

**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. 2017-0321  
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. )

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**REBUTTAL TESTIMONY OF**  
**CYNTHIA S. LEE**  
**ON BEHALF OF**  
**DUKE ENERGY KENTUCKY, INC**

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February 14, 2018

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Attachment:

Attachment CSL-Rebuttal-1 Updated ARO costs

**I. INTRODUCTION AND PURPOSE**

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

2 A. My name is Cynthia S. Lee, 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,  
6 Asset Accounting. DEBS provides various administrative and other services to  
7 Duke Energy Kentucky, Inc., (Duke Energy Kentucky or Company) and other  
8 affiliated companies of Duke Energy Corporation (Duke Energy).

9 **Q. ARE YOU THE SAME CYNTHIA S. LEE THAT SUBMITTED DIRECT**  
10 **TESTIMONY IN THIS PROCEEDING?**

11 A. Yes.

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

13 A. The purpose of my rebuttal testimony is to respond to certain recommendations  
14 made by the Kentucky Attorney General's witness Lane Kollen. Specifically, I  
15 respond to his proposed adjustments to the Company's test year revenue  
16 requirements and environmental surcharge mechanism as it relates to the  
17 Company's coal ash retirement obligation (ARO).

**II. DISCUSSION**

18 **Q. WHAT IS AN ARO AND WHY DOES DUKE ENERGY KENTUCKY HAVE**  
19 **ONE FOR COAL ASH?**

20 A. AROs are legal obligations associated with the retirement of long-lived assets that  
21 result from the acquisition, construction, development and/or normal operation of

1 such assets. As I explained in my Direct testimony, in accordance with Financial  
2 Accounting Standards Board (FASB) Accounting Standards Codification for Asset  
3 Retirement and Environmental Obligations (ASC 410-20) and FERC's Order No.  
4 631, Duke Energy Kentucky records an ARO when it has a legal obligation to incur  
5 retirement costs associated with the retirement of a long-lived asset and the  
6 obligation can be reasonably estimated. The liability is accreted to its present value  
7 each period and the capitalized cost is depreciated over the useful life of the related  
8 asset. When required removal activities are performed, the entity settles the  
9 obligation for its recorded amount.

10 Duke Energy Kentucky's coal ash ARO relates to the retirement obligation  
11 of the Company's coal ash disposal facilities (the ash pond, and two landfills) at its  
12 East Bend generating station that was triggered by the U.S. Environmental  
13 Protection Agency's (U.S. EPA's) April 2015 Disposal of Coal Combustion  
14 Residuals from Electric Utilities rule (CCR Final Rule). As a result of this CCR  
15 Final Rule, as well as other federal and state environmental regulations, these coal  
16 ash disposal facilities will eventually have to be closed in a way that is in  
17 compliance with such regulations. Presently, only the ash pond ARO is being  
18 addressed in this case. The retirement and eventual closure of the two landfills are  
19 several years away.

20 **Q. HAS DUKE ENERGY KENTUCKY STARTED POND CLOSURE**  
21 **ACTIVITIES?**

22 **A.** Yes. As I explained in my Direct Testimony, at the time of the filing of this electric  
23 rate case, Duke Energy Kentucky's actual costs for pond closure activities that were

1 incurred through June 2017 totaled \$11.4 million. The remaining balance of \$17.6  
2 million was depicted in the proposed recovery schedule included as Attachment  
3 CSL-1 to my direct testimony. The Company's actual costs through December 31,  
4 2017, now totals \$15.7 million. The Company estimates that its costs through April  
5 2018 will be \$17.0 million. Attachment CSL-Rebuttal-1 depicts these updated costs  
6 as of December 31, 2017.

7 **Q. PLEASE EXPLAIN MR. KOLLEN'S RECOMMENDED ADJUSTMENT**  
8 **REGARDING THE COAL ASH ARO.**

9 A. Mr. Kollen makes several recommendations regarding the treatment of the  
10 Company's Coal Ash ARO. My testimony focuses on his recommendation  
11 regarding the Company's proposed levelized recovery of the costs through the  
12 Environmental Surcharge Mechanism (ESM). Mr. Kollen recommends that the  
13 Commission authorize the amortization of historical costs over the life of the plant  
14 and recovery of costs in the second month after the Company actually incurs the  
15 costs related to the ARO beginning with the approval of this filing. He maintains  
16 that these costs should not be deferred as a regulatory asset and should not be  
17 included in the ESM rate base or amortization expense until after they are actually  
18 incurred.

19 **Q. DOES DUKE ENERGY KENTUCKY AGREE WITH THIS**  
20 **RECOMMENDATION?**

21 A. No. Duke Energy Kentucky does not agree with this recommendation. First, Duke  
22 Energy Kentucky believes its proposed amortization is in the best interest of its  
23 customers and the Company. It reduces volatility in rates due to the "lumpiness" of

1 the ash retirement activities over the coming years. The Company's proposal will  
2 reduce and eliminate the deferral over a much shorter period than the life of the  
3 station as Mr. Kollen's proposal would provide.

4 Second, as I explain below, because the unamortized balance will accrue  
5 carrying costs at least thirteen years longer under Mr. Kollen's proposal, customers  
6 will ultimately pay more under his proposal compared with Duke Energy  
7 Kentucky's request. Mr. Kollen's adjustment is also unreasonable in that he fails to  
8 acknowledge that the Company has already incurred pond closure costs to date that  
9 have been deferred pursuant to the Commission's Order in Case No. 2015-00187. If  
10 the Company is not able to include the ash-ARO costs incurred to date for recovery  
11 in its ESM, then those costs must then be included in the Company's base rates in  
12 this case. Mr. Kollen made no corresponding adjustment in base rates to account for  
13 the approximate \$11 million that was incurred as of June 2017, nor did he account  
14 for the amount of additional costs that would be incurred through April 1, 2018 the  
15 estimated date of the first month of the ESM recovery. These costs incurred to date  
16 must be factored into the Company's revenue requirement in this case if Mr.  
17 Kollen's recommendation is adopted by this Commission. Otherwise, the Company  
18 would be denied recovery of reasonable and prudent costs incurred to provide  
19 service to its customers.

20 **Q. PLEASE QUANTIFY THE IMPACT TO CUSTOMERS IF THE**  
21 **COMPANY'S PROPOSAL TO RECOVER THE ASH ARO RELATED**  
22 **COSTS THROUGH A LEVELIZED ADJUSTMENT TO THE ESM IS NOT**  
23 **ADOPTED.**

1 A. Based on calculations performed by Duke Energy Kentucky to apply the proposal by  
2 Mr. Kollen, there is an overall unfavorable impact to the customers if his changes  
3 are applied. The total recovery using Mr. Kollen's suggestions is approximately  
4 \$1.6 million higher than the recovery using the assumptions applied by Duke Energy  
5 Kentucky as filed in my Attachment CSL-Rebuttal-1. This is due to more carrying  
6 costs being accrued under Mr. Kollen's proposal to use an unreasonably long  
7 recovery period. The unfavorable impact of carrying charges due to this extended  
8 recovery period proposed by Mr. Kollen is reduced by his proposal to adjust the  
9 carrying charges by the Accumulated Deferred Income Taxes (ADIT) associated  
10 with the unrecovered spend. The calculation of unfavorable customer impact  
11 assumes that the recovery of the actual spend through December 2017 will occur  
12 beginning in June 2018 through June 2041. This calculation reflects a recovery of  
13 forecasted spend in the second month following the month in which costs were  
14 incurred. One exception to this timing relates to the spend expected to occur January  
15 2018 through May 2018, the impacts of which we have included as a catch up in the  
16 recovery expected to begin in June 2018 following the two month approach. This  
17 amount could change once actual costs in 2018 are known. We assumed levelized  
18 spending throughout each forecasted year. However, using the proposal by Mr.  
19 Kollen to recover actual spend in the second month after costs are incurred, actual  
20 costs will not follow this levelized approach. In fact, as illustrated in 2017 actuals,  
21 there can be much volatility month-to-month depending on the nature of the work  
22 performed. This contributes to the uncertainty customers will experience regarding  
23 this recovery.

1 **Q. WHY IS MR. KOLLEN'S PROPOSAL NOT IN THE BEST INTEREST OF**  
2 **CUSTOMERS?**

3 A. First, the total recovery from the customers will be higher due to the carrying  
4 charges over the unreasonably long recovery period. Second, customers will  
5 experience bill volatility under Mr. Kollen's proposal. For these reasons, the  
6 approach and calculations proposed by Duke Energy Kentucky are in the best  
7 interests of the customers.

8 **Q. HOW WOULD THE COMPANY'S REVENUE REQUIREMENT NEED TO**  
9 **BE ADJUSTED IF MR. KOLLEN'S RECOMMENDATION WERE**  
10 **ADOPTED BY THIS COMMISSION?**

11 A. Because the costs incurred to date are recoverable, Mr. Kollen's proposal would  
12 require that an adjustment to base revenue be made for the amortization of the  
13 deferral balance not being recovered in the Company's proposed Environmental  
14 Surcharge Mechanism (Rider ESM). As I understand Mr. Kollen's  
15 recommendation, he asserts that only costs incurred two months before the new  
16 rider becomes effective would be recoverable in the Rider ESM. Therefore,  
17 following his logic, the balance of the deferral at the end of the third month before  
18 the Rider ESM becomes effective would have to be recovered in base rates.

19 While the Company is essentially indifferent economically, it would be  
20 preferable to recover these costs in the Rider ESM as this rider assures the  
21 customers pay no more or less than the costs to be recovered. With base rate  
22 recovery, there is always a chance customers overpay if the amortization period  
23 exceeds the time between rate cases.



1            Nevertheless, if the Commission accepts Mr. Kollen’s proposal, the amount  
2            to include in base rates would be the levelized payment over a ten-year period that  
3            would produce a present value equal to the projected March 31, 2018, balance  
4            (assuming that the Rider ESM would be effective in June 2018 to recover costs  
5            incurred beginning in April 2018). The effect of this change would be to increase  
6            the base rate revenue requirement (an amount that has not been reflected in Mr.  
7            Kollen’s proposed revenue requirement) by approximately \$2.37 million and the  
8            revenue requirement for future Rider ESM filings would be lower by a like amount.  
9            Just to be clear, this is not the Company’s recommendation and is not reflected in  
10           the Company’s updated revenue requirement as the Company continues to believe  
11           Rider ESM is the proper mechanism for recovering this cost.

**III. CONCLUSION**

- 12    **Q.    DOES THIS CONCLUDE YOUR PRE-FILED REBUTTAL TESTIMONY?**  
13    **A.    Yes.**

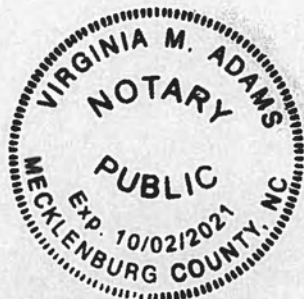
**VERIFICATION**

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

The undersigned, Cynthia S. Lee, Director, Asset Accounting, 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.

Cynthia S. Lee Affiant

Subscribed and sworn to before me by Cynthia S. Lee on this 13 day of  
Feb., 2018.



NOTARY PUBLIC

My Commission Expires: 10/2/21

DUKE ENERGY KENTUCKY, INC.  
CASE NO. 2017-00321  
RECOVERY OF SPEND RELATED TO COAL ASH BASIN CLOSURE  
AS OF DECEMBER 31, 2017

DATA: "X" BASE PERIOD "X" FORECASTED PERIOD  
TYPE OF FILING: ORIGINAL "X" UPDATED REVISED  
WORK PAPER REFERENCE NOS.:

SCHEDULE CSL-REBUTTAL-1  
PAGE 1 OF 4  
WITNESS RESPONSIBLE:  
C. S. Lee

Duke Energy Kentucky  
Amortization Calculation for Coal Ash ARO

Period		Cash Spend	COR Credit	Carrying Cost	Recovery	Ending Balance
		<i>See note A</i>				
2015 Total	<i>Actual</i>	3,858,084	(856,412)	20,378	-	3,022,050
2016 Total	<i>Actual</i>	4,777,964	(107,051)	385,762	-	8,078,724
Jan-17	<i>Actual</i>	371,256	-	43,310	-	8,493,291
Feb-17	<i>Actual</i>	438,302	-	40,475	-	8,972,068
Mar-17	<i>Actual</i>	712,409	(26,763)	44,946	-	9,702,661
Apr-17	<i>Actual</i>	284,391	-	51,351	-	10,038,403
May-17	<i>Actual</i>	643,374	-	56,745	-	10,738,522
Jun-17	<i>Actual</i>	311,213	(26,763)	54,259	-	11,077,232
Jul-17	<i>Actual</i>	251,265	-	52,444	-	11,380,941
Aug-17	<i>Actual</i>	289,485	-	48,604	-	11,719,030
Sep-17	<i>Actual</i>	256,943	(26,763)	45,274	-	11,994,484
Oct-17	<i>Actual</i>	492,338	-	62,073	-	12,548,895
Nov-17	<i>Actual</i>	558,817	-	70,270	-	13,177,982
Dec-17	<i>Actual</i>	2,500,855	(26,763)	84,671	-	15,736,746
Jan-18	<i>Projection</i>	310,182	-	86,028	-	16,132,956
Feb-18	<i>Projection</i>	310,182	-	88,152	-	16,531,290
Mar-18	<i>Projection</i>	310,182	(26,763)	90,144	-	16,904,853
Apr-18	<i>Projection</i>	310,182	-	100,143	-	17,315,178
May-18	<i>Projection</i>	310,182	-	102,530	-	17,727,891
Jun-18	<i>Projection</i>	310,182	-	103,015	(329,323)	17,811,765
Jul-18	<i>Projection</i>	310,182	-	103,503	(329,323)	17,896,127
Aug-18	<i>Projection</i>	310,182	-	103,994	(329,323)	17,980,980
Sep-18	<i>Projection</i>	310,182	-	104,488	(329,323)	18,066,327
Oct-18	<i>Projection</i>	310,182	-	104,984	(329,323)	18,152,170
Nov-18	<i>Projection</i>	310,182	-	105,483	(329,323)	18,238,512
Dec-18	<i>Projection</i>	310,182	-	105,986	(329,323)	18,325,357
Jan-19	<i>Projection</i>	594,928	-	108,147	(329,323)	18,699,109
Feb-19	<i>Projection</i>	594,928	-	110,322	(329,323)	19,075,035
Mar-19	<i>Projection</i>	594,928	-	112,508	(329,323)	19,453,148
Apr-19	<i>Projection</i>	594,928	-	114,708	(329,323)	19,833,460
May-19	<i>Projection</i>	594,928	-	116,920	(329,323)	20,215,985
Jun-19	<i>Projection</i>	594,928	-	119,146	(329,323)	20,600,735
Jul-19	<i>Projection</i>	594,928	-	121,384	(329,323)	20,987,723
Aug-19	<i>Projection</i>	594,928	-	123,635	(329,323)	21,376,962
Sep-19	<i>Projection</i>	594,928	-	125,899	(329,323)	21,768,466
Oct-19	<i>Projection</i>	594,928	-	128,177	(329,323)	22,162,247
Nov-19	<i>Projection</i>	594,928	-	130,467	(329,323)	22,558,319
Dec-19	<i>Projection</i>	594,928	-	132,771	(329,323)	22,956,695
Jan-20	<i>Projection</i>	137,722	-	132,429	(329,323)	22,897,522
Feb-20	<i>Projection</i>	137,722	-	132,085	(329,323)	22,838,005
Mar-20	<i>Projection</i>	137,722	-	131,739	(329,323)	22,778,142
Apr-20	<i>Projection</i>	137,722	-	131,390	(329,323)	22,717,931

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Duke Energy Kentucky  
Amortization Calculation for Coal Ash ARO

Period	Cash Spend	COR Credit	Carrying Cost	Recovery	Ending Balance
	See note A				
May-20	Projection 137,722	-	131,040	(329,323)	22,657,370
Jun-20	Projection 137,722	-	130,688	(329,323)	22,596,456
Jul-20	Projection 137,722	-	130,334	(329,323)	22,535,188
Aug-20	Projection 137,722	-	129,977	(329,323)	22,473,563
Sep-20	Projection 137,722	-	129,619	(329,323)	22,411,580
Oct-20	Projection 137,722	-	129,258	(329,323)	22,349,237
Nov-20	Projection 137,722	-	128,895	(329,323)	22,286,531
Dec-20	Projection 137,722	-	128,531	(329,323)	22,223,460
Jan-21	Projection 63,415	-	127,731	(329,323)	22,085,283
Feb-21	Projection 63,415	-	126,928	(329,323)	21,946,302
Mar-21	Projection 63,415	-	126,119	(329,323)	21,806,512
Apr-21	Projection 63,415	-	125,306	(329,323)	21,665,909
May-21	Projection 63,415	-	124,488	(329,323)	21,524,489
Jun-21	Projection 63,415	-	123,665	(329,323)	21,382,246
Jul-21	Projection 63,415	-	122,838	(329,323)	21,239,175
Aug-21	Projection 63,415	-	122,006	(329,323)	21,095,272
Sep-21	Projection 63,415	-	121,169	(329,323)	20,950,532
Oct-21	Projection 63,415	-	120,327	(329,323)	20,804,950
Nov-21	Projection 63,415	-	119,480	(329,323)	20,658,521
Dec-21	Projection 63,415	-	118,628	(329,323)	20,511,240
Jan-22	Projection -	-	117,402	(329,323)	20,299,319
Feb-22	Projection -	-	116,169	(329,323)	20,086,166
Mar-22	Projection -	-	114,930	(329,323)	19,871,772
Apr-22	Projection -	-	113,682	(329,323)	19,656,131
May-22	Projection -	-	112,428	(329,323)	19,439,236
Jun-22	Projection -	-	111,166	(329,323)	19,221,079
Jul-22	Projection -	-	109,897	(329,323)	19,001,652
Aug-22	Projection -	-	108,621	(329,323)	18,780,950
Sep-22	Projection -	-	107,337	(329,323)	18,558,964
Oct-22	Projection -	-	106,045	(329,323)	18,335,686
Nov-22	Projection -	-	104,747	(329,323)	18,111,109
Dec-22	Projection -	-	103,440	(329,323)	17,885,226
Jan-23	Projection -	-	102,126	(329,323)	17,658,029
Feb-23	Projection -	-	100,805	(329,323)	17,429,510
Mar-23	Projection -	-	99,475	(329,323)	17,199,662
Apr-23	Projection -	-	98,138	(329,323)	16,968,477
May-23	Projection -	-	96,793	(329,323)	16,735,947
Jun-23	Projection -	-	95,441	(329,323)	16,502,065
Jul-23	Projection -	-	94,080	(329,323)	16,266,822
Aug-23	Projection -	-	92,712	(329,323)	16,030,210
Sep-23	Projection -	-	91,335	(329,323)	15,792,222
Oct-23	Projection -	-	89,951	(329,323)	15,552,849
Nov-23	Projection -	-	88,558	(329,323)	15,312,085
Dec-23	Projection -	-	87,158	(329,323)	15,069,919
Jan-24	Projection -	-	85,749	(329,323)	14,826,345
Feb-24	Projection -	-	84,332	(329,323)	14,581,354

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Amortization Calculation for Coal Ash ARO

Period		Cash Spend	COR Credit	Carrying Cost	Recovery	Ending Balance
		See note A				
Mar-24	Projection	-	-	82,907	(329,323)	14,334,937
Apr-24	Projection	-	-	81,473	(329,323)	14,087,088
May-24	Projection	-	-	80,032	(329,323)	13,837,796
Jun-24	Projection	-	-	78,581	(329,323)	13,587,054
Jul-24	Projection	-	-	77,123	(329,323)	13,334,854
Aug-24	Projection	-	-	75,656	(329,323)	13,081,186
Sep-24	Projection	-	-	74,180	(329,323)	12,826,043
Oct-24	Projection	-	-	72,696	(329,323)	12,569,416
Nov-24	Projection	-	-	71,203	(329,323)	12,311,296
Dec-24	Projection	-	-	69,702	(329,323)	12,051,674
Jan-25	Projection	-	-	68,191	(329,323)	11,790,542
Feb-25	Projection	-	-	66,672	(329,323)	11,527,891
Mar-25	Projection	-	-	65,144	(329,323)	11,263,712
Apr-25	Projection	-	-	63,608	(329,323)	10,997,996
May-25	Projection	-	-	62,062	(329,323)	10,730,735
Jun-25	Projection	-	-	60,507	(329,323)	10,461,919
Jul-25	Projection	-	-	58,943	(329,323)	10,191,539
Aug-25	Projection	-	-	57,370	(329,323)	9,919,586
Sep-25	Projection	-	-	55,788	(329,323)	9,646,052
Oct-25	Projection	-	-	54,197	(329,323)	9,370,926
Nov-25	Projection	-	-	52,597	(329,323)	9,094,199
Dec-25	Projection	-	-	50,987	(329,323)	8,815,863
Jan-26	Projection	-	-	49,368	(329,323)	8,535,908
Feb-26	Projection	-	-	47,739	(329,323)	8,254,324
Mar-26	Projection	-	-	46,101	(329,323)	7,971,102
Apr-26	Projection	-	-	44,454	(329,323)	7,686,232
May-26	Projection	-	-	42,797	(329,323)	7,399,706
Jun-26	Projection	-	-	41,130	(329,323)	7,111,512
Jul-26	Projection	-	-	39,453	(329,323)	6,821,642
Aug-26	Projection	-	-	37,767	(329,323)	6,530,086
Sep-26	Projection	-	-	36,071	(329,323)	6,236,834
Oct-26	Projection	-	-	34,365	(329,323)	5,941,876
Nov-26	Projection	-	-	32,649	(329,323)	5,645,202
Dec-26	Projection	-	-	30,924	(329,323)	5,346,803
Jan-27	Projection	-	-	29,188	(329,323)	5,046,667
Feb-27	Projection	-	-	27,442	(329,323)	4,744,786
Mar-27	Projection	-	-	25,686	(329,323)	4,441,148
Apr-27	Projection	-	-	23,919	(329,323)	4,135,744
May-27	Projection	-	-	22,143	(329,323)	3,828,563
Jun-27	Projection	-	-	20,356	(329,323)	3,519,596
Jul-27	Projection	-	-	18,558	(329,323)	3,208,831
Aug-27	Projection	-	-	16,751	(329,323)	2,896,259
Sep-27	Projection	-	-	14,932	(329,323)	2,581,868
Oct-27	Projection	-	-	13,104	(329,323)	2,265,648
Nov-27	Projection	-	-	11,264	(329,323)	1,947,589
Dec-27	Projection	-	-	9,414	(329,323)	1,627,679

DUKE ENERGY KENTUCKY, INC.  
CASE NO. 2017-00321  
RECOVERY OF SPEND RELATED TO COAL ASH BASIN CLOSURE  
AS OF DECEMBER 31, 2017

DATA: "X" BASE PERIOD "X" FORECASTED PERIOD  
TYPE OF FILING: ORIGINAL "X" UPDATED REVISED  
WORK PAPER REFERENCE NOS.:

SCHEDULE CSL-REBUTTAL-1  
PAGE 4 OF 4  
WITNESS RESPONSIBLE:  
C. S. Lee

Duke Energy Kentucky  
Amortization Calculation for Coal Ash ARO

Period	Cash Spend	COR Credit	Carrying Cost	Recovery	Ending Balance
	<i>See note A</i>				
Jan-28	Projection	-	7,553	(329,323)	1,305,909
Feb-28	Projection	-	5,681	(329,323)	982,267
Mar-28	Projection	-	3,798	(329,323)	656,742
Apr-28	Projection	-	1,905	(329,323)	329,323
May-28	Projection	-	0	(329,323)	0
	29,021,650	(1,097,278)	11,594,415	(39,518,788)	

Note A: Actual costs included for May 2015 through December 2017 total \$15.7 million. Projected costs included starting in January 2018 total \$13.3 million.

Amortization Period (yrs) 10 (6/18 - 5/28)  
Monthly Amortization Amount 329,323  
Annualized Amortization Amount 3,951,879

**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**  
**ROGER A. MORIN, PhD**  
**ON BEHALF OF**  
**DUKE ENERGY KENTUCKY, INC.**

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February 14, 2018

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### Exhibits:

Attachment RAM – Rebuttal 1 – Amended Baudino Exhibit RAB-5 DCF Analysis

Attachment RAM - Rebuttal 2 – Corrected DCF



## **I. INTRODUCTION**

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

2 A. My name is Mr. Roger A. Morin. My business address is Georgia State  
3 University, Robinson College of Business, University Plaza, Atlanta, Georgia,  
4 30303. I am Emeritus Professor of Finance at the College of Business, Georgia  
5 State University and was Professor of Finance for Regulated Industry at the  
6 Center for the Study of Regulated Industry at Georgia State University. I am also  
7 a principal in Utility Research International, an enterprise engaged in regulatory  
8 finance and economics consulting to business and government.

9 **Q. DID YOU FILE DIRECT TESTIMONY IN THIS PROCEEDING ON**  
10 **BEHALF OF DUKE ENERGY KENTUCKY, INC., (DUKE ENERGY**  
11 **KENTUCKY OR COMPANY)?**

12 A. Yes, I did.

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

14 A. I have been asked to respond to the cost of capital testimony of Mr. Baudino on  
15 behalf of the Office of The Attorney General (OAG).

## **II. DISCUSSION**

16 **Q. PLEASE SUMMARIZE MR. BAUDINO'S RATE OF RETURN**  
17 **RECOMMENDATION.**

18 A. Mr. Baudino recommends a return on equity (ROE) of only 8.8% for Duke  
19 Energy Kentucky, which I believe is among the lowest, if not the lowest,  
20 authorized return in the entire electric utility industry. In determining the cost of  
21 equity, Mr. Baudino applies a Discounted Cash Flow (DCF) analysis to a group of

1 19 electric utilities. This study, summarized on page 23 of his testimony, produces  
2 a result of 8.49% using average growth rates and 8.64% using medians. Mr.  
3 Baudino also performs a Capital Asset Pricing Model (CAPM) analysis, although  
4 he does not rely on the results of this analysis, and only uses its results as a check  
5 on the DCF estimates. The CAPM analysis, summarized on page 30 of his  
6 testimony, produces a result of 7.01% - 7.23% using prospective market risk  
7 premiums and 6.02% - 7.39% using historical market risk premiums. All the  
8 ROE results are summarized on Table 3 page 30.

9 Based on his sole DCF analysis, Mr. Baudino concludes that Duke Energy  
10 Kentucky's cost of equity is lies in a range of 8.2% - 9.2% and adopts the  
11 midpoint of 8.8% as his final recommendation.

12 **Q. WHAT IS YOUR FIRST GENERAL REACTION TO MR. BAUDINO'S**  
13 **COST OF COMMON EQUITY RECOMMENDATION?**

14 **A.** My general reaction to his recommendation, before I engage in a more technical  
15 critique, is that there are two major flaws in Mr. Baudino's testimony. First, Mr.  
16 Baudino's recommended 8.8% ROE for Duke Energy Kentucky is draconian and  
17 lies completely outside the zone of reasonableness and outside the zone of  
18 currently authorized ROEs for electric utilities in the United States. Mr.  
19 Baudino's recommended reduction of the Company's ROE down to only 8.8%, if  
20 adopted, would result in one of the lowest, if not the lowest, ROE authorized in  
21 the entire utility industry in the country. I am aware of only one electric utility  
22 having an allowed return near Mr. Baudino's recommended 8.8%. Mr. Baudino's  
23 low ROE recommendation would cause adverse consequences on the Company's

1 creditworthiness, its financial integrity, the Company's capital raising ability, and  
2 ultimately its customers. Moreover, Mr. Baudino's recommended ROE lies below  
3 the zone of his own comparable companies' authorized and expected ROEs.  
4 These facts provide clear proof that his ROE recommendation for Duke Energy  
5 Kentucky is far too low.

6 **Q. WHAT IS YOUR SECOND GENERAL REACTION TO MR. BAUDINO'S**  
7 **COST OF COMMON EQUITY RECOMMENDATION?**

8 A. My second general reaction to Mr. Baudino's testimony, even before I engage in a  
9 more technical critique, is that his recommendation of 8.8% rests exclusively on  
10 the results of a DCF analysis. Mr. Baudino has put all of his eggs in the DCF  
11 basket which causes him to recommend returns that are well below investors'  
12 required returns. This narrow approach stands in sharp contrast with the cost of  
13 capital estimation practices of investment analysts, finance experts, corporate  
14 analysts, and finance professionals who rely on a variety of methodologies. His  
15 CAPM check on the DCF result, on which he places little, if any, weight is also  
16 flawed, as I discuss later. Mr. Baudino employs understated model inputs in his  
17 analyses, which cause him to recommend returns that are below investors'  
18 required returns.

19 **Q. IS MR. BAUDINO'S VERY LOW RECOMMENDED ROE**  
20 **APPROPRIATE AT THIS TIME?**

21 A. No. Mr. Baudino's recommended ROE of only 8.8%, which would be among the  
22 lowest authorized ROE in the country, is untimely and contrary to customers' best  
23 interests to receive reliable and reasonably-priced service. As I discussed in my

1 direct testimony, if Duke Energy Kentucky's authorized ROE is set too low, it  
2 will ultimately increase costs for the Company's customers. The Kentucky Public  
3 Service Commission's (KYPSC or Commission) approval of the authorized ROE  
4 in the upper portion of a 9.9% - 10.7% range that I have recommended, will  
5 buttress these goals and provide measurable benefits to Duke Energy Kentucky's  
6 customers.

7 Maintaining the Company's financial viability and creditworthiness  
8 decreases borrowing costs, improves access to capital and the availability of  
9 longer-term debt maturities, and enables the Company to absorb any negative  
10 volatility in its financial performance. Moreover, maintaining the Company's  
11 financial viability will have beneficial long-term cost implications for the  
12 Company and its customers as the Company re-finances existing debt, issues new  
13 capital and enters into new contractual arrangements. Clearly, Duke Energy  
14 Kentucky's customers have a vested interest in a strong financial position for the  
15 utility. The interests of customers and shareholders are consistent, not mutually  
16 exclusive. They both benefit from a financially sound utility.

17 **Q. WHAT ARE THE BASIC CONCLUSIONS OF YOUR REBUTTAL**  
18 **TESTIMONY TO MR. BAUDINO'S COST OF EQUITY TESTIMONY?**

19 **A.** While I agree with several of Mr. Baudino's procedures and methodologies, as I  
20 will demonstrate below, Mr. Baudino understates the appropriate ROE for Duke  
21 Energy Kentucky by a minimum of 120 basis points (1.2%), which would bring  
22 his recommended ROE to 10.0% which is well within my recommended range. If  
23 Mr. Baudino's various results are amended to reflect proper data inputs to the

1 financial models, Mr. Baudino's revised ROE recommendation would be quite  
2 close to my recommended range.

3 **Q. PLEASE SUMMARIZE YOUR COMMENTS ON MR. BAUDINO'S**  
4 **TESTIMONY.**

5 A. I stress from the start that I agree with several of Mr. Baudino's views and  
6 procedures in estimating Duke Energy Kentucky's cost of equity. Mr. Baudino's  
7 procedures and methodologies are generally sound and in keeping with the  
8 practices of finance professionals. For example, I agree with: (1) the companies in  
9 his comparable group; (ii) the use of analysts' growth forecasts as proxies for  
10 expected growth in the DCF model; and (iii) the beta estimates in the CAPM  
11 analysis. My disagreements center more on some of the appropriate data inputs to  
12 the DCF and CAPM models.

13 Specifically, I disagree with Mr. Baudino on the following grounds: (1) an  
14 understated dividend yield component in the DCF model; (2) the absence of a  
15 flotation cost adjustment; (3) the use of the sustainable growth version of the DCF  
16 model; (4) the risk-free rate proxy in the CAPM; (5) part of his market risk  
17 premium estimate in the CAPM; (6) the failure to employ the empirical version of  
18 the CAPM in keeping with the vast literature on the subject; and (7) failure to  
19 account for Duke Energy Kentucky's high relative risks. I also conclude that his  
20 criticisms of my testimony are unfounded. I shall now address each of those  
21 issues in turn.

22 **Q. WHAT ARE THE BASIC CONCLUSIONS OF YOUR REBUTTAL TO**  
23 **MR. BAUDINO'S COST OF EQUITY TESTIMONY?**

1 A. Mr. Baudino understates Duke Energy Kentucky's cost of common equity. A  
2 proper application of cost of capital methodologies would give results  
3 substantially higher than those that he obtained.

### III. SUMMARY OF SPECIFIC CRITICISMS

4 Q. PLEASE SUMMARIZE YOUR SPECIFIC CRITICISMS OF MR.  
5 BAUDINO'S TESTIMONY.

6 A. I have a number of criticisms of Mr. Baudino's testimony, as follows:

#### 1. Return Recommendation Outside the Mainstream.

7 As succinctly stated above, Mr. Baudino's recommended ROE is well outside the  
8 zone of currently authorized ROEs for utilities in the United States and that of his  
9 own sample of companies. The average authorized ROE in the electric utility  
10 industry in 2017 as reported in the Regulatory Research Associates quarterly  
11 review December 2017 edition is 9.7%. The currently authorized returns for Mr.  
12 Baudino's nineteen peer companies average nearly 10%, and the expected returns  
13 for these companies from Mr. Baudino's own Value Line data are at least 10.3%.  
14 I also note that less than one year ago, in Case Nos. 2016-00370 and 2016-00371 ,  
15 the Commission approved an ROE of 9.7% for both Kentucky Utilities Company  
16 and Louisville Gas and Electric Company, respectively. More recently, just one  
17 month ago, the Commission authorized a 9.7 ROE for Kentucky Power in Case  
18 No. 2017-00179. These recent authorized returns for Kentucky jurisdictional  
19 electric utilities exceed by a significant margin Mr. Baudino's recommended  
20 return of only 8.8% for Duke Energy Kentucky.

## **2. Understated Dividend Yield.**

1 Mr. Baudino's dividend yield component is understated because it is not  
2 consistent with the annual form of the DCF model. It is inappropriate to increase  
3 the dividend yield by adding one-half the future growth rate to the spot dividend  
4 yield. The appropriate manner of computing the expected dividend yield when  
5 using the plain vanilla annual DCF model is to add the full growth rate rather than  
6 one-half the growth rate. This adjustment also allows for the failure of the annual  
7 DCF model to allow for the quarterly timing of dividend payments. In short, Mr.  
8 Baudino's DCF results are understated by some 12 basis points (i.e., 0.12 percent)  
9 alone related to this single flaw.

## **3. DCF Dividend Yield and Flotation Costs.**

10 Mr. Baudino's dividend yield component is understated because it does not allow  
11 for flotation costs and, as a result, a legitimate expense is left unrecovered and his  
12 ROE results are understated by an additional 20 basis points.

## **4. DCF Dividend Growth Rates.**

13 While I agree with Mr. Baudino's reliance on analyst earnings growth forecasts as  
14 proxies for the growth component of the DCF model, I disagree with the use of  
15 one particular firm's dividend growth forecasts in view of the scarcity of such  
16 forecasts. Moreover, as discussed in my direct testimony the empirical finance  
17 literature has demonstrated that consensus analysts' earnings growth forecasts (i)  
18 are reflected in stock prices; (ii) possess a high explanatory power of equity  
19 values; and (iii) are used by investors.

**5. Retention Growth Technique.**

1        There are logical inconsistencies in the retention growth technique (B x R)  
2        employed by Mr. Baudino. Although he implements and reports the full results of  
3        this approach on Exhibit RAB-5, he does not rely on its results, nor does he offer  
4        any explanation for its exclusion. The retention growth approach for estimating  
5        the growth component in the DCF formula is logically inconsistent because one is  
6        forced to assume the answer to implement the method, which is what Mr.  
7        Baudino has done to produce the results reported in Exhibit RAB-5.

**6. Risk-Free Rate.**

8        Mr. Baudino has relied on an inappropriate risk-free rate proxy in implementing  
9        the CAPM, understating those results by close to 200 basis points (2.0%).

**7. CAPM Market Risk Premium (MRP).**

10       One of Mr. Baudino's estimates of the MRP is seriously understated to the extent  
11       that it is erroneously based on geometric mean returns rather than on arithmetic  
12       mean returns.

**8. CAPM and the Empirical CAPM (ECAPM).**

13       The basic version of the CAPM used by Mr. Baudino understates the Company's  
14       cost of equity for electric utilities by 50 basis points.

**9. Risk Adjustment.**

15       Mr. Baudino did not adjust his recommended ROE upward to reflect Duke  
16       Energy Kentucky's greater than average risk on account of its very small relative  
17       size, its high construction program relative to its small size, and its highly



1 concentrated generation portfolio. Such a required adjustment would raise his  
2 ROE recommendation significantly.

3 I shall now discuss each criticism in turn as well as respond to Mr.  
4 Baudino's criticisms of my testimony which are largely unfounded.

#### IV. REGULATORY FRAMEWORK AND RATE OF RETURN

##### 1. ALLOWED RETURNS

5 **Q. ARE ALLOWED ROES OF ELECTRIC UTILITIES IMPORTANT**  
6 **DETERMINANTS OF INVESTOR GROWTH PERCEPTIONS AND**  
7 **INVESTOR EXPECTED RETURNS?**

8 A. Yes, they are. Allowed returns, while certainly not a precise indication of a  
9 company's cost of equity capital, are nevertheless important determinants of  
10 investor growth perceptions and investor expected returns. They also serve to  
11 provide some perspective on the validity and reasonableness of Mr. Baudino's  
12 recommendation.

13 **Q. HOW DOES MR. BAUDINO'S RECOMMENDED ROE COMPARE**  
14 **WITH CURRENTLY ALLOWED ROES IN THE INDUSTRY?**

15 A. Mr. Baudino's recommended ROE of 8.8% for Duke Energy Kentucky is well  
16 outside the mainstream for electric utilities. The average authorized ROE in the  
17 electric utility industry as reported by SNL (formerly Regulatory Research  
18 Associates) in its most recent survey of regulatory decisions in 2017 is 9.7%.  
19 Moreover, as shown on Table 1 and according to Value Line, the average  
20 authorized ROE for the electric utilities in Mr. Baudino's own peer group is  
21 shown in Column 1 is 9.9%, and the median is 10.1%. The average expected ROE

1 for these electric utilities in 2018 and for the long-term shown in Columns 2 and 3  
 2 is a minimum of 10.3%.

**Table 1. Allowed And Expected Returns**

	Allowed	2018	Long-Term
	ROE	VL Exp ROE	VL Exp ROE
	(1)	(2)	(3)
1 Alliant Energy	10.50	11.00	12.00
2 Ameren Corp.	9.15	9.50	10.00
3 Black Hills	9.37	10.00	10.50
4 CenterPoint Energy	10.18	16.50	16.50
5 Chesapeake Utilities		9.50	13.00
6 CMS Energy Corp.	10.10	13.50	13.50
7 Consol. Edison	9.00	8.50	8.50
8 Dominion Resources	10.90	15.50	19.50
9 DTE Energy	10.10	10.50	10.50
10 Duke Energy	10.31	8.00	8.50
11 Eversource Energy	9.48	9.00	10.00
12 Exelon Corp	9.60	9.00	9.50
13 Fortis	9.31	8.00	8.50
14 MGE Energy	10.20	10.50	12.00
15 NorthWestern Corp. Public Serv.	9.92	9.00	9.50
16 Enterprise	10.30	11.00	10.50
17 Vectren Corp.	10.28	12.00	12.00
18 WEC Energy Group	9.55	11.00	11.50
19 Xcel Energy Inc.	9.60	10.50	10.50
<b>AVERAGE</b>	<b>9.88</b>	<b>10.66</b>	<b>11.39</b>
<b>MEDIAN</b>	<b>10.10</b>	<b>10.25</b>	<b>11.25</b>

3 Source: Value Line 2018.

4 These allowed and expected ROEs substantially exceed Mr. Baudino's  
 5 recommended return on equity for Duke Energy Kentucky of only 8.8%.

1           In short, Mr. Baudino's recommendation is outside the mainstream of the  
2 allowed rates of return that were current during the period in which Mr. Baudino  
3 performed his analysis and lies outside the zone of recently authorized returns for  
4 electric utilities and for Mr. Baudino's own sample of companies.

5           Unreasonable rate treatment for a utility, if implemented, may have  
6 serious public policy implications and repercussions that are not mentioned in Mr.  
7 Baudino's testimony. For example, the quality of regulation and the  
8 reasonableness of authorized ROEs clearly have implications for regulatory  
9 climate, economic development and job creation in a given territory. The  
10 consistency of regulation in a given jurisdiction has similar implications. I believe  
11 that Mr. Baudino's recommended return has negative implications on these  
12 grounds and is not consistent with the economic well-being of the Commonwealth  
13 of Kentucky. It certainly provides a disincentive to investment in Kentucky.

## 2.     UNDERSTATED DIVIDEND YIELD

14   **Q.   DO YOU HAVE ANY COMMENT ON MR. BAUDINO'S DIVIDEND**  
15   **YIELD CALCULATION IN THE DCF ANALYSIS?**

16   Yes. I disagree with Mr. Baudino's dividend yield calculation on page 23 lines 9-  
17 10). Mr. Baudino multiplies the spot dividend yield by one plus one half the  
18 expected growth rate ( $1 + 0.5g$ ) rather than the standard one plus the expected  
19 growth rate ( $1 + g$ ). Mr. Baudino's deviation from the standard methodology  
20 understates the return expected by the investor.

21           The fundamental assumption of the annual DCF model used by Mr.  
22 Baudino is that dividends are received annually at the end of each year and that

1 the first dividend is to be received one year from now. Thus, the appropriate  
2 dividend to use in a DCF model is the full prospective dividend to be received at  
3 the end of the year. Instead, Mr. Baudino calculates the first dividend by  
4 multiplying the current dividend by one plus one-half the growth rate ( $1 + 0.5g$ )  
5 instead of multiplying by one plus the growth rate ( $1 + g$ ). Since the appropriate  
6 dividend to use in a DCF model is the prospective dividend one year from now  
7 rather than the dividend one-half year from now, Mr. Baudino's approach  
8 understates the proper dividend yield.

9 Mr. Baudino's use of the wrong methodology creates a downward bias in  
10 its dividend yield component, and causing it to underestimate the cost of equity by  
11 approximately 12 basis points. For example, for a spot dividend yield of 4% and a  
12 growth rate of 6%, Mr. Baudino's estimated dividend yield is  $4\%(1 + .06/2) =$   
13  $4.12\%$ . The correct dividend yield to employ is  $4\%(1 + .06) = 4.24\%$ , which is 12  
14 basis points higher. This failure by Mr. Baudino to recognize the quarterly nature  
15 of dividend payments in his formula, understates the cost of equity capital by 12  
16 basis points.

17 Moreover, the basic annual DCF model ignores the time value of quarterly  
18 dividend payments and assumes dividends are paid once a year at the end of the  
19 year. Multiplying the spot dividend yield by  $(1 + g)$  is actually a conservative  
20 attempt to capture the reality of quarterly dividend payments and understates the  
21 expected return on equity. Use of this method is conservative because the annual  
22 DCF model ignores the more frequent compounding of quarterly dividends.

**3. DCF DIVIDEND YIELD AND FLOTATION COSTS**

1   **Q.    IN YOUR DIRECT TESTIMONY, YOU STATED THAT THE RETURN**  
2       **ON EQUITY SHOULD BE ADJUSTED TO INCLUDE AN ALLOWANCE**  
3       **FOR FLOTATION COSTS. PLEASE COMMENT ON FLOTATION**  
4       **COSTS.**

5    A.    Flotation costs are very similar to the closing costs on a home mortgage. In the  
6        case of issues of new equity, flotation costs represent the discounts that must be  
7        provided to place the new securities. Flotation costs have a direct and an indirect  
8        component. The direct component represents monetary compensation to the  
9        security underwriter for marketing/consulting services, for the risks involved in  
10       distributing the issue, and for any operating expenses associated with the issue  
11       (printing, legal, prospectus, etc.). The indirect component represents the  
12       downward pressure on the stock price as a result of the increased supply of stock  
13       from the new issue. The latter component is frequently referred to as "market  
14       pressure."

15                Flotation costs for common stock are analogous to the flotation costs  
16        associated with past bond issues which, as a matter of routine regulatory policy,  
17        continue to be amortized over the life of the bond, even though no new bond  
18        issues are contemplated. In the case of common stock, which has no finite life,  
19        flotation costs are not amortized. Therefore, the recovery of flotation cost requires  
20        an upward adjustment to the allowed return on equity.

1           As demonstrated in my direct testimony, the expected dividend yield  
2 component of the DCF model must be adjusted for flotation cost by dividing it by  
3  $(1 - f)$ , where  $f$  is the flotation cost factor.

4 **Q.   WHAT FLOTATION COST TREATMENT DID MR. BAUDINO**  
5 **RECOMMEND IN THIS CASE?**

6 A.   Mr. Baudino's common equity return recommendation does not include any  
7 allowance for issuance expense (Page 23 lines 17-19). Because Mr. Baudino fails  
8 to include any allowance for flotation costs, his DCF estimates of equity costs are  
9 understated by 20 basis points, as shown in Appendix A of my direct testimony.

10           I am surprised by Mr. Baudino's reluctance to accept flotation costs.  
11 Obviously, common equity capital is not free. The flotation cost allowance to the  
12 cost of common equity capital is routinely discussed and applied in most  
13 corporate finance textbooks.

14           Mr. Baudino's disregard of flotation costs is inconsistent with Value Line  
15 data on historical and projected common stock issues. Electric utilities have, and  
16 will continue to be issuing new common stock in the future.

17 **Q.   HOW DOES MR. BAUDINO JUSTIFY HIS DISMISSAL OF FLOTATION**  
18 **COST?**

19 A.   On page 33 lines 7-17 of his testimony, Mr. Baudino argues that flotation costs  
20 are already accounted for in current stock prices and that adding such an  
21 adjustment would constitute double counting. In other words, current stock prices  
22 "*most likely*" already account for such costs, he claims, although he is not quite  
23 sure and does not substantiate this claim.

1 I disagree with this argument. Whatever the stock price is does not change  
2 the fact that a portion of the capital contributed by equity investors is not available  
3 to earn a return because it is paid out as flotation costs. The simple fact of the  
4 matter is that in issuing common stock, the company's common equity account is  
5 credited by an amount less than the market value of the issue, so that the company  
6 must earn slightly more on its reduced equity base in order to produce a return  
7 equal to that required by shareholders. The costs are there irrespective of the stock  
8 price.

#### 4. DIVIDEND GROWTH RATES

9 **Q. WHAT GROWTH RATE PROXIES DID MR. BAUDINO EMPLOY IN**  
10 **HIS DCF ANALYSIS?**

11 A. Mr. Baudino calculates five different growth proxies in his DCF analysis shown  
12 on Exhibit RAB-5 page 1 of 2:

- 13 1. Value Line Dividend Growth Forecast
- 14 2. Value Line Earnings Growth Forecast
- 15 3. Value Line's Retention Growth Forecast (B x R)
- 16 4. Analyst Growth Forecasts in Zacks
- 17 5. Analyst Growth Forecasts in Yahoo Finance

18 **Q. DO YOU AGREE WITH MR. BAUDINO'S GROWTH PROXIES?**

19 A. I agree with three of Mr. Baudino's forecasts: Value Line Earnings Growth;  
20 Zacks analysts' forecasts; and Yahoo Finance analysts forecasts. I disagree with  
21 the other two: Value Line's dividend growth forecast and the use of the Retention

1 Growth forecast methodology. In fairness to Mr. Baudino, he ends up not relying  
2 on the latter.

3 **Q. SHOULD THE VALUE LINE DIVIDEND GROWTH FORECASTS BE**  
4 **CONSIDERED IN APPLYING THE DCF MODEL TO ELECTRIC**  
5 **UTILITIES?**

6 A. No, they should not. I disagree with the use of dividend growth forecasts.  
7 Reliance on “near-term” dividend growth is improper because in the current  
8 environment where utilities, including Duke Energy Kentucky, are increasing  
9 their capital expenditures, dividends cannot be expected to grow at the same rate  
10 that investors expect earnings to grow. Mr. Baudino’s own data on Exhibit RAB-5  
11 shows a Value Line projected dividend growth rate that is less than the Value  
12 Line earnings growth rate. This is not surprising because it is likely that energy  
13 utilities will lower their dividend payout ratio over the next several years in  
14 response to very high external capital needs and rising business risks.

15 In short, dividend growth rates are unlikely to provide a meaningful guide  
16 to investors’ growth expectations for energy utilities. Therefore, earnings growth  
17 provides a more meaningful guide to investors’ long-term growth expectations.  
18 After all, it is growth in earnings that will support future dividends and share  
19 prices.

#### 5. RETENTION GROWTH METHOD

20 **Q. DO YOU AGREE WITH THE RETENTION GROWTH RATE**  
21 **TECHNIQUE (ALSO KNOWN AS SUSTAINABLE GROWTH METHOD**



1           **AND THE B X R METHOD) USED BY MR. BAUDINO TO IMPLEMENT**  
2           **THE DCF MODEL?**

3    A.    No, I do not. In order to estimate the growth component of the DCF model, Mr.  
4           Baudino relies on the retention growth method. According to this method (labeled  
5           “B x R” on Exhibit RAB-5), the growth rate is based on the equation  $g = b(\text{ROE})$ ;  
6           b is the percentage of earnings retained and ROE is the expected rate of return on  
7           book equity (ROE).

8                        I am not sure how much weight, if any, Mr. Baudino relies on this method.  
9           He reports its results on page 1 of Exhibit RAB-5, but does not include its results  
10          in his growth proxies on page 2 of Exhibit RAB-5. No explanation is provided for  
11          this exclusion.

12                       To the extent that he does rely on this method, it should be rejected for  
13          several reasons the most important of which is its inherent circularity.

14   **Q.    IS THE RETENTION GROWTH METHODOLOGY LOGICALLY**  
15    **CONSISTENT?**

16    A.    No, it is not. The retention growth methodology contains a logical contradiction.  
17          The contradiction arises because the method requires an explicit assumption on  
18          the ROE as one can plainly see in its formula  $g = b(\text{ROE})$ . The problem is that the  
19          purpose of this proceeding is to establish a fair and reasonable ROE on a  
20          prospective basis. It is inappropriate to develop a ROE recommendation based on  
21          assumed ROEs. Clearly, the method is logically circular in a regulatory  
22          proceeding.

1           In Data Request No. 96 I asked Mr. Baudino to supply the input data he  
2 used to estimate retention growth, that is, the “B” and “R” components. He  
3 referred me to the Value Line reports for each of the 19 peer companies. The  
4 expected ROEs used in his B x R estimates were shown earlier on Table 1 from  
5 Value Line. The problem is that the ROEs used by Mr. Baudino in calculating the  
6 retention growth rate do not match his 8.8% ROE recommendation.

7           Table 1 above replicates the expected ROEs for each company used by  
8 Mr. Baudino from Value Line reports. As seen above Table 1, expected ROEs  
9 using both averages and medians range from 10.3% to 11.4% (midpoint 10.75%).  
10 The problem is that the ROE range used in Mr. Baudino's retention growth  
11 computation exceeds his recommended ROE of 8.8% for Duke Energy Kentucky.  
12 Mr. Baudino's analysis thus assumes that the earned returns (ROE) of the sample  
13 companies exceed what he has determined to be their cost of equity. Perhaps, in  
14 fairness to Mr. Baudino, he does not factor the results of this faulty methodology,  
15 due to this inherent difficulty.

#### 6.     DCF GROWTH RATES

16   **Q.   WHAT GROWTH RATES SHOULD MR. BAUDINO HAVE USED?**

17   **A.**   For reasons outlined above, Mr. Baudino should have relied on three of his  
18 growth proxies: Value Line earnings growth, Zacks analyst growth forecasts, and  
19 Yahoo Finance analyst forecasts, and rejected the other two proxies, dividend  
20 growth and the retention growth forecasts. He did reject the latter in his final  
21 choice of growth rates.

1 Q. DR. MORIN, PLEASE PROVIDE A SUMMARY OF THE  
2 RECOMMENDED CHANGES TO MR. BAUDINO'S DCF ANALYSIS.

3 A. Attachment RAM - Rebuttal 1 Page 1 replicates the upper panel of Mr. Baudino's  
4 original growth rates shown on his Exhibit RAB-5. Attachment RAM - Rebuttal-1  
5 Page 2 shows the same table without the Value Line dividend growth forecasts  
6 and without the retention growth forecasts for reasons discussed above. As far as  
7 the shaded cells are concerned, the correct Value Line growth forecast for Fortis  
8 is 10.5% and not 9.0%. The other shaded cells refer to four very low growth rates  
9 that imply the implausible result that the cost of equity nearly equals these  
10 companies' cost of debt. Those are eliminated from the original compilation as  
11 well.

12 Attachment RAM - Rebuttal-2 shows the final corrected DCF analysis.  
13 The upper panel shows the growth rates, and the lower panel shows the correct  
14 DCF calculations. The expected dividend yield is calculated correctly my  
15 multiplying the dividend yield by  $(1 + g)$  rather than by  $(1 + 0.5g)$ . Also, 20 basis  
16 points were added to the expected dividend yield in order to account for flotation  
17 costs. **The final amended DCF results are 9.2% using Method 1 and 9.3%**  
18 **using Method 2.**

#### 7. CAPM Analysis

19 Q. DOES MR. BAUDINO PERFORM A CAPM ANALYSIS?

20 A. Yes, he does, although he does not rely on its results in his final recommendation.  
21 The results of his CAPM study are summarized on page 25 of his testimony and  
22 detailed on Exhibit RAB-6.

1 **Q. WHAT INPUT DATA DOES A CAPM ANALYSIS REQUIRE?**

2 A. To implement the CAPM, three quantities are required: the risk-free rate ( $R_f$ ),  
3 beta ( $\beta$ ), and the MRP (MRP). As shown on Exhibit RAB-6, Mr. Baudino uses a  
4 risk-free rate of 1.88% - 2.59%, a beta of 0.69, and a MRP in a range of 6.76% -  
5 7.47%.

6 **Q. DR. MORIN, DO YOU AGREE WITH MR. BAUDINO'S BETA**  
7 **ESTIMATE IN THE CAPM ANALYSIS?**

8 A. Yes, I do.

#### 8. CAPM MARKET RISK PREMIUM

9 **Q. DR. MORIN, DO YOU AGREE WITH MR. BAUDINO'S MRP**  
10 **ESTIMATED IN THE CAPM ANALYSIS?**

11 A. Not totally, I agree with two of the three proxies but disagree with the other.

12 **Q. HOW DOES MR. BAUDINO ESTIMATE THE MRP COMPONENT OF**  
13 **THE CAPM?**

14 A. In order to determine the MRP, Mr. Baudino relies on three estimates. First, as  
15 shown at the bottom of Exhibit RAB-6, Mr. Baudino calculates the overall market  
16 return using the DCF model, that is, he adds the dividend yield to the projected  
17 earnings growth using all the companies in the Value Line universe. He does the  
18 same thing using projected book value growth. The average of the two results  
19 produces a market return of 9.9%. He also looks at Value Line's projected overall  
20 market return of 8.8%. Averaging the two estimates of 9.9% and 8.8%, his final  
21 estimate of the market return is 9.35%. Subtracting Mr. Baudino's risk-free rate of

1           2.59% from the market return of 9.35% yields a MRP of 6.76%. I have ignored  
2           the 5-year risk-free rate estimate for reasons discussed later.

3   **Q.   DR. MORIN, DO YOU AGREE WITH THIS MRP ESTIMATE?**

4   A.   No, I do not. Mr. Baudino also relies on projected book value growth in arriving  
5           at his 9.9% estimate of market return. It is not clear as to why Mr. Baudino  
6           suddenly introduces book value growth in this particular DCF analysis of the  
7           market return when he failed to do so in all his DCF calculations for individual  
8           utilities. In any event, book value growth has little correlation with either earnings  
9           or dividend growth and should be ignored. Only earnings growth matters in a DCF  
10          analysis, as discussed earlier.

11                 If we remove the book value growth estimate of 7.5% from the  
12           calculations at the bottom of Exhibit RAB-6, the correct market return becomes  
13           10.1% which in turn produces a MRP of 7.52%, and not 6.76%.

14   **Q.   DR. MORIN, PLEASE COMMENT ON MR. BAUDINO'S SECOND MRP**  
15   **ESTIMATE?**

16   A.   For his second MRP estimate, Mr. Baudino relies on a long-term historical MRP  
17           of 7.0 percent tabulated by Duff & Phelps for the 1926-2016 period based on  
18           arithmetic averages, as shown in the middle column of Exhibit RAB-7.

19   **Q.   DR. MORIN, DO YOU AGREE WITH THIS SECOND MRP ESTIMATE?**

20   A.   Yes, I do. Mr. Baudino's second MRP of 7.0% is reasonable and is identical to  
21           the MRP used in my own CAPM analysis.

1 Q. DR. MORIN, PLEASE COMMENT ON MR. BAUDINO'S THIRD MRP  
2 ESTIMATE?

3 A. For his third estimate of the MRP Mr. Baudino relies on the long-term historical  
4 MRP of 5.0% reported in the same Duff & Phelps publication for the same period  
5 but this time based on geometric averages.

6 Q. DR. MORIN, DO YOU AGREE WITH THIS THIRD MRP ESTIMATE?

7 A. No, I do not. Mr. Baudino's MRP estimate of 5% is erroneously based on  
8 geometric average returns instead of the correct arithmetic average returns.

### 9. ARITHMETIC VS GEOMETRIC AVERAGES

9 Q. IS IT APPROPRIATE TO USE GEOMETRIC AVERAGES IN  
10 MEASURING HISTORICAL MRPS?

11 A. No, it is not. For his third MRP estimate, Mr. Baudino relies on the geometric  
12 average of stock returns minus bond returns rather than on the conventional and  
13 correct arithmetic average. As I discussed in my direct testimony, whenever  
14 relying on historical risk premiums, only arithmetic average returns over long  
15 periods are appropriate for forecasting and estimating the cost of capital, and  
16 geometric average returns are not. This is fully discussed in my treatise on  
17 regulatory finance.<sup>1</sup> Indeed, the Duff & Phelps publication on which Mr. Baudino  
18 himself relies to develop his MRP estimates contains a detailed and rigorous  
19 discussion of the impropriety of using geometric averages in estimating the cost  
20 of capital.

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<sup>1</sup> See Roger A. Morin, Regulatory Finance: Utilities' Cost of Capital, Chapter 11 (1994); Roger A. Morin, The New Regulatory Finance: Utilities' Cost of Capital, Chapter 4 (2006); Richard A Brealey, *et al.*, Principles of Corporate Finance (8th ed. 2006).

1           There is no theoretical or empirical justification for the use of geometric  
2 mean rates of return. Briefly, the disparity between the arithmetic average return  
3 and the geometric average return raises the question as to what purposes should  
4 these different return measures be used. The answer is that the geometric average  
5 return should be used for measuring historical returns that are compounded over  
6 multiple time periods. The arithmetic average return should be used for future-  
7 oriented analysis, where the use of expected values is appropriate. It is  
8 inappropriate to average the arithmetic and geometric average return; they  
9 measure different quantities in different ways.

10           Geometric means are properly used in evaluating historic performance of  
11 stocks or portfolios of stocks, whereas determining investor expectations, which  
12 define the cost of equity capital, requires use of arithmetic means. Chapter 6 of  
13 my book The New Regulatory Finance, as well as Mr. Baudino's own data source  
14 (Duff & Phelps) explain this issue in detail, provide illustrative mathematical  
15 examples, and cite authoritative financial texts, all of which confirm the need to  
16 use arithmetic means, and not geometric means, to properly estimate a utility's  
17 cost of equity.

18 **Q. DOES MR. BAUDINO RELY ON ANY PUBLISHED STUDIES IN**  
19 **COMPUTING HIS MRP?**

20 **A.** Yes, he does. On Page 28, Mr. Baudino refers to an old 2003 study of the MRP by  
21 Ibbotson & Chen which estimates a MRP of 5.97%, or almost 6%. I find this  
22 reference not only very stale but highly selective. There is a gigantic literature  
23 published regarding the MRP, a veritable cottage industry regarding its

1 magnitude. Instead of selecting one of a myriad studies on the MRP Mr. Baudino  
2 should have familiarize himself with the prevalent academic consensus on the  
3 magnitude of the MRP. In their widely-used authoritative textbook, following a  
4 comprehensive review of the rich and fertile MRP literature, Richard Brealey,  
5 Stewart Myers, and Franklin Allen state as follows:

6 *Brealey, Myers, and Allen have no official position on the issue,*  
7 *but we believe that a range of 5 to 8 percent is reasonable for the*  
8 *risk premium in the United States.<sup>2</sup>*

9 My own survey of the market risk premium literature is also quite consistent with  
10 this range.<sup>3</sup>

11 **Q. WHAT MRP ESTIMATE SHOULD MR. BAUDINO HAVE USED IN HIS**  
12 **CAPM ANALYSIS?**

13 A. The bottom line on Mr. Baudino's MRP estimate in the CAPM analysis is that he  
14 should have relied on a 7% MRP, as shown on Exhibit RAB-7, middle column.

#### 10. CAPM RISK-FREE RATE

15 **Q. WHAT RISK-FREE RATE DOES MR. BAUDINO USE IN HIS CAPM**  
16 **ANALYSIS?**

17 A. As a proxy for the risk-free rate, Mr. Baudino uses the average yield on the 20-  
18 year Treasury bond of 2.59% and the average yield on the 5-year Treasury note of  
19 1.88% over the six-month period from June through November 2017. As I show  
20 below, Mr. Baudino should have used the consensus long-term interest rate  
21 forecast of 4.40%. This correction alone would raise his CAPM estimates

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<sup>2</sup> Richard A. Brealey, *et al.*, *Principles of Corporate Finance*, at page 180 (9th ed. 2008).

<sup>3</sup> See Roger A. Morin, *The New Regulatory Finance*, at chapter 5 (2006).



1 substantially by 1.81% ( $4.40\% - 2.59\% = 1.81\%$ ) using the yield on 20-year  
2 bonds and by 2.52% ( $4.40\% - 1.88\% = 2.52\%$ ) using the yield on 5-year notes.

3 **Q. PLEASE COMMENT ON MR. BAUDINO'S PROXY FOR THE RISK-**  
4 **FREE RATE IN THE CAPM.**

5 A. I disagree with these proxies for two reasons. First, the appropriate proxy for the  
6 risk-free rate in the CAPM is the return on long-term Treasury bonds, and not the  
7 yield on medium-term Treasury notes. This is simply because common stocks are  
8 very long-term instruments more akin to long-term bonds than to 5-year notes.

9 Because common equity has an infinite life-span, the inflation  
10 expectations embodied in its market-required rate of return will be equal to the  
11 inflation rate anticipated to prevail over the long-term. The same expectation  
12 should be embodied in the risk free rate used in applying the CAPM model.  
13 Among U.S. Treasury securities, U.S. 30-year Treasury bonds have the longest  
14 term to maturity. Therefore, U.S. 30-year Treasury bonds will more closely  
15 incorporate within their yield the inflation expectations that influence the prices of  
16 common stocks than do U.S. Treasury bills or Treasury notes. The correct proxy  
17 for the risk-free rate in the CAPM is the return on 30-year Treasury bonds, and  
18 not the yield on 5-year Treasury notes or 20-year Treasury bonds. I note that is  
19 standard procedure practiced by most financial economists. Second, as I show  
20 below, Mr. Baudino should have relied on prospective interest rates rather than on  
21 current interest rates

22 **Q. WHY SHOULD MR. BAUDINO'S HAVE RELIED ON PROSPECTIVE**  
23 **RISK-FREE RATES IN THE CAPM ANALYSIS?**

1 A. Mr. Baudino uses current interest rates in his CAPM analysis instead of forecast  
2 interest rates, and strongly objects to my use of forecast interest rates. But given  
3 that this proceeding is to provide ROE estimates for future proceedings, forecast  
4 interest rates are far more relevant. I note that Mr. Baudino generously uses  
5 projections of other financial variables in all his analyses. In particular, he relies  
6 extensively on earnings and dividend growth projections in his DCF analyses and  
7 uses Value Line projections in deriving the MRP in his CAPM analysis. So, it is a  
8 mystery as to why he uses projections for most of his financial variables, but not  
9 for interest rates.

10 Mr. Baudino should have relied on projected long-term Treasury interest  
11 rates for the simple reason that investors price securities on the basis of long-term  
12 expectations, including interest rates. Cost of capital models, including CAPM  
13 estimates, are prospective (*i.e.* forward-looking) in nature and must take into  
14 account current market expectations for the future because investors price  
15 securities on the basis of long-term expectations, including interest rates. As he  
16 himself states on page 18 lines 6-7:

17 *“Finally, the relevant time frame is prospective rather than retrospective.”*

18 Again on page 22 line 7, he states:

19 *“Return on equity analysis is a forward-looking process.”*

20 In the same way that Mr. Baudino relies on forecast growth rates in his  
21 DCF analyses, he should have relied on interest rate forecasts as proxies for the  
22 risk-free rate in the CAPM analysis.

1 Q. PLEASE DESCRIBE THE TREND IN INTEREST RATES.

2 A. Throughout his testimony, Mr. Baudino makes frequent reference to the current  
3 low interest environment. On page 3-4 of his testimony, Mr. Baudino states that  
4 long-term interest rates remain low. But on page 7 lines 6-11 he reverses course  
5 and points to the Fed's increasing rates posture.

6 The simple fact is that interest rates have already risen substantially,  
7 contradicting Mr. Baudino's position. One only has to look at the following graph  
8 to see the "surging" upward trend in interest rates.

9 All the economic forecasts of which I am aware call for a substantial  
10 increase in interest rates. As shown in my prefiled direct testimony in this  
11 proceeding, each of the Congressional Budget Office, the U.S. Department of  
12 Labor, the U.S. Energy Information Administration, Global Insight, and Value  
13 Line projects higher long-term Treasury interest rates, with an average of 4.4%.

### Surging rates this year

US 10-YR (US10Y:U.S.)

undefined

Close | 1:52:28 PM EST

**2.727** +0.028 (0.00%)

YTD



1 Q. IS MR. BAUDINO CORRECT THAT LITTLE WEIGHT SHOULD BE  
2 PLACED ON INTEREST RATE FORECASTS IN PROJECTING THE  
3 RISK-FREE RATE FOR CAPM ANALYSES?

4 A. No, he is not. On pages 34-35 Mr. Baudino erroneously suggests that investors  
5 and regulatory bodies should place little weight on interest rate forecasts because  
6 they are often wrong, and therefore should not be used as proxies for the risk-free  
7 rate in implementing the CAPM. Mr. Baudino does not offer any published  
8 academic supportive evidence for that statement. One wonders if Mr. Baudino  
9 feels the same way about analyst growth forecasts on which he relies upon in his  
10 DCF analysis which often turn out to be wrong.

11 I disagree with Mr. Baudino's point of view on economic forecasts.  
12 Investors' required returns can and do shift over time with changes in capital  
13 market conditions, hence the importance of considering interest rate forecasts.  
14 The fact that organizations such as Value Line, IHS (Global Insight), EIA, and  
15 Blue Chip among many others devote considerable expertise and resources to  
16 developing an informed view of the future, and the fact that investors are willing  
17 to purchase such expensive services confirms the importance of  
18 economic/financial forecasts in the minds of investors. Moreover, the empirical  
19 evidence demonstrates that stock prices do indeed reflect prospective financial  
20 input data.

1 **Q. DR. MORIN, PLEASE PROVIDE A CORRECTED RENDITION OF MR.**  
2 **BAUDINO'S CAPM ESTIMATES.**

3 A. To implement the CAPM, three quantities are required: the risk-free rate ( $R_F$ ),  
4 beta ( $\beta$ ), and the MRP (MRP). For reasons discussed earlier, Mr. Baudino should  
5 have used a risk-free rate of 4.4%, a beta of 0.69, and a MRP of 7.0%. The end  
6 result is 9.23% which becomes 9.43% with a flotation costs adjustment of 20  
7 basis points.<sup>4</sup>

### 11. ECAPM VS EMPIRICAL CAPM

8 **Q. DO YOU AGREE WITH MR. BAUDINO'S EXCLUSIVE USE OF PLAIN**  
9 **VANILLA VERSION OF THE CAPM TO ESTIMATE RETURNS ON**  
10 **EQUITY?**

11 A. No. The plain vanilla version of the CAPM should be supplemented by the more  
12 refined version of the CAPM in estimating returns on equity. There have been  
13 countless empirical tests of the CAPM to determine to what extent security  
14 returns and betas are related in the manner predicted by the CAPM. The results of  
15 the tests support the idea that beta is related to security returns, that the risk-return  
16 tradeoff is positive, and that the relationship is linear. The contradictory finding is  
17 that the risk-return tradeoff is not as steeply sloped as the predicted CAPM. That  
18 is, low-beta securities earn returns somewhat higher than the CAPM would  
19 predict, and high-beta securities earn less than predicted. In other words, a  
20 CAPM-based estimate of the cost of capital underestimates the return required

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<sup>4</sup>  $ROE = 4.40\% + 0.69 \times 7.00\% = 9.23\%$

1 from low-beta securities and overstates the return from high-beta securities, based  
2 on the empirical evidence.

3 The empirical form of the CAPM that I used in my direct testimony  
4 refines the standard form of the CAPM to account for this phenomenon. As  
5 discussed in Appendix B of my prefiled direct testimony, my own empirical  
6 investigation of the relationship between return and Value Line adjusted betas is  
7 quite consistent with the general findings of the literature.

8 The downward-bias inherent in the CAPM is particularly significant for  
9 low-beta securities, such as the three groups of utilities used by Mr. Baudino. Mr.  
10 Baudino's CAPM estimates of equity costs are understated by about 50 basis  
11 points (*i.e.*, 0.5 percent) from this bias alone. His revised CAPM estimate of  
12 9.43% shown above becomes 9.93% using the ECAPM adjustment.

13 **Q. DO YOU HAVE ANY COMMENTS REGARDING MR. BAUDINO'S**  
14 **CONCERNS WITH YOUR EMPIRICAL CAPM ANALYSIS?**

15 **A.** Yes. Mr. Baudino's purported concerns with my empirical CAPM analysis on  
16 Page 39 arise from his confusing the adjustment of beta with the empirical  
17 CAPM. As discussed in Appendix B of my direct testimony, there is considerable  
18 academic and regulatory support for the use of the empirical CAPM. As explained  
19 in my direct testimony and supporting exhibit, it is essential to take into account  
20 the reality that the empirical Security Market Line described by the traditional  
21 CAPM is not as steeply sloped as the predicted Security Market Line. The  
22 empirical CAPM is thus a return adjustment which accounts for this reality and is

1 not an adjustment to beta which is an x-axis adjustment accounting for regression  
2 bias. Hence, the use of adjusted betas is not equivalent to the empirical CAPM.

3 Mr. Baudino objects to the use of the ECAPM on the grounds that it  
4 suggests that Value Line betas are incorrect and that investors should not rely on  
5 them. This argument is totally specious, because the use of an adjusted beta by  
6 Value Line is correcting for a different problem than the ECAPM. The adjusted  
7 beta captures the fact that betas regress toward one over time. Value Line betas  
8 remain accurate and useful and should be relied upon. The ECAPM corrects for  
9 the fact that the CAPM under-predicts observed returns when beta is less than one  
10 and over-predicts observed returns when beta is greater than one. Mr. Baudino's  
11 criticisms are unfounded.

12 In other words, the CAPM under-predicts actual returns for betas less than  
13 one which is a static relationship that exists at any point in time. Therefore, one  
14 adjustment captures a dynamic process, the other captures a static one. The two  
15 adjustments are not the same and there is no double-counting. As I stated in my  
16 treatise on regulatory finance:<sup>5</sup>

17 *"Some have argued that the use of the ECAPM is inconsistent with the use*  
18 *of adjusted betas, such as those supplied by Value Line and Bloomberg. ...*  
19 *This argument is erroneous. Fundamentally, the ECAPM is not an*  
20 *adjustment, increase or decrease, in beta. ... The ECAPM is a formal*  
21 *recognition that the observed risk-return tradeoff is flatter than predicted*  
22 *by the CAPM on myriad empirical evidence. The ECAPM and the use of*  
23 *adjusted betas comprised two separate features of asset pricing".*

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<sup>5</sup> Roger A. Morin, *New Regulatory Finance*, (Arlington, Virginia: Public Utilities Reports, Inc., 2006), p. 191.

1 Q. DO YOU AGREE WITH MR. BAUDINO'S ASSESSMENT OF THE  
2 CAPM GENERIC METHODOLOGY?

3 A. No, I do not. On page 26 of his testimony, Mr. Baudino argues that a considerable  
4 amount of judgment must be employed in defining the inputs to the CAPM. My  
5 immediate reaction is that the same comments apply at least as forcefully to the  
6 DCF model. I certainly agree with Mr. Baudino that judgment must be employed  
7 in defining the inputs to the CAPM, but the same is true about the DCF model. In  
8 my view, an inordinate amount of judgment is required to estimate the inputs to  
9 the DCF model, particularly the elusive growth component. There are additional  
10 judgmental elements, for example, the appropriate stock price, proxies for  
11 expected growth, sample size, risk comparability of the sample, and so on. All  
12 financial models require the use of judgment in defining the inputs data to these  
13 models, and the CAPM is no exception.

## 12. HISTORICAL RISK PREMIUM

14 Q. HOW DO YOU RESPOND TO MR. BAUDINO'S COMMENT ON YOUR  
15 HISTORICAL RISK PREMIUM ANALYSIS?

16 A. On page 40, Mr. Baudino criticizes my historical risk premium analysis on the  
17 grounds that 1) it relies on forecast interest rates instead of current interest rates,  
18 and 2) it is imprecise and constitutes a "blunt instrument". I have already  
19 discussed the impropriety of using current interest rates and the need to rely on  
20 prospective financial data.<sup>6</sup>

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<sup>6</sup> The same response applies to Mr. Baudino's criticism of my Allowed Risk Premium method.



1           As for his second argument concerning the lack of precision of this  
2 methodology no empirical evidence is offered for this unsubstantiated statement.  
3 In my view, the method is no less precise than the DCF methodology. The risk  
4 premium methodology is well-established among finance practitioners, and I am  
5 surprised Mr. Baudino did not rely on this well-known method.

6           The Risk Premium approach is conceptually sound and firmly rooted in the  
7 conceptual framework of Capital Market Theory. It is widely used by analysts,  
8 investors, and expert witnesses. Most college-level corporate finance and/or  
9 investment management texts contain detailed conceptual and empirical  
10 discussion of the risk premium approach.<sup>7</sup> The latter is typically recommended as  
11 one of the three leading methods of estimating the cost of capital<sup>8</sup>. Techniques of  
12 risk premium analysis are widespread in investment community reports.  
13 Professional certified financial analysts are certainly well versed in the use of this  
14 method.

15           Data requirements to implement the method are not prohibitive. The  
16 methodology is responsive to changes in capital market conditions and provides a  
17 timely signaling device for current interest rate trends in contrast to the DCF  
18 method, which may be sluggish in detecting changes in return requirements,  
19 especially when based on historical data. One advantage of risk premium over DCF  
20 is that the former takes a broader time-series perspective rather than a snapshot

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<sup>7</sup> See Bodie, Z., Kane, A., and Marcus, A. J., *Investments*, McGraw-Hill Irwin, 6<sup>th</sup> ed., 2005., a recommended textbook for Chartered Financial Analyst certification and examination.

<sup>8</sup> See Brigham and Ehrhardt (2005), op. cit.

1 point-in-time viewpoint, and is therefore less vulnerable to the vagaries of any one  
2 particular capital market environment.

3 Mr. Baudino also argues on page 40 lines 8-9 that risk premiums are  
4 unstable over time. No empirical evidence is offer to buttress this statement. To the  
5 extent that the estimated historical equity risk premium follows what is known in  
6 statistics as a random walk, one should expect the equity risk premium to remain  
7 at its historical mean. Thus, the best estimate of the future risk premium is the  
8 historical mean. As explained in my direct testimony, at least for the market risk  
9 premium, there is no evidence that the market risk premium in common stocks  
10 has changed over time (*i.e.*, no significant serial correlation in the Duff & Phelps  
11 historical return data). Therefore, it is reasonable to assume that these quantities  
12 will remain stable in the future. In short, Mr. Baudino's remarks on my risk  
13 premium analyses are unwarranted.

14 **Q. DID MR. BAUDINO ALLOW FOR THE COMPANY'S RISK RELATIVE**  
15 **TO ITS PEERS?**

16 **A.** No, Mr. Baudino did not adjust his recommended ROE upward to reflect Duke  
17 Energy Kentucky's greater than average risk on account of its significant capital  
18 expenditure program relative to its size and ancillary regulatory risks, its  
19 relatively small size, and its highly concentrated generation portfolio. In my  
20 direct testimony, I recommended that the Commission adopt a ROE in the upper  
21 portion of my recommended range in order to account for Duke Energy  
22 Kentucky's higher relative and a substantial increase in interest rates predicted

1 over the next several years. Mr. Baudino should have at least recommended the  
2 upper portion of his DCF results.

3 **Q. HOW DOES MR. BAUDINO JUSTIFY HIS FAILURE TO ADJUST FOR**  
4 **DUKE ENERGY KENTUCKY'S HIGHER RELATIVE RISKS?**

5 A. On page 42, Mr. Baudino argues that Duke Energy Kentucky's credit ratings are  
6 consistent with current industry credit ratings and, therefore, nothing in these  
7 credit ratings support a risk increment.

8 This view is inappropriate. This proceeding is mainly concerned with  
9 common stock risk/returns, and not bond risk/returns. Bondholders are concerned  
10 with creditworthiness, and bond ratings constitute a measure of creditworthiness.  
11 Common shareholders, on the other hand, are concerned with variability of  
12 returns, typically measured by beta risk measures. It is incorrect to measure a  
13 common stock's riskiness on the basis of its bond rating alone. In short, Mr.  
14 Baudino has confounded the risk of bonds and the risk of common stocks. The  
15 same applies to Mr. Baudino's view on Duke Energy Kentucky's asset  
16 concentration being already reflected in credit ratings.

#### V. SIZE EFFECT

17 **Q. IS MR. BAUDINO CORRECT IN ASSERTING THAT IT IS**  
18 **INAPPROPRIATE TO TAKE INTO ACCOUNT SIZE DIFFERENCES OF**  
19 **COMPANIES WHEN DETERMINING THE RETURN ON EQUITY?**

20 A. No. On pages 42-43, Mr. Baudino rejects the notion that Duke Energy Kentucky's  
21 very small size warrants an upward ROE adjustment because there is no evidence  
22 to suggest that a size premium applied to small companies. Frankly, I was

1 surprised by this assertion because the size phenomenon effect is well-known and  
2 well documented in the financial literature. Investment risk increases as company  
3 size diminishes, all else remaining constant. Small companies have very different  
4 returns than large ones and on average those returns have been higher. Small  
5 companies earn many different returns than large ones, and on average the actual  
6 returns of small companies have been higher, as is well documented in the  
7 financial literature. Indeed, the Duff & Phelps Valuation book cited by Mr.  
8 Baudino his testimony devote a full two chapters and two appendices  
9 documenting and quantifying the size effect.

10 The greater risk of small stocks does not fully account for their higher  
11 returns over many historical periods. The average small stock premium is well in  
12 excess of that of the average stock, more than could be expected by risk  
13 differences alone, suggesting that the cost of equity for small stocks is  
14 considerably larger than for large capitalization stocks. In addition to earning  
15 higher average rates of return, small stocks also have a higher volatility, as  
16 measured by the standard deviation of returns.

17 **Q. SHOULD THE COMMISSION RELY EXCLUSIVELY ON THE DCF AS**  
18 **MR. BAUDINO DOES?**

19 A. No, it should not. No one single method provides the necessary level of precision  
20 for determining a fair return, but each method provides useful evidence to  
21 facilitate the exercise of an informed judgment. Reliance on any single method or  
22 preset formula is inappropriate when dealing with investor expectations because  
23 of possible measurement difficulties and vagaries in individual companies'

1 market data. The advantage of using several different approaches is that the  
2 results of each one can be used to check the others.

3 As a general proposition, it is extremely dangerous to rely on only one  
4 generic methodology to estimate equity costs. Hence, several methodologies  
5 applied to several comparable risk companies should be employed to estimate the  
6 cost of common equity.

7 There are three broad generic methods available to measure the cost of  
8 equity: DCF, CAPM, and risk premium. All three of these methods are accepted  
9 and used by the financial community and firmly supported in the financial  
10 literature. The weight accorded to any one method may vary depending on  
11 unusual circumstances in capital market conditions.

12 Each methodology requires the exercise of considerable judgment on the  
13 reasonableness of the assumptions underlying the method and on the  
14 reasonableness of the proxies used to validate the theory and apply the method.  
15 Each method has its own way of examining investor behavior, its own premises,  
16 and its own set of simplifications of reality. Investors do not necessarily subscribe  
17 to any one method, nor does the stock price reflect the application of any one  
18 single method by the price-setting investor. There is no guarantee that a single  
19 DCF result is necessarily the ideal predictor of the stock price and of the cost of  
20 equity reflected in that price, just as there is no guarantee that a single CAPM or  
21 risk premium result constitutes the perfect explanation of a stock's price or the  
22 cost of equity.

1           In short, the Commission should consider all the relevant evidence  
2           presented.

## VI. CONCLUSIONS

3   **Q.   WHAT DO YOU CONCLUDE FROM MR. BAUDINO'S TESTIMONY?**

4   A.   I agree with several of Mr. Baudino's views and procedures: (i) his sample of  
5       utility companies in his DCF and CAPM analyses; (ii) his use of analysts' growth  
6       forecasts as proxies for expected growth in the classic DCF model; (iii) his beta  
7       estimates in the CAPM analysis, and (iv) a portion of his MRP estimates in the  
8       CAPM analysis.

9           However, there are major weaknesses in Mr. Baudino's methodologies.  
10       His ROE recommendation, which would represent among the lowest, if not the  
11       lowest, allowed ROE in the country, should be rejected by the Commission.

12           As I demonstrated earlier, Mr. Baudino has understated his DCF results.  
13       Correcting these understatements increases his DCF estimates from a range of  
14       8.49% - 8.64% to a range of 9.0% – 9.3% even without the required upward risk  
15       adjustment. Mr. Baudino has also understated his CAPM results. Correcting these  
16       understatements increases his CAPM results from a midpoint of 6.70% to 9.43%  
17       even without the upward risk adjustment.

18   **Q.   WOULD THE ADOPTION OF MR. BAUDINO'S UNDERSTATED**  
19       **RECOMMENDED ROE ENDANGER DUKE ENERGY KENTUCKY'S**  
20       **CREDIT QUALITY?**

21   A.   Yes, it certainly increases the probability of deterioration in Duke Energy  
22       Kentucky's creditworthiness. Decreases in Duke Energy Kentucky's authorized

1 ROE, such as the decrease recommended by Mr. Baudino, could very well  
2 threaten the Company's creditworthiness. A weakening of Duke Energy  
3 Kentucky's financial viability and earnings power at a time when the Company  
4 needs to attract significant external capital on reasonable terms is ill-advised.

5 **Q. HAS MR. BAUDINO PRESENTED ANY ARGUMENTS IN HIS**  
6 **TESTIMONY THAT WOULD CAUSE YOU TO ALTER ANY OF YOUR**  
7 **RECOMMENDATIONS AND METHODOLOGIES?**

8 A. No, he has not.

9 **Q. DOES THIS COMPLETE YOUR REBUTTAL TESTIMONY?**

10 A. Yes, it does.

**VERIFICATION**

**STATE OF FLORIDA** )  
 ) **SS:**  
**COUNTY OF NASSAU** )

The undersigned, Dr. Roger A. Morin, Emeritus Professor of Finance and a Principal in Utility Research International, 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.

*Roger A. Morin*

Dr. Roger A. Morin Affiant

Subscribed and sworn to before me by Dr. Roger A. Morin on this 13<sup>th</sup> day of February, 2018.

*[Signature]*

NOTARY PUBLIC

My Commission Expires: 6/2/20





**PROXY GROUP  
DCF Growth Rate Analysis**

<u>Company</u>	(1) <u>Value Lin/alue DPS</u>	(2) <u>Lin/alue EPS</u>	(3) <u>Line B x R</u>	(4) <u>Zacks</u>	(5) <u>Yahoo! Finance</u>
1 Alliant Energy		6.00%		6.20%	6.75%
2 Ameren Corp.		6.00%		6.70%	7.00%
3 Black Hills		7.50%		5.60%	4.26%
4 CenterPoint Energy		6.00%		5.50%	7.38%
5 Chesapeake Utilities		8.00%		6.00%	8.10%
6 CMS Energy Corp.		6.50%		6.50%	7.44%
7 Consolidated Edison		2.50%		3.00%	3.23%
8 Dominion Energy		6.50%		5.60%	3.64%
9 DTE Energy Co.		6.00%		6.00%	4.91%
10 Duke Energy Corp.		4.50%		4.00%	3.23%
11 Eversource Energy		6.50%		5.90%	5.91%
12 Exelon Corp.		8.50%		4.30%	
13 Fortis		10.50%		5.50%	5.50%
14 MGE Energy		6.50%		4.00%	4.00%
15 NorthWestern Corp.		4.50%			
16 Pub Sv Enterprise Grp.				2.70%	
17 Vectren Corp.		6.50%		5.70%	6.00%
18 WEC Energy Group		6.00%		5.30%	5.27%
19 Xcel Energy Inc.		4.50%		5.50%	5.50%
<b>Averages</b>		<b>6.28%</b>		<b>5.22%</b>	<b>5.51%</b>
<b>Median Values</b>		<b>6.25%</b>		<b>5.55%</b>	<b>5.50%</b>

Source: Baudino Exhibit RAB-5

Note: The Fortis earnings growth rate reported by Vallue Line is actually 10.5%

Note: the four shaded cells in Columns 4 and 5 show eliminated growth rates

**PROXY GROUP  
DCF Growth Rate Analysis**

<u>Company</u>	(1) <u>Value Line</u> <u>DPS</u>	(2) <u>Value Line</u> <u>EPS</u>	(3) <u>Value Line</u> <u>B x R</u>	(4) <u>Zacks</u>	(5) <u>Yahoo!</u> <u>Finance</u>
Alliant Energy	4.50%	6.00%	5.00%	6.20%	6.75%
Ameren Corp.	4.50%	6.00%	4.00%	6.70%	7.00%
Black Hills	5.00%	7.50%	5.00%	5.60%	4.26%
CenterPoint Energy	3.50%	6.00%	4.00%	5.50%	7.38%
Chesapeake Utilities	5.50%	8.00%	8.00%	6.00%	8.10%
CMS Energy Corp.	6.50%	6.50%	5.50%	6.50%	7.44%
Consolidated Edison	3.00%	2.50%	2.50%	3.00%	3.23%
Dominion Energy	9.00%	6.50%	2.00%	5.60%	3.64%
DTE Energy Co.	7.00%	6.00%	4.00%	6.00%	4.91%
Duke Energy Corp.	4.50%	4.50%	2.00%	4.00%	3.23%
Eversource Energy	6.00%	6.50%	4.00%	5.90%	5.91%
Exelon Corp.	5.50%	8.50%	4.50%	4.30%	0.84%
Fortis	6.00%	9.00%	3.00%	5.50%	5.50%
MGE Energy	4.00%	7.00%	6.50%	4.00%	4.00%
NorthWestern Corp.	5.00%	4.50%	4.00%	1.50%	2.25%
Pub Sv Enterprise Grp.	5.00%	1.00%	3.50%	2.70%	1.48%
Vectren Corp.	4.50%	6.50%	5.00%	5.70%	6.00%
WEC Energy Group	6.00%	6.00%	3.50%	5.30%	5.27%
Xcel Energy Inc.	6.00%	4.50%	3.50%	5.50%	5.50%
Averages	5.32%	5.95%	4.18%	5.03%	4.88%
Median Values	5.00%	6.00%	4.00%	5.50%	5.27%

Sources: Exhibit RAB-5

**PROXY GROUP**  
**Corrected DCF Growth Rate Analysis**

<u>Company</u>	(1) <u>Value Line</u> <u>EPS</u>	(2) <u>Zacks</u>	(3) <u>Yahoo!</u> <u>Finance</u>
Alliant Energy	6.00%	6.20%	6.75%
Ameren Corp.	6.00%	6.70%	7.00%
Black Hills	7.50%	5.60%	4.26%
CenterPoint Energy	6.00%	5.50%	7.38%
Chesapeake Utilities	8.00%	6.00%	8.10%
CMS Energy Corp.	6.50%	6.50%	7.44%
Consolidated Edison	2.50%	3.00%	3.23%
Dominion Energy	6.50%	5.60%	3.64%
DTE Energy Co.	6.00%	6.00%	4.91%
Duke Energy Corp.	4.50%	4.00%	3.23%
Eversource Energy	6.50%	5.90%	5.91%
Exelon Corp.	8.50%	4.30%	
Fortis	10.50%	5.50%	5.50%
MGE Energy	6.50%	4.00%	4.00%
NorthWestern Corp.	4.50%		
Pub Sv Enterprise Grp.		2.70%	
Vectren Corp.	6.50%	5.70%	6.00%
WEC Energy Group	6.00%	5.30%	5.27%
Xcel Energy Inc.	4.50%	5.50%	5.50%
Averages	6.28%	5.22%	5.51%
Median Values	6.25%	5.55%	5.50%

**PROXY GROUP  
CORRECTED DCF RETURN ON EQUITY**

	(1) Value Line <u>Earnings Gth.</u>	(2) Zack's <u>Earnings Gth.</u>	(3) Yahoo! <u>Earnings Gth.</u>	(4) Averages
<b><u>Method 1:</u></b>				
Dividend Yield	3.11%	3.11%	3.11%	3.11%
Average Growth Rate	6.28%	5.22%	5.51%	5.67%
Expected Div. Yield	<u>3.51%</u>	<u>3.47%</u>	<u>3.48%</u>	3.49%
<b><i>DCF Return on Equity</i></b>	<b>9.78%</b>	<b>8.69%</b>	<b>8.99%</b>	<b>9.16%</b>
<b><u>Method 2:</u></b>				
Dividend Yield	3.11%	3.11%	3.11%	3.11%
Median Growth Rate	6.25%	5.55%	5.50%	5.77%
Expected Div. Yield	<u>3.50%</u>	<u>3.48%</u>	<u>3.48%</u>	3.49%
<b><i>DCF Return on Equity</i></b>	<b>9.75%</b>	<b>9.03%</b>	<b>8.98%</b>	<b>9.26%</b>

**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. )

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**REBUTTAL TESTIMONY OF**  
**ANTHONY J. PLATZ**  
**ON BEHALF OF**  
**DUKE ENERGY KENTUCKY, INC**

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February 14, 2018

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**I. INTRODUCTION AND PURPOSE**

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

2 A. My name is Anthony J. Platz, 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 Director  
6 Power Quality, Reliability and Integrity (PQR&I) Engineering for Kentucky,  
7 Ohio, and Indiana. DEBS provides various administrative and other services to  
8 Duke Energy Kentucky, Inc., (Duke Energy Kentucky or the Company) and other  
9 affiliated companies of Duke Energy Corporation (Duke Energy).

10 **Q. ARE YOU THE SAME ANTHONY J. PLATZ THAT SUBMITTED**  
11 **DIRECT TESTIMONY IN THIS PROCEEDING?**

12 A. Yes.

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

15 A. The purpose of my testimony is to respond to the criticisms of the Company's  
16 proposed distribution capital investment rider (Rider DCI) and the Targeted  
17 Underground program raised by Richard Baudino, Brian Collins, and Justin  
18 Bieber. Specifically, I will rebut questions about program cost management,  
19 operation and maintenance (O&M) expense reductions, and reliability  
20 improvement projections associated with the Targeted Underground program  
21 itself. All issues involving the structure and operation of the Rider DCI as well as

1 policy issues raised by these witnesses are addressed in the Rebuttal Testimony of  
2 Duke Energy Kentucky Witness William Don Wathen Jr.

## II. DISCUSSION

3 **Q. HOW DO THE INTERVENORS RESPOND TO THE COMPANY'S**  
4 **PROPOSED RIDER DCI AND THE TARGETED UNDERGROUND**  
5 **PROGRAM?**

6 A. Witness Baudino, on behalf of the Office of the Attorney General, opposes  
7 approval of Rider DCI for ratemaking policy reasons, although he also makes  
8 recommendations for the Commission to consider if it does approve the  
9 Company's proposal. Witness Baudino did not question the costs or benefits  
10 provided in my Direct Testimony or in response to discovery questions, but he did  
11 question why the Company would not guarantee achievement of specific  
12 reliability projections tied to its Targeted Underground program. I will provide  
13 further detail about the program costs and benefits and explain reliability score  
14 guarantees in this rebuttal testimony. I will also respond to some of Witness  
15 Baudino's proposed recommendations for Rider DCI if it is approved by the  
16 Commission.

17 Witness Collins, on behalf of Northern Kentucky University, and Witness  
18 Bieber, on behalf of Kroger, also oppose approval of Rider DCI for policy  
19 reasons. In terms of the Targeted Underground program specifically, Witness  
20 Bieber suggests that the Company would have reduced incentive to manage  
21 program costs if the program were recovered through a rider rather than through  
22 base rates. Witness Collins suggests that the Company should not be granted a



1 rider for recovery of the Targeted Underground program because it may attain  
2 lower O&M expense as a result of the program and has not proposed inclusion of  
3 those O&M reductions in the rider. I will address these concerns about cost  
4 management and O&M benefits in my rebuttal testimony as well.

5 **Q. WOULD RECOVERY OF TARGETED UNDERGROUND PROGRAM**  
6 **COSTS BE SUBJECT TO LESS EXAMINATION AND PRUDENCY**  
7 **REVIEW IF THEY ARE RECOVERED THROUGH A RIDER AS**  
8 **OPPOSED TO A RATE CASE, AS SUGGESTED BY WITNESS BAUDINO**  
9 **AND WITNESS BIEBER?**

10 A. I do not believe so. The Commission and Intervenors would arguably have greater  
11 transparency to examine and review costs associated with the Targeted  
12 Underground program through the annual Rider DCI proceedings than through a  
13 rate case, since the Targeted Underground program would be front and center in  
14 those proceedings. In response to the Attorney General's discovery request, AG-  
15 DR-01-089(a)(1) Attachment, I provided a 10 year budget for the Targeted  
16 Underground program. In a separate and discrete rider proceeding, the Company  
17 would have more detailed cost estimates for near-term work to be performed and  
18 would not be able to recover costs until the plant was in service, as recommended  
19 by Witness Baudino. This rider process would thereby allow for a review of  
20 forecasted Targeted Underground investment and actual costs incurred. The  
21 Commission would actually have greater transparency into how the Company's  
22 program is impacting reliability performance for customers. Ms. Lawler explains  
23 the process for Rider DCI in her direct testimony.

1           Near-term scope for the Targeted Underground program would also be  
2 available through the individual Rider DCI proceedings. Again, in response to the  
3 Attorney General's discovery requests, I provided the candidate line segments  
4 being considered for the Targeted Underground program scope over the next 3  
5 and the full 10 years in AG-DR-01-089(b)(1) Attachment and AG-DR-01-  
6 089(b)(2) Attachment and showed where those line segments are located in the  
7 Duke Energy Kentucky service area using AG-DR-01-089(c)(1) Attachment and  
8 AG-DR-01-089(c)(2) Attachment. The Company will conduct further evaluation  
9 and engineering to turn candidate line segments into selected line segments on an  
10 annual basis.

11 **Q. HOW WOULD WITNESS BAUDINO'S PROPOSAL THAT THE**  
12 **COMMISSION LIMIT RIDER DCI TO A THREE-YEAR PILOT**  
13 **PROGRAM AFFECT THE TARGETED UNDERGROUND PROGRAM**  
14 **AND RIDER DCI'S OPERATION?**

15 **A.** The reliability projections for the Targeted Underground program, described  
16 below, assume that the full 10 years of the program are executed. Witness  
17 Baudino's suggestion that Duke Energy Kentucky undertake only three years of  
18 the program would undercut its ability to achieve the projected reliability  
19 improvements through the program.

20           Moreover, limiting the DCI or Targeted Underground to a pilot would  
21 limit the Company's ability to develop and present new reliability and integrity  
22 initiatives to the Commission for review and approval and consideration as part of  
23 the Rider DCI mechanism. This would mean that customers would be limited in

1 experiencing benefits from potential new programs that could be implemented to  
2 increase or enhance reliability, integrity or system performance. Again, as  
3 proposed, Rider DCI provides the Company with the process and mechanism to  
4 bring such programs to the Commission for consideration. The Company would  
5 be afforded an opportunity to recover the capital costs related to such investments  
6 and programs in a manner that does not erode earnings or require the Company to  
7 perform evaluations of what existing programs should be cut to fund additional or  
8 new reliability initiatives. The Company's proposal balances the need for the  
9 Commission to approve and evaluate reasonableness of the utility's service and  
10 rate. The Company would have the burden of proof that any new program would  
11 be reasonable and performed at a reasonable cost.

12 If the Commission does consider Rider DCI merits approval on a pilot  
13 basis, the Company would be agreeable to a pilot that would last until the  
14 Company's next base electric rate case. The Company would then have the ability  
15 to demonstrate whether or not Rider DCI should continue on a permanent basis.

16 **Q. WITNESS BAUDINO STATES THAT DUKE ENERGY KENTUCKY HAS**  
17 **NOT QUANTIFIED ANY CUSTOMER BENEFITS FROM THE**  
18 **PROPOSED TARGETED UNDERGROUND PROGRAM. IS THAT**  
19 **CORRECT?**

20 **A.** No, which is confusing since Witness Baudino references the customer benefits  
21 projected by the Company in his Exhibit No. RAB-8. I have provided projected  
22 benefits of completing the 10 year Targeted Underground program in terms of  
23 reliability with major storm impacts excluded through AG-DR-01-089(a)(2)

1 Attachment. I also provided the impact of the program during major storms  
2 through AG-DR-01-089(a)(3) Attachment. The Company has clearly quantified  
3 its customer benefits in terms of reliability improvement projections.

4 It appears that Witness Baudino does not consider those benefits to be  
5 “quantified” because the Company is not able to “guarantee... a particular level of  
6 system performance,” as I state in Direct Testimony, weather and other factors  
7 outside the Company’s control can cause significant variability in the reliability  
8 measures from year to year. All customers will benefit from a hardened  
9 distribution system that experiences fewer outages, both in terms of events and  
10 duration. These fewer events will enable the Company to restore service faster  
11 during major events because fewer circuits will be impacted. While we cannot  
12 guarantee specific performance, customers whose service has suffered due to  
13 vegetation issues in his or her back yard will improve when the overhead line is  
14 moved underground.

15 **Q. WHY DOES THE COMPANY PROJECT THAT THE TARGETED**  
16 **UNDERGROUND PROGRAM WILL NOT HAVE MUCH IMPACT ON**  
17 **SAIFI IN THE DUKE ENERGY KENTUCKY SERVICE AREA, AS**  
18 **NOTED BY WITNESS BAUDINO?**

19 **A.** SAIFI is calculated using the total number of customers interrupted divided by the  
20 total number of customers served. The targeted underground program is focused  
21 on tap lines that serve smaller groupings of customers. Therefore, the reduction of  
22 total number of customer interruptions will be minimal, corresponding to a  
23 negligible improvement to a system level reliability measure. However, the

1 customers who have had their service moved to underground will definitely  
2 experience an improvement in reliability.

3 **Q. WHAT IS THE SIGNIFICANCE OF THE MAJOR EVENT DAY OUTAGE**  
4 **REDUCTIONS FOR THE DUKE ENERGY SYSTEM AS A WHOLE?**

5 A. Duke Energy Kentucky has conducted analysis to identify outlier overhead  
6 segments using previous ten years outage history. These segments were used to  
7 project MED event benefits. By using past MED outage data showing specific CI  
8 (customers interrupted), CMI (customer minutes of interruption) and outage  
9 events (total number) linked to specific device or equipment identifiers, we were  
10 able to perform analysis to look for correlations between those MED event  
11 devices and the proposed list of candidate targets for the Targeted Underground  
12 program.

13 That correlation analysis suggests that MED events we will see a 16%  
14 reduction in outage events post completion of the proposed TUG program and a  
15 15-20% reduction in major event day duration depending on the severity of the  
16 MED event. These percentages represent the average experience over multiple  
17 events.

18 **Q. DOES THE COMPANY PROJECT O&M EXPENSE REDUCTIONS**  
19 **ASSOCIATED WITH IMPROVED OUTAGE RESTORATION OR**  
20 **AVOIDED VEGETATION MANAGEMENT DUE TO THE TARGETED**  
21 **UNDERGROUND PROGRAM, AS ASSUMED BY WITNESS COLLINS?**

22 A. No. First, it should be recognized that the Company is not proposing to include  
23 O&M costs in the Rider DCI. Therefore, unless Mr. Baudino is suggesting that

1 O&M costs for Targeted Underground (and future reliability programs) should be  
2 included in the Rider DCI, there are no O&M savings that should be included.

3 Nonetheless, the same challenges to knowing exact outage conditions in  
4 the future exist in quantifying O&M expense reductions associated with restoring  
5 service from outages. I described how the Company could more effectively  
6 respond to outages if it didn't have to restore the line segments moved  
7 underground, but quantifying those processes in terms of O&M savings is not  
8 possible.

9 Regarding vegetation management O&M expenses, the Company believes  
10 that the Targeted Underground program will simply let us redirect vegetation  
11 management efforts to other parts of our service territory and enable the Company  
12 to have additional flexibility to maintain and manage trim cycles. Any savings  
13 from vegetation management achieved from Targeted Underground will be  
14 immaterial. The Company is not seeking to relocate entire circuits or its entire  
15 delivery system.

### **III. CONCLUSION**

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

17 **A. Yes.**

VERIFICATION

STATE OF OHIO                    )  
  )  
COUNTY OF HAMILTON        )        SS:

The undersigned, Anthony J. Platz, Director Power Quality, Reliability and Integrity Engineering, 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.

Anthony J. Platz  
Anthony J. Platz Affiant

Subscribed and sworn to before me by Anthony J. Platz on this 14<sup>TH</sup> day of FEBRUARY, 2018.

Adele M. Frisch  
NOTARY PUBLIC

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

My Commission Expires: 1/5/2019

**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. )

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**REBUTTAL TESTIMONY OF**  
**BRUCE L. SAILERS**  
**ON BEHALF OF**  
**DUKE ENERGY KENTUCKY, INC.**

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February 14, 2018



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**Attachments:**

Attachment BLS-Rebuttal-1 (NKU-DR-01-006)

Attachment BLS-Rebuttal-2 (NKU-DR-02-001)

Attachment BLS-Rebuttal-3 (STAFF-DR-02-009)

Attachment BLS-Rebuttal-4 (STAFF-DR-02-009 Attachment A)

Attachment BLS-Rebuttal-5 (STAFF-DR-03-010)

Attachment BLS-Rebuttal-6 (STAFF-DR-03-010 Attachment)

Attachment BLS-Rebuttal-7 (AG-DR-02-040)

Attachment BLS-Rebuttal-8 (AG-DR-02-040 Attachment 2)

**I. INTRODUCTION AND PURPOSE**

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

2 A. My name is Bruce L. Sailers. 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 Pricing and  
6 Regulatory Solutions Manager. 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 BRUCE SAILERS THAT SUBMITTED DIRECT**  
10 **TESTIMONY IN THIS PROCEEDING?**

11 A. Yes.

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

13 A. The purpose of my rebuttal testimony is to respond to several opinions and  
14 recommendations expressed by witness Glenn A. Watkins on behalf of the  
15 Kentucky Attorney General (AG) and witness Ronald L. Willhite on behalf of the  
16 Kentucky School Boards Association (KSBA). I also respond to the cost  
17 reduction allocation recommended by Kroger's witness Justin Bieber regarding  
18 the benefits of the Tax Cuts and Jobs Act. In addition, I provide support for  
19 several tariff sheet changes to be reflected upon conclusion of this proceeding.

20 Specifically, I address: 1) certain of Mr. Watkins' arguments concerning  
21 the residential customer and energy charges; 2) certain of Mr. Watkins' testimony  
22 regarding anomalies in non-residential rates; 3) certain of Mr. Willhite's

1 arguments concerning his proposal for a new rate for P – 12 schools; 4) Mr.  
2 Willhite’s recommendation to reopen Rate SP; 5) support for corrections to the  
3 Company’s Rate DT charges to correct errors that were discovered during  
4 discovery; 6) support for certain revisions to Billing & Payment Electric Service  
5 Regulations, Sheet No. 25; 7) support for a change to the remote electric  
6 reconnection charge, again, that was identified during discovery; and 8) Mr.  
7 Bieber’s allocation recommendation related to the Tax Cuts and Jobs Act.

## II. DISCUSSION

### 1. RATE SCHEDULE RS CUSTOMER AND ENERGY CHARGES

8 **Q. WHAT DOES ATTORNEY GENERAL WITNESS WATKINS**  
9 **RECOMMEND RELATED TO RESIDENTIAL RATE SCHEDULE RS**  
10 **CHARGES?**

11 A. Mr. Watkins recommends no change in the current \$4.50 per month customer  
12 charge implying that any increase to rate schedule RS should be reflected in the  
13 energy charge.

14 **Q. WHAT IS THE BASIS OF MR. WATKINS’ RECOMMENDATION?**

15 A. Mr. Watkins opines that the increase “...violates the regulatory principle of  
16 gradualism, violates the economic theory of efficient competitive pricing, and is  
17 contrary to effective conservation efforts.”

18 **Q. DO YOU AGREE WITH HIS RECOMMENDATION AND REASONING?**

19 A. No. The Company’s proposed residential customer charge is reasonable and does  
20 not violate any regulatory principal.

1 Q. PLEASE EXPLAIN WHY YOU BELIEVE THE PROPOSED  
2 RESIDENTIAL CUSTOMER CHARGE IS REASONABLE.

3 A. As a foundation, let me restate information from my direct testimony that the  
4 proposed \$11.22 per month customer charge is supported by the Company's rate  
5 schedule RS customer component as determined in the cost of service study  
6 (COSS) which uses industry-standard cost allocation methods that have been  
7 previously approved by the Commission. Therefore, the proposed charge is  
8 supported by cost causation and helps to eliminate the intra-rate subsidy low  
9 usage customers have received for years.

10 Further, the Company has not requested an increase in its base electric  
11 rates, and in turn, this fixed customer charge for over a decade. In that time, the  
12 fixed customer component of rates throughout the industry, including utilities in  
13 Kentucky, have been rising over that past 12 years.

14 Mr. Watkins' statements regarding the magnitude of the Company's  
15 proposed increase in the fixed monthly customer charge are exaggerations and the  
16 increase must be viewed in the proper context. The increase may seem large on a  
17 percentage increase basis, but this is only because of the exceptionally low current  
18 value. For example, if you increase a customer charge \$3.00 but the charge has a  
19 current value of \$1.00, then the increase is 300 percent (*i.e.*, \$3.00 / \$1.00). But if  
20 the current value is \$15.00, the percentage increase is 20 percent (*i.e.*, \$3.00 /  
21 \$15.00). Moreover, the metric that is truly relevant in evaluating the magnitude  
22 of an increase is the total rate per month, including both the fixed and variable  
23 components of the bill.

1                   When placed in the proper context, the Company’s proposed fixed  
 2 monthly customer charge is in line with what the Commission has previously  
 3 approved. The table below shows that Company’s proposed customer charge  
 4 compares favorably with many other electric utilities in the state. Clearly, the  
 5 proposed customer charge is reasonable. It is smaller than the current customer  
 6 charges of twenty (20) other Kentucky utilities.

<b>Kentucky Electric Utility Residential Customer Charges**</b>		
	<b>Utility Name</b>	<b>RS Customer Charge</b>
1	Owen Electric Cooperative	\$ 20.00
2	Kenergy	\$ 18.20
3	Meade County Rural Electric Coop *	\$ 17.16
4	Jackson Energy Coop	\$ 16.64
5	Big Sandy RECC	\$ 15.00
6	Fleming-Mason Energy Coop	\$ 15.00
7	Grayson Rural Electric Coop	\$ 15.00
8	Big Sandy RECC	\$ 15.00
9	Shelby Energy Cooperative Inc.	\$ 15.00
10	Kentucky Power – Pending Settlement	\$ 14.00
11	Farmers Rural Electric	\$ 14.00
12	Licking Valley Rural Electric	\$ 14.00
13	Blue Grass RECC	\$ 13.85
14	Nolin RECC	\$ 13.50
15	South Kentucky RECC	\$ 12.82
16	Jackson Purchase Energy Corp	\$ 12.45
17	Clark Energy Cooperative	\$ 12.43
18	LG&E	\$ 12.25
19	Kentucky Utilities	\$ 12.25
20	Cumberland Valley Electric	\$ 12.00
21	Duke Energy Kentucky – Proposed	\$ 11.22
22	Kentucky Power - Current	\$ 11.00
23	Taylor County Rural Electric Coop Corp	\$ 9.82
24	Inter-County Energy	\$ 8.97
25	Salt River Electric	\$ 8.84
26	Duke Energy Kentucky – Current	\$ 4.50

\* Meade’s customer charge is a ‘daily’ charge adjusted here.

\*\* Sourced from a review of the KYPSC website in early Jan. 2018.

1 **Q. DOES THE COMPANY'S PROPOSED RATE DESIGN VIOLATE THE**  
2 **REGULATORY PRINCIPLE OF GRADUALISM?**

3 A. No. Mr. Watkins' argument is selective and fails to consider the total bill for the  
4 customer. Again, the correct metric for gradualism is what is the total impact of  
5 the rate increase to customers. Nonetheless, as I previously stated, Duke Energy  
6 Kentucky has not requested a base rate increase or sought to change this fixed  
7 customer charge in over 11 years. On an annualized basis, the increase in the  
8 fixed customer charge equates to approximately \$0.61 per year.<sup>1</sup>

9 **Q. PLEASE COMMENT ON MR. WATKINS' DISCUSSION OF THE**  
10 **ECONOMIC THEORY OF EFFICIENT COMPETITIVE PRICING.**

11 A. Notwithstanding the merit of Mr. Watkins' economic theory discussion, the  
12 Company does not operate in a competitive retail electricity market. It is my  
13 understanding that Kentucky law supports a fully regulated electric utility model  
14 where utility rates are based upon the cost of service. The Company bases its  
15 charges on prudently incurred embedded costs that are allocated through a COSS  
16 using Commission approved allocation methods. Nonetheless, to the extent that  
17 Mr. Watkins believes a comparison of Duke Energy Kentucky's rates to that of  
18 the market is relevant to the reasonableness of the Company's rates, which it is  
19 not, Mr. Henning's direct testimony describes how favorably Duke Energy  
20 Kentucky's rates compare to that of other utilities in the Commonwealth.

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<sup>1</sup>(\$11.22 - \$4.50) / 11 years = \$0.61 / year.

1 Q. FINALLY, DO YOU AGREE WITH MR. WATKINS' ASSERTION THAT  
2 THE PROPOSED RESIDENTIAL RATE DESIGN WILL BE  
3 DETRIMENTAL TO CONSERVATION EFFORTS?

4 A. No. The proposed Rate RS design reflects the cost to serve and it continues to  
5 provide customers with the opportunity to save money by reducing the amount of  
6 energy they use. It is incorrect to assume that conservation efforts will be harmed  
7 given that the incremental charge for energy consumption is increasing.

2. DEVELOPMENT OF NON-RESIDENTIAL RATE SCHEDULES  
DS, EH, GSFL, AND DT

8 Q. PLEASE DESCRIBE MR. WATKINS' CRITICISM OF THE COMPANY'S  
9 DEVELOPMENT OF THE PROPOSED CHARGES FOR RATE  
10 SCHEDULES DS, EH, GSFL AND DT.

11 A. Mr. Watkins alleges that the Company's proposed class revenue increase to base  
12 rates produced anomalous results for those specific non-residential classes.

13 Q. DESCRIBE THE DEVELOPMENT OF THE PROPOSED CHARGES FOR  
14 RATE SCHEDULES DS, EH, AND GSFL.

15 A. As done in the past, the revenue requirements for Rate Schedules DS, EH, and  
16 GSFL are summed and allocated proportionally to result in similar percentage  
17 increases for each rate schedule.

18 Q. ARE THESE ANOMALOUS RESULTS AS DESCRIBED BY MR.  
19 WATKINS?

20 A. No. Combining the revenue requirements for these three similar rate schedules  
21 results in reasonable percentage increases more in line with the Company's

1 overall percentage revenue requirements increase. This approach is reasonable  
2 and has been used in the past.

3 **Q. DESCRIBE THE DEVELOPMENT OF THE PROPOSED CHARGES FOR**  
4 **RATE SCHEDULE DT.**

5 A. As described in my direct testimony, Schedule L, and as I further describe below,  
6 the Rate DT charges are shared between secondary and primary served customers  
7 with primary service customers receiving a demand charge credit if the customer  
8 furnishes primary voltage transformers and appurtenances. Therefore, revenue  
9 requirements for Rate DT customers served at secondary and primary voltage are  
10 combined to calculate the proposed charges. This results in a small deviation  
11 between the revenues collected from primary and secondary customers compared  
12 to the COSS results.

13 **Q. ARE THESE RESULTS ANOMALOUS AS MR. WATKINS CLAIMS?**

14 A. No. Significant changes in rate design are not proposed in this proceeding. The  
15 resulting percentage increase deviation, as compared to COSS results for  
16 secondary and primary served customers on Rate DT, is small.

### 3. P – 12 SCHOOL RATE

17 **Q. PLEASE DESCRIBE MR. WILLHITE’S RECOMMENDATION RELATED**  
18 **TO P – 12 SCHOOLS.**

19 A. On page 8 lines 10 through 16 of Mr. Willhite’s testimony, he states, “...P – 12  
20 Schools are being severely penalized by being served on Rate DS. In order to  
21 correct this situation a new P – 12 School Tariff should be established...”. Mr.  
22 Willhite asserts that schools are fundamentally different than other rate DS



1 customers, that schools are not operating during Company peak periods, and that  
2 schools have load and usage characteristics that differ from commercial and  
3 industrial customers.

4 **Q. DO YOU AGREE WITH MR. WILLHITE'S RECOMMENDATION AND**  
5 **JUSTIFICATION TO CREATE A NEW AND SEPARATE P - 12 RATE**  
6 **CLASS?**

7 A. No. I do not believe his assertions are supported by the available information or  
8 that a separate rate class for P – 12 schools is warranted.

9 **Q. DO YOU AGREE WITH MR. WILLHITE'S CLAIM THAT SCHOOLS DO**  
10 **NOT CONTRIBUTE TO THE COMPANY'S PEAK PERIODS?**

11 A. No. Mr. Willhite maintains on page 6 of his testimony that schools are not in  
12 session from mid-June to mid-August. However, that does not equate to schools  
13 not consuming any electricity, nor does it mean that schools are completely closed  
14 during those months. Mr. Willhite's assertion that a separate P - 12 Class is  
15 warranted due to the timing of when schools are "in session" as it relates to the  
16 Company's peak is not supportable. Schools do operate during June and August  
17 and are therefore likely to contribute to the summer peak. In fact, three data  
18 points on Mr. Willhite's graphic on page 4 of his testimony (8/11/16, 8/17/17, and  
19 8/27/14) are in mid-August or later. In addition, Mr. Willhite conveniently  
20 produces graphics in his testimony that average data during the months of June  
21 and August while he states that the load profiles for schools are different during  
22 half of those months. This produces misleading graphics for the half of those  
23 months schools are in session. It is not reasonable to assume Company will not



1 profile. Similarly, nor does every school currently billed under Rate DS have an  
2 identical load profile. And yet, this diversity is factored into the overall design of  
3 Rate DS. However, contrary to Mr. Willhite's suggestions otherwise, schools are  
4 similar to other day-time, weekday businesses, such as a small to medium sized  
5 office, included in the Rate DS class and should not be separated from other  
6 groups of customers that jointly form the Rate DS class. Duke Energy Kentucky  
7 maintains that there just is not sufficient or credible evidence that supports  
8 creating a new and separate class just for P - 12 schools, especially as Mr.  
9 Willhite proposes.

10 **Q. DO YOU HAVE ANY SPECIFIC CONCERNS WITH MR. WILLHITE'S**  
11 **ANALYSIS?**

12 **A.** Yes. Mr. Willhite uses hourly interval meter information provided to him by the  
13 Company for his calculations. This information only includes a limited number  
14 of P - 12 schools currently in Rate DS. He mistakenly assumes it is representative  
15 of an entire P - 12 school class defined in his proposed tariff. The school  
16 customers that happen to have interval meter data currently have such information  
17 due to a variety of reasons (*i.e.*, customer size, current or past DSM program  
18 participation, net metering participation, or other reasons) none of which relate to  
19 the development of a valid load research sample for public or private P - 12  
20 schools. Using this hourly information and assuming it is representative of the P -  
21 12 school class proposed is speculative.

1 **Q. DO YOU HAVE ANY ADDITIONAL CONCERNS WITH MR.**  
2 **WILLHITE'S RECOMMENDATIONS.**

3 A. Yes. Mr. Willhite's argument leads to the untenable precedent that a new rate  
4 class should be established for any arbitrary group of customer types that differ  
5 from the class average. This is impractical and would be administratively  
6 burdensome.

7 Finally, I have another concern with Mr. Willhite's proposed tariff and the  
8 analysis he performed to support its structure. The data and COSS used by Mr.  
9 Willhite to develop his recommended P - 12 class and tariff was based on school  
10 customers with maximum loads greater than 100 kW. However, Mr. Willhite's  
11 proposed tariff includes P - 12 schools that have average monthly loads of 50 kW  
12 or greater. There is no justification or support that customers with a non-  
13 coincident annual peak greater than 100 kW is transferrable to customers with  
14 average monthly demand greater than 50 kW. When asked about this in  
15 discovery, Mr. Willhite concedes that his adjustment was results-oriented and was  
16 simply to include a greater number of P-12 customers (*i.e.*, 66 schools that will no  
17 longer have maximum loads > 100 kW after energy efficiency projects and  
18 additional schools that do not currently have maximum loads > 100 kW).<sup>3</sup>

19 **Q. ARE YOU AWARE OF ANY RECENT COMMISSION ORDERS THAT**  
20 **SUGGEST P - 12 SCHOOLS SHOULD NOT HAVE A SEPARATE RATE**  
21 **CLASS?**

---

<sup>3</sup> Witness Ronald Willhite's response to Staff's request for information to KSBA No. 4.

1 A. Yes. In the Commission order dated January 18, 2018, in Case No. 2017-00179,  
2 a Kentucky Power, Inc. rate case, the Commission found that load research data  
3 did not support a separate rate sheet for P – 12 schools in that service territory.  
4 This prompts me to believe that a load research sample in the Company’s service  
5 area could likely produce information leading to the same conclusion.

6 **Q. ARE THERE OTHER COMPANY PROGRAMS AVAILABLE FOR**  
7 **SCHOOLS TO REDUCE THEIR ELECTRIC COSTS THAT DO NOT**  
8 **REQUIRE A SEPARATE RATE CLASS?**

9 A. Yes. Subject to eligibility criteria, customers, including P - 12 schools, may  
10 participate in the Company’s energy efficiency and demand response programs  
11 that can reduce their cost of electric service.

12 **Q. WHAT IS YOUR RECOMMENDATION REGARDING P – 12 SCHOOLS?**

13 A. In my opinion, P – 12 schools served under Rate DS should continue service  
14 under Rate DS. The appropriate information is not available to support a separate  
15 P – 12 rate class at this time.

#### 4. RATE SCHEDULE SP

16 **Q. WHAT IS MR. WILLHITE’S RECOMMENDATION REGARDING RATE**  
17 **SCHEDULE SP?**

18 A. On page 9 of Mr. Willhite’s testimony, he recommends that, “[t]he Commission  
19 should order the Company to reopen Rate SP...”.

20 **Q. DO YOU AGREE WITH MR. WILLHITE’S RECOMMENDATION ON**  
21 **RATE SCHEDULE SP?**

22 A. No. Mr. Willhite supplies no evidence to support his recommendation and

1           therefore there is simply no reason to re-open a rate schedule that has been closed  
2           for so long. The Company recommends that the Commission reject Mr. Willhite's  
3           recommendation to reopen Rate SP.

**5.     RATE DT CHARGES**

4     **Q.     PLEASE EXPLAIN THE COMPANY'S CORRECTION TO RATE DT.**

5     A.     Through discovery, the Company identified an error in the calculation of the  
6           customer charge for Rate DT which flows through to impact the other charges for  
7           Rate DT as well. Although this customer charge calculation is inaccurate, the  
8           total revenue requirement recovered from Rate DT is accurate and collects the  
9           revenue requirement allocated to Rate DT in the Company's cost of service study.

10    **Q.     WHAT ARE THE PROPOSED CHANGES?**

11    A.     The proposed changes are discussed and presented in my rebuttal testimony  
12           attachments BLS-Rebuttal-1 and 2, which include copies of NKU-DR-01-006 and  
13           NKU-DR-02-001 respectively. Revised tariff sheets will be provided upon  
14           Commission order. The total revenue requirement recovered from Rate DT is  
15           accurate and collects the revenue requirement allocated to Rate DT in Company's  
16           cost of service study.

**6.     ELECTRIC SERVICE REGULATIONS – SECTION VI –  
          BILLING & PAYMENT**

17    **Q.     DOES THE COMPANY PROPOSE TO CHANGE ELECTRIC SERVICE  
18           REGULATIONS SECTION VI – BILLING & PAYMENT, TARIFF SHEET  
19           NO. 25?**

20    A.     Yes. Through discovery, the Company agreed to provide additional detail to  
21           describe the Budget Billing Plan and the Fixed Bill payment option. These

1 changes are discussed and the additions presented in attachments to my rebuttal  
2 testimony, attachments BLS-Rebuttal-3 through 6 which represent discovery  
3 items STAFF-DR-02-009, STAFF-DR-02-009 Attachment A, STAFF-DR-03-  
4 010, and STAFF-DR-03-010 Attachment respectively. A new tariff sheet will be  
5 filed upon Commission order accepting this change.

7. **ELECTRIC RECONNECTION CHARGES**

6 **Q. DID THE COMPANY AGREE TO A DIFFERENT RECONNECTION**  
7 **CHARGE FOR REMOTE RECONNECTIONS ENABLED BY AMI**  
8 **METERS?**

9 A. Yes. Information related to the electric reconnection charge for remote  
10 reconnection through AMI meters can be found in the Attorney General discovery  
11 request AG-DR-02-040 including Attachment 2 to that request. I have included  
12 copies as attachments BLS-Rebuttal-7 and 8 to my rebuttal testimony.

13 **Q. WHAT LABOR RATE DOES COMPANY USE TO CALCULATE THE**  
14 **PROPOSED ELECTRIC RECONNECTION CHARGES.**

15 A. In my direct testimony, Attachment BLS-5, KY Reconnection Charge  
16 Calculations, a labor rate and labor loadings for field operations employees is  
17 used for both on-site and remote reconnections. In Attachment BLS-Rebuttal-8,  
18 an alternative approach to calculating the remote electric reconnection charge is  
19 presented using a customer service representative labor rate.

20 **Q. IS THE COMPANY AMENABLE TO CHANGE THE REMOTE**  
21 **RECONNECTION CHARGE PROPOSED?**

22 A. Yes. The Company is amenable to changing the remote electric reconnection

1 charge from the proposed \$25.00 to \$3.45. The Company expresses concern for  
2 such a low reconnection charge but concedes it is a reasonable alternative, subject  
3 to reconciliation of the impact on the Company's overall cost of service.

4 **Q. WILL THE ELECTRIC RECONNECTION CHARGE REVISION ALONE**  
5 **ALLOW THE COMPANY TO RECOVERY ITS FULL COST OF SERVICE**  
6 **PROVIDED?**

7 A. No. A reduction in electric reconnection charge revenues requires an increase in  
8 other revenues in order for the Company to recovery its full revenue requirement.  
9 Test year reconnection charge revenues are \$198,096. A reduction in these  
10 revenues of 86.2 percent (*i.e.*,  $1 - (\$3.45 / \$25.00)$ ) leaves a shortfall of 86.2  
11 percent \* \$198,096 = \$170,759. If the revised electric remote reconnection  
12 charge of \$3.45 is accepted by the Commission, the Company requests additional  
13 revenue recovery of \$165,124 from Rate RS and \$5,635 from Rate DS to be  
14 collected through the respective energy charges. Revised Rate RS, Rate DS, and  
15 Electric Reconnection Charge tariff sheets will be provided upon Commission  
16 order in this proceeding.

8. **ALLOCATION OF THE TAX CUTS AND JOBS ACT**

17 **Q. PLEASE DESCRIBE THE ALLOCATION RECOMMENDATION**  
18 **OFFERED BY KROGER WITNESS MR. JUSTIN BIEBER REGARDING**  
19 **THE IMPACTS OF THE TAX CUTS AND JOBS ACT.**

20 A. Mr. Bieber proposes that the Commission should allocate 50 percent of the  
21 benefits of the Tax Cut and Jobs Act to all rate classes. He then requests that the



1 Commission allocate the remaining 50 percent to further reduce interclass  
2 subsidies.

3 **Q. DOES DUKE ENERGY KENTUCKY AGREE WITH THIS PROPOSAL?**

4 A. While Mr. Bieber's recommended allocation is revenue neutral to Duke Energy  
5 Kentucky, the Company believes that this proposal is not a fair result for the  
6 Company's customers. To the extent that there are benefits under the Tax Cuts  
7 and Jobs Act for the Company's customers, my view is that these changes should  
8 follow the customer contribution to costs incurred. Notwithstanding the  
9 Company's proposed cost of service, the choice to deviate from cost of service  
10 principals to address rate gradualism, subsidy/excess issues, and the like are  
11 decisions that will ultimately be made by the Commission. On this issue, the  
12 Company defers to the Commission as the arbiter of what is a fair and reasonable  
13 means to allocate the overall revenue requirement among rate classes.

### **III. CONCLUSION**

14 **Q. WERE ATTACHMENTS BLS-REBUTTAL-1 THROUGH 8 PREPARED BY**  
15 **YOU OR UNDER YOUR SUPERVISION?**

16 A. Yes.

17 **Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?**

18 A. Yes.

**VERIFICATION**

STATE OF OHIO                    )  
  )  
COUNTY OF HAMILTON        )        SS:

The undersigned, Bruce L. Sailers, Pricing and Regulatory Solutions Manager, 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.

Bruce L. Sailers  
Bruce L. Sailers, Affiant

Subscribed and sworn to before me by Bruce L. Sailers, on this 8<sup>TH</sup> day of FEBRUARY, 2018.

Adele M. Frisch  
NOTARY PUBLIC

My Commission Expires: 1/5/2019



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

**Duke Energy Kentucky**

**Case No. 2017-00321**

**Northern Kentucky University’s First Set Data Requests**

**Date Received: October 27, 2017**

**NKU-DR-01-006**

**REQUEST:**

With respect to Mr. Sailers’ direct testimony at page 10, line 17, he states that the proposed customer charge for Rate DT primary service is \$465. Please reconcile this charge with the value shown in cell I33, \$155.07, of the tab “CustomerCharge” contained in the cost of service study Excel spreadsheet provided in response to Staff DR-01-029.

**RESPONSE:**

The values do not reconcile. The proposed customer charges for Rate DT inadvertently and incorrectly used only the number of summer bills in the calculation rather than the total number of bills. Note that total revenues collected from the proposed charges collect the Rate DT revenue requirement from the cost of service study. Therefore, altering the proposed customer charges also impact the other charges of the proposed rate. To display the correct Rate DT charges using the appropriate total number of bills, examples of what Schedule M-2.2 and M-2.3 Pages 4 and 5 of 20 would look like for the Test Period are provided in NKU-DR-01-006 Attachment 1, which is being provided on CD.

**PERSON RESPONSIBLE:** Bruce L. Sailers

**Duke Energy Kentucky**

**Case No. 2017-00321**

**Northern Kentucky University’s Second Set Data Requests**

**Date Received: November 29, 2017**

**NKU-DR-02-001**

**REQUEST:**

With respect to the Company’s response to NKU-DR-01-006, please provide the following information:

- a. Confirmation that the Company will correct the proposed charges for Rate DT primary in its proposed tariff sheets.
- b. Corrected proposed tariff sheets for Rate DT primary into the record containing the accurate charges.

**RESPONSE:**

- a. The Company will correct the proposed charges for Rate DT in its proposed tariff sheet.
- b. See NKU-DR-02-001 Attachment for the proposed corrected tariff sheet for Rate DT.

**PERSON RESPONSIBLE:**

Bruce L. Sailors

**Duke Energy Kentucky**  
**Case No. 2017-00321**  
**Staff Second Set Data Requests**  
**Date Received: October 26, 2017**

**STAFF-DR-02-009**

**REQUEST:**

Refer to the Application, Volume 13, Schedule L-1, page 15 of 148 regarding paragraph

“7. Availability of Budget Billing and Fixed Bill.”

- a. Provide the provisions of the Budget Billing Plan.
- b. 807 KAR 5:006, Section 14(2)(a)(3), requires that the provisions of a budget payment plan be included in the utility’s tariff. Explain whether Duke Kentucky believes paragraph “7. Availability of Budget Billing and Fixed Bill” complies with this regulation.
- c. Indicate whether Duke Kentucky would be willing to include the provisions of its budget payment plan in its tariff.
- d. Also, refer to the Direct Testimony of Alexander “Sasha” J. Weintraub, Ph.D. (“Weintraub Testimony”), page 12, lines 5-10. The Weintraub Testimony indicates that the Fixed Bill program is described in Duke Kentucky’s billing tariff. The provisions of the Fixed Bill program do not appear to be included in the proposed tariff, other than a brief mention of the program’s name. Indicate whether Duke Kentucky would be willing to include the provisions of the Fixed Bill program in its tariff.

**RESPONSE:**

- a. As stated in Company's tariff referenced above, the Budget Payment Plan is a bill payment option that reduces monthly bill amount fluctuations. See STAFF-DR-02-009 Attachment A for additional information on the Budget Payment Plan.
- b. Yes.
- c. Company is amenable to provide more detail such as information in STAFF-DR-02-009 Attachment A.
- d. Yes.

**PERSON RESPONSIBLE:** Bruce Sailors (a - c)  
Sasha Weintraub (d)

**Duke Energy Kentucky Budget Payment Plans**

**Annual Plan**

- The Annual Plan provides 11 months of equal payments with a settle-up on the 12th month.
- The usage amount for bill calculation is calculated using 12 months usage, then divides by 11.
- A bill message is sent after 6 months with a suggested new amount if variance to the actual bill amount is +/- 30% or greater; but the amount does not change automatically.
- Customer must call to change amount.
- The amount is changed after the 12 month review as needed.

**Quarterly Plan**

- The Quarterly Plan provides quarterly review and adjustment of the budget payment amount to prevent a settle-up month.
- The usage amount for bill calculation uses 12 months usage and divides by 12.
- Reviews occur after 3, 6, 9, and 12 months on the plan and continue every 3 months thereafter.
- A bill message is sent after reviews with a new bill amount if variance to the actual bill amount is +/- 10% or greater.
- The bill amount automatically changes. The customer does not need to call.

**Duke Energy Kentucky**

**Case No. 2017-00321**

**Staff Third Set Data Requests**

**Date Received: November 28, 2017**

**STAFF-DR-03-010**

**REQUEST:**

Refer to Duke Kentucky's response to Commission Staff's Second Request, Item 9.c. Provide the proposed language Duke Kentucky is willing to include in its tariff regarding the budget payment plan.

**RESPONSE:**

Please see STAFF-DR-03-010 Attachment that consists of a revised Sheet No. 25 Section VI – Billing and Payment that includes proposed language for budget payment plans and the Fixed Bill payment option.

**PERSON RESPONSIBLE:** Bruce L. Sailors



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

KY.P.S.C. Electric No. 2  
Third Revised Sheet No. 25 (T)  
Cancels and Supersedes  
Second Revised Sheet No. 25 (T)  
Page 1 of 3

## SECTION VI - BILLING AND PAYMENT

### 1. Billing Periods - Time and Place for Payment of Bills.

Bills ordinarily are rendered regularly at monthly intervals, but may be rendered more or less frequently at Company's option. Bills may be rendered by hand delivery, mail, electronically, or by any other reasonable means. If bills are rendered electronically then a charge not to exceed \$0.25 per usage may be assessed. Non-receipt of bills by customer does not release or diminish the obligation of Customer with respect to payment thereof.

The word "month" as it pertains to the supply of service shall mean the period of approximately thirty days between meter readings as fixed and made by Company. Meters are ordinarily read at monthly intervals but may be read more or less frequently at Company's option but no less than quarterly. Company shall have the right to establish billing districts for the purpose of reading meters and rendering bills to customers at various dates. A change or revision of any Rate Schedule shall be applicable to all bills on which the initial monthly meter reading was taken on or after the effective date of such change or revision, except as otherwise ordered by the Kentucky Public Service Commission.

Bills are due on the date indicated thereon as being the last date for payment of the net amount, or as otherwise agreed to, and bills are payable only at the Company's offices or authorized agencies for collection. When not so paid, the Gross Monthly Bill, which is the Net Monthly Bill plus 5% is due and payable. If a partial payment is made, the amount will be applied to items of indebtedness in the same order as they have accrued, except that any payment received shall first be applied to the bill for service rendered.

The Company may issue interim bills based on average normal usage instead of determining actual usage by reading the meter. Interim bills may also be used when access to Company's meter cannot be obtained or emergency conditions exist.

### 2. Information on Customer Bills.

Every bill rendered by the Company for metered service will clearly state:

- (a) The beginning and ending meter readings for the billing period and the dates thereof.
- (b) The amount of energy usage.
- (c) The amount due for the energy used, any adjustments, including assessed late payment charges, and the gross amount of the bill.
- (d) The rate code under which the customer is billed.
- (e) The date of the last day payment can be made without a late payment charge being assessed.
- (f) Any previous balance.
- (g) The address, phone number, and business hours of the Company.
- (h) The date of the next scheduled meter reading.
- (i) The date after which received payments are not reflected in the bill.
- (j) The type of service rendered (gas or electric).
- (k) The amount, and identification, of any tax or fee the Company is authorized either by state law or order of the Commission to collect.

Issued by authority of an Entry of the Kentucky Public Service Commission dated \_\_\_\_\_, 201\_ in Filing No. 2017-00321. (T)  
(T)

Issued: September 1, 2017

Effective: October 1, 2017 (T)

Issued by James P. Henning, President (T)

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

KY.P.S.C. Electric No. 2  
Third Revised Sheet No. 25 (T)  
Cancels and Supersedes  
Second Revised Sheet No. 25 (T)  
Page 2 of 3

**SECTION VI - BILLING AND PAYMENT (Contd.)**

**3. Charge for Restoring Service for Non-Payment of Bill and Unlawful Use of Service.**

Company may charge and collect in advance the sum as specified on Tariff Sheet "Charge for Reconnection of Service" for reconnecting a customer's service after service is disconnected because of non-payment of bill when due or when service is discontinued because of fraudulent use, except as may be provided by 807 KAR 5:006, Section 15, Winter Hardship Reconnection.

**4. Temporary Discontinuance of Service.**

If any customer on a residential rate, because of absence or otherwise, shall notify Company in writing or by telephone to discontinue service, Company will make no minimum charge for any full meter reading period during the period of discontinuance; provided, however, that Company may charge and collect the sum as specified on Tariff Sheet "Charge for Reconnection of Service" prior to reconnecting a service which was discontinued at customer's request within the preceding twelve months.

**5. Selection of Rate Schedule.**

When a prospective customer makes application for service, Company will, upon request, assist in the selection of the Rate Schedule most favorable to customer or the service requested. The selection will be based on the prospective customer's statement as to the class of service desired, the amount and manner of use, and any other pertinent information.

**6. Change to Optional Rate Schedule.**

A customer being billed under one of two or more optional Rate Schedules applicable to his class of service may elect to be billed on any other applicable Rate Schedule by notifying Company in writing, and Company will bill customer under such elected Schedule from and after the date of the next meter reading. However, a customer having made such a change of Rate Schedule may not make another such change within the next twelve months. At the Company's option, Company may allow another such change within the next twelve months if customer complies with applicable early termination provisions specified in the Rate Schedule. (T)  
(T)

**7. Availability of Budget Billing and Fixed Bill.** (T)

Company has available to its customers a "Budget Billing Plan" and a Fixed Bill payment option which reduce and minimize billing amount fluctuations over a twelve month period. The Company may exercise discretion as to the availability of such plans to a customer based on reasonable criteria, including but not limited to: (T)  
(T)  
(T)

- (a) Customer's recent payment history.
- (b) The amount of the delinquent account.
- (c) Customer's payment performance in respect to any prior arrangements or plans.
- (d) Any other relevant factors concerning the circumstances of the customer including health and age.

If the customer fails to pay bills as rendered under the Budget Payment Plan or Fixed Bill payment option, the Company reserves the right to revoke the plan, restore the customer to regular billing and require immediate payment of any deficiency. (T)

Issued by authority of an Entry of the Kentucky Public Service Commission dated \_\_\_\_\_, 201\_ in Filing No. 2017-00321. (T)  
(T)

Issued: September 1, 2017

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Third Revised Sheet No. 25 (T)  
Cancels and Supersedes  
Second Revised Sheet No. 25 (T)  
Page 3 of 3

**SECTION VI - BILLING AND PAYMENT (Contd.)**

Failure to receive a bill in no way exempts customer from the provisions of these terms and conditions.

**Budget Billing Plan Description:**

**Annual Plan:**

- The Annual Plan provides 11 months of equal payments by using 12 months of customer's usage, dividing the usage by 11, and using the result to calculate the bill. (T)
- Month 12 is a settle-up month between the billed amounts and customer bills based on actual usage. (T)
- A bill message is sent after 6 months with a suggested new bill amount if the budget bill amounts compared to the actual bill amounts exceeds a Company set threshold; however, Customer must contact Company to change the amount. (T)
- The budget bill amount is changed as needed after the 12 month review. (T)

**Quarterly Plan:**

- The Quarterly Plan provides 3 months of equal payments starting by using 12 months of customer's usage, dividing the usage by 12, and using the result to calculate the bill. (T)
- However, to prevent a settle-up month, reviews occur after 3, 6, 9, and 12 months on the plan and continue every 3 months thereafter. (T)
- The budget bill amount is changed as needed after each review. The change is automatic and the customer does not need to contact Company. (T)
- A bill message is sent after each review with a new bill amount if the budget bill amounts compared to the actual bill amounts exceeds a Company set threshold. (T)

**Fixed Bill Plan Description:**

- The Fixed Bill payment option provides residential customers 12 months of equal payments with no settle-up. (T)
- Company will calculate a fixed monthly bill amount for Customer using Customer's past usage history. (T)
- Customer's usage will be reviewed regularly and significant changes in Customer's consumption behavior may require the Fixed Bill amount to be recalculated before the 12 month period ends. (T)
- Company will recalculate the Fixed Bill amount every 12 months and Customer must re-enroll in the Fixed Bill payment option every 12 months. (T)
- Company may provide the option to terminate the Fixed Bill option prior to the end of the first 12 month participation period if Customer has paid a total amount under Fixed Bill that is greater than or equal to what would have been billed under Rate RS using Customer's actual usage. (T)

**8. Partial payment Plans.**

The Company shall negotiate and accept reasonable partial payment plans at the request of residential customers who have received a termination notice according to the regulations governing failure to pay, except the Company shall not be required to negotiate a partial payment plan with a customer who is delinquent under a previous payment plan.

**9. Bill Format.**

The Company has included as Appendix A to these Service Regulations an example of the Company's customer bill format.

Issued by authority of an Entry of the Kentucky Public Service Commission dated \_\_\_\_\_, 201\_ in Filing No. 2017-00321. (T)

Issued: September 1, 2017

Effective: October 1, 2017 (T)

Issued by James P. Henning, President (T)

Duke Energy Kentucky  
Case No. 2017-00321  
Attorney General's Second Set Data Requests  
Date Received: November 29, 2017

AG-DR-02-040

**REQUEST:**

Refer to the Company's responses to AG-DR-01-082, which does not propose a remedy to the fact that the Company's proposed clean tariff sheet includes no reduced reconnection fee for customers with smart meters as required in the Stipulation to which the Company agreed in Case No. 2016-00152. The Company explains that including a reduced reconnection fee for customers with smart meters in its proposed clean tariff sheet "creates a corresponding need to adjust the Company's other assumed test year revenues as a result of the reduction in reconnection revenues." This does not appear to be a proposed resolution as requested by the AG in AG-DR-01-082. Furthermore this justification appears to be a Company problem and not a customer problem. In addition, the Company appears to have calculated what the smart meter reconnection fee should be (\$25 rather than \$75 for non-AMI customers) in its response to AG-DR-01-083. Describe any commitment the Company is willing to make to correct this deficiency in the proposed clean tariff sheet per the Stipulation to which the Company agreed in Case No. 2016-00152.

**RESPONSE:**

In the stipulation in Case No. 2016-00152, the Company agreed to revise remote reconnection charges to reflect *actual cost*; not necessarily to provide a reduced remote reconnection charge. The Company's proposed remote reconnection charge of \$25 uses

an actual cost value as described in AG-DR-01-082 and is consistent with costs used in other jurisdictions that have remote disconnection service capability. In addition, in the Company's response to AG-DR-01-082, the Company states it is amenable to using a different labor cost value for remote reconnection charge calculation. The Company honors its commitments and provides AG-DR-02-040 Attachment 1 which uses the alternative labor rate noted in AG-DR-01-082. The Company proposes this revised sheet No. 91 as a remedy to the issue raised above subject to an appropriate revenue adjustment. AG-DR-02-040 Attachment 2; being uploaded electronically and a copy provided on CD; provides supporting calculations for the revised remote reconnection charge.

**PERSON RESPONSIBLE:** Bruce L. Sailors

**Duke Energy Kentucky**  
**Calculation of Remote Reconnection Fee**

Base Labor - Midwest Call Center Representatives		\$16.16	Average \$/Hour
Loading Factor	31.21%	\$5.04	Loads on Base Labor
Payroll Taxes	7.65%		
Pension & Benefits	20.56%		
Incentives	3.00%		
Base Labor - Loaded		\$21.20	
Labor Overheads	60.65%	\$12.86	

Total Cost Per Hour \$34.06

	<u>Approximate Hours</u>	Cost	Propose
Remote Reconnect (AMI)	0.10	\$3.48	\$3.45

**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. )

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**REBUTTAL TESTIMONY OF**  
**THOMAS SILINSKI**  
**ON BEHALF OF**  
**DUKE ENERGY KENTUCKY, INC.**

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February 14, 2018

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**I. INTRODUCTION AND PURPOSE**

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

2 A. My name is Thomas Silinski. My business address is 550 South Tryon, Charlotte  
3 North Carolina.

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

5 A. I am employed by Duke Energy Business Services LLC (DEBS), an affiliate  
6 service company of Duke Energy Kentucky, Inc. (Duke Energy Kentucky or the  
7 Company) as Vice President, Total Rewards and Human Resource Operations.

8 **Q. ARE YOU THE SAME THOMAS SILINSKI THAT SUBMITTED DIRECT**  
9 **TESTIMONY IN THIS PROCEEDING?**

10 A. Yes.

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

13 A. The purpose of my Rebuttal Testimony is to address the erroneous claims and  
14 adjustments made by the Attorney General's witness Lane Kollen related to the  
15 Company's Incentive Compensation and Retirement Plan expenses.

**II. DISCUSSION**

16 **Q. PLEASE DESCRIBE MR. KOLLEN'S ADJUSTMENT RELATED TO**  
17 **THE COMPANY'S INCENTIVE COMPENSATION.**

18 A. Mr. Kollen begins his discussion of his recommended adjustment on page 18 of  
19 his direct testimony. Mr. Kollen makes the statement that incentive compensation  
20 tied to financial performance should be removed from the Company's test year  
21 revenue requirements and then proposes a negative adjustment of \$1.638 million

1 to the Company's revenue requirement and \$1.634 million negative adjustment to  
2 the Company's expenses.

3 **Q. DO YOU AGREE WITH MR. KOLLEN'S ADJUSTMENT TO REMOVE**  
4 **INCENTIVES TIED TO FINANCIAL PERFORMANCE OF THE**  
5 **COMPANY?**

6 A. No. Mr. Kollen's adjustment is unfounded and incorrect both princply and  
7 mathematically. First, for the reasons stated in my direct testimony, the Company  
8 does not agree that any adjustment should be made to eliminate compensation that  
9 is tied to financial performance. As I explained in my direct testimony, Duke  
10 Energy's compensation philosophy and policies are designed to be market based  
11 and competitive, and ensure that employees are not encouraged to take excessive  
12 or inappropriate risks. The components of the compensation package, including  
13 base, variable incentives, and benefits, in the aggregate, are targeted to deliver  
14 total compensation that is competitive with the applicable peer group and  
15 consistent with performance. The total compensation concept is depicted in  
16 Figures 1 and 2, below.



Figure 1



Figure 2

1 My direct testimony and responses to multiple data requests demonstrate the time,  
2 effort and analysis to ensure that the Duke Energy compensation packages are, in  
3 total, market-based, comparable to others in the industry, as well as other similar  
4 industries across the country. Disallowing recovery of a portion of our  
5 compensation program would render the Company's compensation uncompetitive  
6 with the market, which would result in the inability to attract the talent this  
7 Company needs to run a safe, efficient and reliable electric system. From the  
8 perspective of prudently and efficiently managing the Company's retail electric  
9 business to the benefit of consumers and the public, there is no reasonable basis to  
10 deny recovery of employees' market-based compensation. The earnings per  
11 share/total shareholder reward (EPS)/(TSR) metrics, whether a part of employees'  
12 Short Term Incentive (STI) or Longer Term Incentive (LTI) compensation,  
13 encourage eligible employees to reduce expense, operate efficiently and conserve  
14 financial resources, all of which benefit customers by keeping rates competitive.  
15 To eliminate any portion of incentive compensation would decrease employees'  
16 total compensation to less than competitive levels, compelling the Company to  
17 consider an offset to this reduction by an increase to its fixed costs through base  
18 pay adjustments or face severe workforce challenges. This is shown by Figures 3  
19 and 4, below – removing either of the cross-hatched pie pieces, representing the  
20 portions of compensation that the Attorney General's witness wishes to exclude  
21 from rates, would leave the compensation at a below-market level.

Figure 3



Figure 4



1 As previously stated in earlier testimony, many craft positions require lengthy  
 2 apprenticeships to learn the skills needed to perform work independently and  
 3 safely. Given the length of time necessary to fully train employees to safely  
 4 perform all aspects of their job, allowing the turnover rate to further escalate due  
 5 to lowering the competitive levels of pay and benefits would be imprudent.

6 According to the Bureau of Labor Statistics (BLS), the average annual  
 7 total separations for companies in the trade, transportation, and utilities industry  
 8 was 3.9% for 2015, 3.7% for 2016 and 3.7% for 2017. Duke Energy Kentucky  
 9 experienced higher attrition in two out of three of these years, at 7.9%, 10.2% and  
 10 3.7%, respectively. The 3-year average for BLS is 3.76%, while Duke Energy  
 11 Kentucky averaged 7.26%, almost double the attrition rate over the same period  
 12 of time. Allowing our package of pay and benefits to fall below market-  
 13 competitive levels would have substantial negative implications for the cost of  
 14 service to customers and would be imprudent by the Commission. The length of  
 15 time necessary to fully train employees to safely perform all aspects of their job,  
 16 the expense incurred to hire and train new employees and the loss of productivity

1 realized through high turnover rates would all negatively affect the ability of the  
2 Company to provide safe and reliable service at a reasonable cost. This is also  
3 true for leadership positions. Duke Energy invests in developing highly effective  
4 leaders who carry out the organization's mission and inspire employees to work  
5 together to achieve results the right way. Paying less than competitive levels of  
6 compensation would put the Company at risk of losing these valuable leaders to  
7 other companies and potentially having to pay more to attract the same level of  
8 leadership talent externally. The financial cost of turnover and negative  
9 implications from lost productivity, hiring, training and job vacancy can put a  
10 significant level of productivity and financial value at risk to the Company.  
11 Incentive pay is similar to the other costs related to producing and distributing  
12 electricity. It is a necessary cost to provide customers safe and reliable service.

13 In the competitive market for talent, employees consider total rewards,  
14 including base pay, incentive pay and benefits, as a key determinant in deciding  
15 whether to work for a particular employer. The target incentive compensation  
16 provided by Duke Energy is necessary to achieve market-competitive  
17 compensation and, thus, is a reasonable and appropriate cost of doing business  
18 that should not be eliminated.

19 Mr. Kollen provided little justification, support, and analysis in making his  
20 recommended adjustment. He offers no claim that the Company's compensation,  
21 including portions of the incentive package that are tied to corporate financial  
22 performance are anything but market-based and competitive. His only  
23 justification for his proposed \$1.638 million adjustment is that, in his belief, this

1 portion of the Company's incentive is tied to achieving financial performance  
2 targets.

3 In my opinion, the Company's entire incentive pay expense is reasonable  
4 and necessary to attract and retain high quality employees with the critical skills  
5 necessary to provide safe, efficient and reliable service to customers, and,  
6 therefore, it should be recoverable in its entirety.

7 **Q. DO YOU AGREE WITH MR. KOLLEN'S CLAIM THAT THERE IS AN**  
8 **INHERENT CONFLICT BETWEEN ACHIEVING LOWER RATES FOR**  
9 **CUSTOMERS ON THE ONE HAND AND ACHIEVING GREATER**  
10 **FINANCIAL PERFORMANCE FOR SHAREHOLDERS AND GREATER**  
11 **INCENTIVE COMPENSATION FOR EXECUTIVES, MANAGERS, AND**  
12 **OTHER EMPLOYEES ON THE OTHER?**

13 A. No. Mr. Kollen's claim in that regard presupposes that having incentives tied to  
14 achieving financial targets will somehow encourage waste. That is simply not  
15 true. In fact, quite the opposite is true. Inherent in achieving financial targets is  
16 the ability to control costs. Lower costs equates to lower rates for customers. To  
17 achieve strong incentive results we must operate reliably **and** we must operate  
18 safely **and** we must deliver strong customer service **and** we must control our  
19 costs **and** we must grow our company. Including a goal for financial performance  
20 in our incentive program ensures that employees pursue cost effective ways to  
21 deliver on the other measures. Using this balanced scorecard approach benefits  
22 customers by delivering critical services at competitive rates. EPS and TSR  
23 measure overall financial performance, and overall financial performance in turn

1 can reflect how employees take action on a routine basis to support the efficient  
2 delivery of safe and reliable energy to customers. In addition, finding sustainable  
3 cost savings is an important part of achieving our financial targets and those  
4 sustainable cost savings benefit our customers. Incenting employees to work  
5 diligently to ensure costs are responsibly and prudently incurred is critical to  
6 ensuring costs remain as low as reasonably possible. These actions provide  
7 benefits to customers through competitive rates.

8 **Q. PLEASE EXPLAIN HOW MR. KOLLEN'S ADJUSTMENT IS**  
9 **MATHEMATICALLY INCORRECT.**

10 A. First, even if the Company conceded that financial performance based incentives  
11 should be removed from the Company's test year expense and revenue  
12 requirement, which it does not, Mr. Kollen's proposed adjustments go too far, as  
13 he includes portions of incentive compensation that are not at all tied to achieving  
14 financial performance. On page 18 of his testimony, Mr. Kollen describes the  
15 Company as including \$0.751 million in STI Plan expense tied to the achievement  
16 of EPS and \$0.883 million in LTI Plan expense to arrive at his \$1.634 million  
17 expense adjustment.

18 Mr. Kollen fundamentally misconstrues and misinterprets the Company's  
19 compensation plans. In Mr. Kollen's calculation of the \$1.634 million shown in  
20 the incentive comp worksheet included in the "AG Recommendations excel file",  
21 filed with Mr. Kollen's testimony, \$541,424 of restricted stock unit amounts  
22 charged to the Company are proposed to be eliminated. His inclusion of restricted  
23 stock units in his adjustment is flawed because the receipt of restricted stock units

1 is in no way tied to the results of any financial metric under the Company's  
2 compensation packages. The Company has determined it is beneficial to issue a  
3 portion of market-competitive pay in the form of restricted stock units as a means  
4 to improve retention of critical skills and encourage a long-term mindset. The  
5 vesting of restricted stock units is not tied to corporate financial performance and  
6 the employee will receive these restricted stock units irrespective of whether the  
7 Company hits financial targets. The information surrounding restricted stock units  
8 was contained in and fully described in the Company's attachments in response to  
9 AG-DR-01-019. Therefore, if the Commission does determine that financial  
10 target-based incentives should be eliminated from the Company's revenue  
11 requirement, the adjustment should only be \$1.09 million based on Mr. Kollen's  
12 logic.

13 **Q. WHAT IS YOUR RECOMMENDATION REGARDING MR. KOLLEN'S**  
14 **ADJUSTMENT.**

15 A. The Commission should reject Mr. Kollen's adjustment for the reasons I stated in  
16 my direct testimony, the information I supported in response to discovery requests  
17 and as I explained above. If however, the Commission determines that incentives  
18 tied to corporate financial performance should be removed from the Company's  
19 expense and rate base, then the correct adjustment should be made as I described  
20 above.

21 **Q. PLEASE EXPLAIN MR. KOLLEN'S ADJUSTMENT TO REDUCE THE**  
22 **COMPANY'S RETIREMENT PLAN EXPENSE.**



1 A. On pages 23 and 24 of his testimony, Mr. Kollen proposes a reduction of \$1.580  
2 million in the Company's retirement plan expense.

3 **Q. WHAT IS THE BASIS OF MR. KOLLEN'S ADJUSTMENT TO THE**  
4 **COMPANY'S RETIREMENT PLAN EXPENSE?**

5 A. Mr. Kollen performs no analysis and offers no justification for his  
6 recommendation. He cites two prior Commission cases where the Commission  
7 made reductions to other utilities' retirement plan expenses, but he offers no  
8 reasoning to support why the Company's test year expense is unreasonable.

9 **Q. DO YOU AGREE WITH MR. KOLLEN'S RECOMMENDED**  
10 **ADJUSTMENT?**

11 A. No. First, because Mr. Kollen's sole justification for his elimination of \$1.580  
12 million from the Company's revenue requirement is that certain employees have  
13 both a defined benefit pension plan benefit and a defined contribution plan  
14 benefit. I believe that the value of the Company's retirement benefit is what is  
15 important, rather than whether the Company chooses to deliver the value through  
16 multiple components. In other words, a one dollar bill has equal value to four  
17 quarters, even though they are denominated in different forms. He offers no  
18 support whatsoever that the benefit being provided from these plans is not market  
19 competitive. Second, he ignores the fact that many companies, including Duke  
20 Energy, have significantly reduced retirement related expenses by transitioning  
21 many employees eligible for pension benefits to a less rich formula and partially  
22 utilizing those pension savings to enhance 401(k) matching formulas. As I  
23 previously stated, the Company's benefit packages, including retirement

1 programs, as a whole are designed to be market competitive and are benchmarked  
2 to ensure that is the case. Mr. Kollen makes no claim to the contrary.

3 Duke Energy has aggressively managed costs related to their retirement  
4 benefit program by closing the defined benefit pension plan to new hires, and, for  
5 existing employees, freezing final average pay benefit formulas for all non-union  
6 employees and transitioning employees from a final average pay formula to a  
7 more "Defined Contribution like" cash balance pension formula. To offset the  
8 impact of those pension changes, we utilized some of the pension savings to  
9 enhance the 401(k) matching formula for those employees to stay competitive  
10 with the market. To arbitrarily eliminate recovery of retirement cost because some  
11 employees have benefits under both plans, would penalize the Company for  
12 aggressively managing its retirement costs. Like all prudent and cost-minded  
13 companies that offer benefit packages that include retirement programs for  
14 employees, we continually evaluate these programs for cost and reasonableness.  
15 As these programs change and evolve over time, it must be done in a manner that  
16 is fair to employees who make employment and continued employment decisions  
17 based upon the existence of such plans. To arbitrarily require the Company to  
18 cease funding programs that current or retired employees previously participated  
19 in and relied upon is unreasonable and unfair to those employees. Moreover, it  
20 also provides a significant disincentive for the Company to consider and pursue  
21 opportunities to revisit programs and follow market trends and implement new  
22 programs that will overall reduce its expenses.

1 Q. WHAT IS YOUR RECOMMENDATION REGARDING MR. KOLLEN'S  
2 ADJUSTMENT RELATED TO POST-RETIREMENT PLAN EXPENSES.

3 A. The Commission should ignore Mr. Kollen's arbitrary and unsupported proposal  
4 to reduce the Company's retirement plan expenses.

**III. CONCLUSION**

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

6 A. Yes.

**VERIFICATION**

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

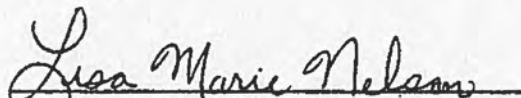
The undersigned, Thomas Silinski, Vice President, Total Rewards and Human Resource Operations, being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the rebuttal testimony, and that it is true and correct to the best of his knowledge, information and belief.

  
Thomas Silinski Affiant

Subscribed and sworn to before me by Thomas Silinski on this 14 day of

February, 2018.



  
NOTARY PUBLIC

My Commission Expires: September 03, 2020