COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:		
KENTUCKY INDUSTRIAL UTILITY CUSTOMERS, INC.)	
COMPLAINANT)	
V) CASE NO.	2018-00034
KENTUCKY UTILITIES COMPANY)	
LOUISVILLE GAS AND ELECTRIC COMPANY)	
DEFENDANTS)	

NOTICE OF FILING

Notice is given to all parties that the following materials have been filed into the

record of this proceeding:

- The digital video recording of the evidentiary hearing conducted on May 24, 2018 in this proceeding;

- Certification of the accuracy and correctness of the digital video recording;

- All exhibits introduced at the evidentiary hearing conducted on May 24, 2018 in this proceeding;

- A written log listing, *inter alia*, the date and time of where each witness' testimony begins and ends on the digital video recording of the evidentiary hearing conducted on May 24, 2018.

A copy of this Notice, the certification of the digital video record, hearing log, and

exhibits have been electronically served upon all persons listed at the end of this Notice.

Parties desiring to view the digital video recording of the hearing may do so at http://psc.ky.gov/av_broadcast/2018-00034/2018-00034_24May18_Inter.asx.

Parties wishing an annotated digital video recording may submit a written request by electronic mail to <u>pscfilings@ky.gov</u>. A minimal fee will be assessed for a copy of this recording.

Done at Frankfort, Kentucky, this 4th day of October 2018.

Shwen R. Punson

Gwen R. Pinson Executive Director Public Service Commission of Kentucky

Honorable Allyson K Sturgeon Senior Corporate Attorney LG&E and KU Energy LLC 220 West Main Street Louisville, KENTUCKY 40202

Honorable Kendrick R Riggs Attorney at Law Stoll Keenon Ogden, PLLC 2000 PNC Plaza 500 W Jefferson Street Louisville, KENTUCKY 40202-2828

Rebecca W Goodman Assistant Attorney General Office of the Attorney General Office of Rate Intervention 700 Capitol Avenue Suite 20 Frankfort, KENTUCKY 40601-8204

Louisville Gas and Electric Company 220 W. Main Street P. O. Box 32010 Louisville, KY 40232-2010 Jody Kyler Cohn Boehm, Kurtz & Lowry 36 East Seventh Street Suite 1510 Cincinnati, OHIO 45202

Kent Chandler Assistant Attorney General Office of the Attorney General Office of Rate Intervention 700 Capitol Avenue Suite 20 Frankfort, KENTUCKY 40601-8204

Robert Conroy LG&E and KU Energy LLC 220 West Main Street Louisville, KENTUCKY 40202 Honorable Kurt J Boehm Attorney at Law Boehm, Kurtz & Lowry 36 East Seventh Street Suite 1510 Cincinnati, OHIO 45202

Honorable Michael L Kurtz Attorney at Law Boehm, Kurtz & Lowry 36 East Seventh Street Suite 1510 Cincinnati, OHIO 45202

Kentucky Utilities Company 220 W. Main Street P. O. Box 32010 Louisville, KY 40232-2010

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

KENTUCKY INDUSTRIAL UTILITY CUSTOMERS, INC.CASE NO.V. KENTUCKY UTILITIES COMPANY AND)2018-00034LOUISVILLE GAS AND ELECTRIC COMPANY)

CERTIFICATION

I, Stephanie Schweighardt, hereby certify that:

1. The attached DVD contains a digital recording of the Hearing conducted in the above-styled proceeding on May 24, 2018. Hearing Log, Exhibit List and Witness List are included with the recording on May 24, 2018.

2. I am responsible for the preparation of the digital recording;

3. The digital recording accurately and correctly depicts the Hearing of

May 24, 2018.

4. The Hearing Log attached to this Certificate accurately and correctly states the events that occurred at the Hearing of May 24, 2018 and the time at which each occurred.

Signed this 1st day of June, 2018.

Stephanie Schweighardt, Notary Public State at Large Commission Expires: January 14, 2019 ID#: 525987



2018-00034 24May2018

Kentucky Utilities Company and Louisville Gas and Electric Company

Date:	Туре:	Location:	Department:
5/24/2018	General Rates	Hearing Room 1	Hearing Room 1 (HR 1)
Judge: Bob Cice	ro; Talina Mathews Arbough; Kent Blake; Christopher		
Event Time	Log Event		
8:10:16 AM	Session Started		
8:10:18 AM	Session Paused		
8:58:26 AM	Session Resumed		
8:58:29 AM	Vice Chairman Cicero		
	Note: Schweighardt,	Preliminary Remarks, int	troductions
	Stephanie		
8:59:07 AM	Atty Kendrick Riggs		
	Note: Schweighardt,	Introductions of Counse	l for LGE KU, Allyson Sturgeon
	Stephanie		
8:59:23 AM	Atty Michael Kurtz		
	Note: Schweighardt,	Introductions of cousel f	for KIUC, Kurt Boehm and Jody Cohn
0.50.24 414	Stephanie		
8:59:34 AM	Vice Chairman Cicero		
	Note: Schweighardt,	Ask for any public stater	nents
	Stephanie Note: Schweighardt,	No one from public pres	cont to make commonts
	Stephanie	No one nom public pres	
9:00:00 AM	Atty Riggs		
5.00.00741	Note: Schweighardt,	Calls Witness Kent Blake	e to the stand
	Stephanie		
	Note: Schweighardt,	Sworn in by Vice Chairm	nan Cicero
	Stephanie	,	
9:00:38 AM	Atty Riggs Direct Exam of Witne	ess Blake	
	Note: Schweighardt,	Asking Witness if answe	rs to data request would be the same if
	Stephanie	asked today	
9:01:20 AM	Atty Riggs Direct Exam of Witne		
	Note: Schweighardt,	Regarding order grantin	g hearing
	Stephanie		
9:01:46 AM	Atty Chandler Cross Exam of W		
	Note: Schweighardt,	Distributes documents	
0.02.25 414	Stephanie	to and Diality	
9:03:25 AM	Atty Chandler Cross Exam of W		filed as AC Fubility #1 and AC Fubility #2
	Note: Schweighardt,	Ask for documents to be	e filed as AG Exhibit #1 and AG Exhibit #2
	Stephanie Note: Schweighardt,	Vice Chairman Cicero gr	ante request
	Stephanie	vice chaiman cicero gr	
9:04:31 AM	Atty Chandler Cross Exam of W	itness Blake	
JIO IIJI AN	Note: Schweighardt,	Questions regarding AG	Exhibits #1 and #2
	Stephanie	Questions regularing Ad	
9:10:00 AM	Atty Chandler Cross Exam of W	itness Blake	
	Note: Schweighardt,	Questions regarding KW	/B2, page 1 of 4 -
	Stephanie		

9:11:50 AM	Atty Chandler Cross Exam of Wit	iness Blake
	Note: Schweighardt, Stephanie	Discussing statement made regarding unprotected amount
9:14:38 AM	Atty Chandler Cross Exam of Wit	tness Blake
	Note: Schweighardt, Stephanie	Regarding what's in the best interest for the customers
9:15:13 AM	Atty Chandler Cross Exam of Wi	tness Blake
	Note: Schweighardt, Stephanie	Questions regarding Credit Ratings
9:17:34 AM	Atty Chandler Cross Exam of Wi	tness Blake
	Note: Schweighardt, Stephanie	Regarding the outcome of this case and the credit ratings
9:19:23 AM	Atty Chandler Cross Exam of Wit	ness Blake
	Note: Schweighardt,	Regarding page 19 or April 6 testimony -
	Stephanie	
9:21:33 AM	Atty Chandler Cross Exam of Wit	tness Blake
	Note: Schweighardt, Stephanie	Regarding rating and AG's attachment 1-B document
9:22:38 AM	Atty Chandler Cross Exam of Wit	ness Blake
	Note: Schweighardt, Stephanie	Regarding the A Rated
9:24:02 AM	Atty Chandler Cross Exam of Wit	iness Blake
	Note: Schweighardt, Stephanie	Regarding Stipulations providing any change in capitalization for either of the companies
9:27:38 AM	Camera Lock Panel Wide Activat	ed
9:27:40 AM	Atty Chandler Cross Exam of Wit	iness Blake
	Note: Schweighardt, Stephanie	Regarding the extent of the capitalization updates - chart on page 12
9:27:49 AM	Camera Lock Deactivated	
9:32:18 AM	Atty Chandler Cross Exam of Wit	iness Blake
	Note: Schweighardt, Stephanie	Regarding cash credit and increase to capitalization
9:32:48 AM	Atty Chandler Cross Exam of Wit	iness Blake
	Note: Schweighardt, Stephanie	Regarding line marked "Other"
9:34:01 AM	Atty Chandler Cross Exam of Wit	iness Blake
	Note: Schweighardt, Stephanie	Regarding the 75 million dollars not added up to the 176million
9:34:30 AM	Atty Chandler Cross Exam of Wit	tness Blake
	Note: Schweighardt, Stephanie	CFO Pre working cash ratio
9:35:51 AM	Atty Chandler Cross Exam of Win Note: Schweighardt,	Asking What is the effect on cash flow and how significant is the
	Stephanie	reduction
9:37:53 AM	Atty Chandler Cross Exam of Wir Note: Schweighardt,	ness Blake Questions regarding AG Exhibit #2 - unprotected deferred cash
	Stephanie	
9:39:12 AM	Atty Chandler Cross Exam of Wit Note: Schweighardt,	ness Blake Regarding pensions
0.41.10.41	Stephanie	Dialas
9:41:16 AM	Atty Chandler Cross Exam of Wir Note: Schweighardt, Stephanie	Distributes documents

9:41:30 AM	Atty Chandler Cross Exam of Wite	ness Blake
	Note: Schweighardt, Stephanie	Vice Chairman Cicero grants request
	Note: Schweighardt, Stephanie	Request document be filed as AG Exhibit #3
9:42:08 AM	Atty Chandler Cross Exam of With	ness Blake
	Note: Schweighardt, Stephanie	Questions regarding AG Exhibit #3 - PSC Case 2017-00321
9:45:55 AM	Atty Chandler Cross Exam of With	ness Blake
	Note: Schweighardt,	Distributes documents
	Stephanie	
9:46:37 AM	Atty Chandler Cross Exam of With	ness Blake
	Note: Schweighardt,	Questions regarding AG Exhibit #4 - PSC Case #2018-00035
	Stephanie	
9:50:20 AM	Atty Riggs	
	Note: Schweighardt, Stephanie	Objection - Hearsay
	Note: Schweighardt,	Vice Chairman allows questioning to continue
	Stephanie	
9:51:31 AM	Atty Chandler Cross Exam of With	ness Blake
	Note: Schweighardt, Stephanie	Regarding Page 2 of 2, Appendix B of order
9:57:06 AM	Atty Chandler Cross Exam of With	ness Blake
	Note: Schweighardt,	Regarding April Testimony, page 12 - chart
	Stephanie	
9:59:34 AM	Atty Chandler Cross Exam of With	ness Blake
	Note: Schweighardt, Stephanie	Regarding KY Power testimony
10:01:14 AM	Atty Chandler Cross Exam of Wite	ness Blake
	Note: Schweighardt, Stephanie	Regarding regulatory asset for Big Sandy 2
10:02:25 AM	Atty Chandler Cross Exam of With	ness Blake
	Note: Schweighardt,	Regarding Commisison entering an order approval stipulation as
	Stephanie	signed and looking at it again
10:06:10 AM	Atty Chandler Cross Exam of With	
	Note: Schweighardt,	Asking for Witness' opinion if Commission approves stipulization as
	Stephanie	filed, any issues with that
10:06:46 AM	Atty Riggs	
	Note: Schweighardt, Stephanie	Objection
	Note: Schweighardt,	Vice Chairman - Substane
	Stephanie	
10:07:53 AM	Session Paused	
10:20:04 AM	Session Resumed	
10:20:10 AM	Session Paused	
10:20:13 AM	Session Resumed	
10:20:24 AM	Atty Riggs	
	Note: Schweighardt,	Correction to statement at beginning of hearing
	Stephanie	
10:20:44 AM	Atty Kurtz Cross Exam of Witness	5 Blake
	Note: Schweighardt, Stephanie	Regarding Dec 27 order from the commission and filed answers
10:22:09 AM	Atty Kurtz Cross Exam of Witness	Blake
10.22.09 AM	Note: Schweighardt,	Regarding the settlement meeting with commission staff
	Stephanie	

10:23:12 AM	Atty Kurtz Cross Exam of Witn	ess Blake
	Note: Schweighardt, Stephanie	Regarding the settlement agreement filed to the Commission
10:25:38 AM	Atty Kurtz Cross Exam of Witn	ess Blake
	Note: Schweighardt, Stephanie	Regarding the tax settlement
10:26:47 AM	Atty Kurtz Cross Exam of Witn	ess Blake
	Note: Schweighardt, Stephanie	Distributes documents
10:27:03 AM	Atty Kurtz Cross Exam of Witn	ess Blake
	Note: Schweighardt, Stephanie	Request document be filed as KIUC Exhibit # 1
	Note: Schweighardt, Stephanie	Vice Chairman grants request
10:27:55 AM	Atty Kurtz Cross Exam of Witn	ess Blake
	Note: Schweighardt, Stephanie	Regarding KIUC Exhibit #1
10:28:16 AM	Atty Kurtz Cross Exam of Witn	ess Blake
	Note: Schweighardt, Stephanie	Questions regarding chart within settlement
10:31:00 AM	Atty Kurtz Cross Exam of Witn	ess Blake
	Note: Schweighardt,	Asking why the increase of capitalization was needed other than the
	Stephanie	tax act
10:33:29 AM	Atty Kurtz Cross Exam of Witn	ess Blake
	Note: Schweighardt, Stephanie	Regarding Page 1 of Settlement agreement
10:34:07 AM	Atty Kurtz Cross Exam of Witn	ess Blake
	Note: Schweighardt, Stephanie	Regarding page 2 of KIUC Exhibit #1
10:36:05 AM	Atty Kurtz Cross Exam of Witn	ess Blake
	Note: Schweighardt, Stephanie	Regarding 135 million to refund to customers
10:36:49 AM	Atty Kurtz Cross Exam of Witn	ess Blake
	Note: Schweighardt, Stephanie	Distributes documents
10:36:59 AM	Atty Kurtz Cross Exam of Witn	ess Riake
10.30.39 AM	Note: Schweighardt,	Request document be filed as KIUC Exhibit #2
	Stephanie	Request document be nied as RIOC Exhibit #2
	Note: Schweighardt, Stephanie	Vice Chairman grants request
10:37:42 AM	Atty Kurtz Cross Exam of Witn	
	Note: Schweighardt, Stephanie	Questions regarding KIUC Exhibit #2
10:43:45 AM	Atty Kurtz Cross Exam of Witn	
	Note: Schweighardt, Stephanie	Regarding the numbers listed on Appendix C
10:45:52 AM	Atty Kurtz Cross Exam of Witn	ess Blake
	Note: Schweighardt, Stephanie	Regarding the 1.34 not moving needle very much
10:46:45 AM	PHDR	
	Note: Schweighardt, Stephanie	Updated settlement agrement to show tax for all three utilities
10:47:36 AM	Atty Vinsel Cross Exam of Witr	ness Blake
	Note: Schweighardt, Stephanie	Distributes documents

1.
, #4
5
3

	Note: Schweighardt,	Vice Chairman grants request
	Stephanie	
12:33:48 PM	Atty Vinsel Cross Exam of Witness	
	Note: Schweighardt, Stephanie	Allowing Witness to review PSC Exhibit #3 and state if any questions or corrections
12:34:46 PM	Atty Vinsel Cross Exam of Witness	
	Note: Schweighardt,	Questions regarding revised Appendix C
	Stephanie	
12:35:33 PM	Atty Vinsel Cross Exam of Witness	s Blake
	, Note: Schweighardt,	Questions regarding PSC Exhibit #5 and 6, revised appendix C
	Stephanie	
12:36:53 PM	Atty Vinsel Cross Exam of Witness	s Blake
	Note: Schweighardt,	Distributes document
	Stephanie	
12:37:06 PM	Atty Vinsel Cross Exam of Witness	
	Note: Schweighardt,	Request document be filed as PSC Exhibit #7
	Stephanie	
	Note: Schweighardt, Stephanie	VC Grants request
12:37:53 PM	Atty Vinsel Cross Exam of Witness	s Blake
12.37.33114	Note: Schweighardt,	Questions regarding PSC Exhibit #7, revised appendix A
	Stephanie	
12:38:19 PM	PHDR	
	Note: Schweighardt,	File rates showing reductions on Appendix C, from March 20 order
	Stephanie	
12:39:28 PM	Atty Vinsel Cross Exam of Witness	s Blake
	Note: Schweighardt,	Distributes document
	Stephanie	
12:39:44 PM	Atty Vinsel Cross Exam of Witness	
	Note: Schweighardt, Stephanie	Request document be filed as PSC Exhibit #8
	Note: Schweighardt,	Vice Chairmen grants request
	Stephanie	vice chairmen grants request
12:41:16 PM	Atty Vinsel Cross Exam of Witness	s Blake
	Note: Schweighardt,	Questions regarding PSC Exhibit #8
	Stephanie	
12:45:29 PM	Atty Vinsel Cross Exam of Witness	s Blake
	Note: Schweighardt,	Distributes additional sheet to be added to the PSC Exhibit #8
	Stephanie	
12:46:28 PM	PHDR	
	Note: Schweighardt,	Detailed list of any construction projects included in capitalization
12.40.17 DM	Stephanie	
12:48:17 PM	PHDR Noto: Schweighardt	Revise Exhibit KWB-3 with using capitalization from 2016-00370
	Note: Schweighardt, Stephanie	2016-00371
12:50:32 PM	Vice Chairman Cicero Cross Exam	
12130132111	Note: Schweighardt,	Questions regarding PSC Exhibit #8, line 3
	Stephanie	
12:51:57 PM	Vice Chairman Cicero Cross Exam	of Witness Blake
	Note: Schweighardt,	Regarding adjustments
	Stephanie	
12:55:01 PM	Atty Riggs ReDirect of Witness Bla	
	Note: Schweighardt,	Regarding PSCs PHDR to revise PSC Exhibit #3
	Stephanie	

12:58:30 PM	Atty Riggs ReDirect of Witness B	lake
	Note: Schweighardt,	Regarding the three utilites with rate case
	Stephanie	
1:01:42 PM	Atty Riggs ReDirect Witness Blak	
	Note: Schweighardt,	Regarding if the capitalization and rate adjustments recommended
	Stephanie	to the commission are not accepted.
1:03:55 PM	Atty Riggs ReDirect Witness Blak	
	Note: Schweighardt,	Asking about questions from the AG's office regarding ratio
	Stephanie	
1:04:42 PM	Atty Kurtz ReCross Exam of Witn	
	Note: Schweighardt,	Regarding the 10 million that come from the increase of
	Stephanie	capitalization
1:07:28 PM	Atty Kurtz ReCross Exam of Witn	
	Note: Schweighardt,	Regarding the March 20th order
	Stephanie	
1:08:41 PM	Atty Vinsel ReCross Exam of Wite	
	Note: Schweighardt,	Asking if any of the increases are for funding a project not yet
	Stephanie	granted by commission
1:09:44 PM	Atty Riggs	
	Note: Schweighardt,	Explaining that he has other witnesses here if anyone has questions
	Stephanie	
	Note: Schweighardt,	No one has questions
	Stephanie	
1:10:35 PM	Vice Chairman	
	Note: Schweighardt,	PHDR - requests by May 30, responses by June 11
	Stephanie	
1:11:20 PM	Vice Chairman	
	Note: Schweighardt,	IF you would like to file a brief, due by Friday, June 29
	Stephanie	
1:12:40 PM	Vice Chairman	
	Note: Schweighardt,	Meeting Adjourned
	Stephanie	
1:12:44 PM	Session Paused	
1:14:12 PM	Session Ended	

2018-00034 24May2018



Kentucky Utilities Company and Louisville Gas and Electric Company

Name:	Description:
AG Exhibit #1	Response to Commission Staff Second Request - Question #1
AG Exhibit #2	KU Excess Deferred Taxes
AG Exhibit #3	PSC Case No. 2017-00321 Order
AG Exhibit #4	PSC Case No. 2018-00035 Testimony of Matthew A. Horeled
KIUC Exhibit #1	Appendix C - To an order of the PSC in Case No. 2018-00034
KIUC Exhibit #1	KU Case No. 2018-00034 - Overall Financial Summary
PSC Exhibit #1	Appendix C - To an order of the PSC in Case No. 2018-00034, Dated MAR 20, 2018
PSC Exhibit #2	Appendix C - KU Case No. 2018-00034, Energy Credit Calculations
PSC Exhibit #3	LG&E Gas Operations - Energy Credit Calculations
PSC Exhibit #4	Appendix C, Page 3 - LG&E, Case No. 2018-00034, Gas Operations, Energy Credit Calculations
PSC Exhibit #5	LG&E - Electric Operations, Energy Credit Calculations
PSC Exhibit #6	Appendix C Page 2 - LG&E, Electric Operations, Energy Credit Calculations
PSC Exhibit #7	Appendix A - KU / LG&E, Summary of Tax Reductions Credits
PSC Exhibit #8	LG&E - Balance Sheet Total Company - December 31, 2017 - April 30, 2019

KENTUCKY UTILITIES COMPANY AND LOUISVILLE GAS AND COMPANY

Response to Commission Staff's Second Request for Information Dated February 20, 2018

Case No. 2018-00034

Question No. 1

Witness: Kent W. Blake / Christopher M. Garrett

- Q-1. For each utility, provide a schedule of Excess Accumulated Deferred Income Tax ("ADIT"), broken down between protected and unprotected Excess ADIT for the test year utilized in Case Nos. 2016-00370 and 2016-00371, and for the test year utilized in the proposed Offer of Acceptance and Satisfaction tendered on January 29, 2018. Provide a copy of the response in an Excel spreadsheet format with formulas intact and unprotected, and all rows and columns fully accessible.
- A-1. Under Generally Accepted Accounting Principles (GAAP), the tax effect of changes in tax laws must be recognized in the period in which the law is enacted. GAAP requires deferred tax assets and liabilities to be measured at the enacted tax rate expected to apply when temporary differences are to be realized or settled. Thus, at the date of enactment of the Tax Cuts and Job Act ("Tax Act") in December 2017, LG&E and KUs' deferred taxes were remeasured based upon the new U.S. federal corporate income tax rate of 21%. The difference between the 35% tax rate and the new 21% tax rate is Excess ADIT.

See attachment A provided in excel format for the Excess ADIT balances for the periods of December 2017 through April 2018 attributable to the Tax Act. A calculation of the Excess ADIT balances by temporary difference as of December 31, 2017 is provided to show the breakdown between protected and unprotected Excess ADIT balances.

Because LG&E and KU utilize the average rate assumption method required by the tax code to amortize protected Excess ADIT, LG&E and KU still have a small Excess ADIT balance attributable to the Tax Reform Act of 1986 and Kentucky Tax Act of 2005. Included in Attachment B are the protected Excess ADIT balances utilized in the previous test year in Case No. 2016-00370 and 2016-00371 for the periods of June 2017 through June 2018 attributable to changes in prior tax laws.

KU Excess Detail

Kentucky Utilities Company Excess Deferred Taxes - Protected and Unprotected

Excess Deterred Taxes - Protected and Unprotected												
Tax Cuts and Jobs Act				Unamortized	Excess Accumulated Defe	erred income Tax as of	12/31/1/					
	Cumulative Timing	Deferred Tax Balance	Deferred Tax Balance					102				
Description	Difference	at Old Rates	at New Rates	Excess Deferred Taxes	ECR	DSM	Electric Base	Jan-18	Feb-18	Mar-18	Apr-18	May-18
Protected (Property Related) Deferred Taxes:	•											
Tax Repairs Expensing	(85,164,450)	(33,128,971)	(21,921,330)				11,207,642					
Contributions in Aid of Construction (CIAC)	24,049,284	9,355,171	6,190,286	and the second se			(3,164,886)					
Interest Capitalized	189,789,554	73,828,136	48,851,831	and anne i have been			(24,976,305)					
Other Basis Adjustments	9,060,992	3,524,726	2,332,299				(1,192,427)					
Total Basis Adjustments	137,735,379	53,579,062	35,453,086			-	(18,125,976)					
Tax versus Book (method/life) Depreciation - Federal	(3,586,780,633)	(1,255,373,221)	(753,223,933)		107,594,802	690,622	393,863,865					
Tax versus Book (method/life) Depreciation - State	(2,488,807,312)	(97,063,485)	(117,969,467)				(20,905,981)					
Federal Net Operating Losses	61,410,399	21,493,640	12,896,184	(8,597,456)			(8,597,456)					
CCR ARO Ponds ¹	(28,421,223)	(11,055,856)	(7,315,623)		3,740,233		-		V.			
Total Protected Deferred Taxes		(1,288,419,860)	(830,159,752)	458,260,108	111,335,035	690,622	346,234,452	345,465,331	344,696,210	343,927,088	343,157,967	342,388,84
16 Month 01/18 to 04/19 - Excess Deferred Amortization (ARAM Method	1)											
Jurisdictional Factor												
Kentucky Jurisdictional Amount												
Unprotected Deferred Taxes:												
2008 Wind Storm Damages	(567,175)	(220,631)	(145,991)	74,640			74,640	74,226	73,811	73,396	72,982	72,567
2009 Winter Storm Damages	(14,786,163)	(5,751,817)	(3,805,958)) 1,945,859			1,945,859	1,935,049	1,924,238	1,913,428	1,902,618	1,891,80
Amortization Loss on Reacquired Debt	(8,826,063)	(3,433,338)	(2,271,829)	1,161,510			1,161,510	1,155,057	1,148,604	1,142,151	1,135,699	1,129,24
Bad Debts Reserves	1,478,120	574,989	380,468	(194,521)			(194,521)	(193,440)	(192,359)	(191,279)	(190,198)	(189,11
CAFC	842,194	327,614	216,781	(110,833)			(110,833)	(110,217)	(109,601)	(108,986)	(108,370)	(107,75
CMRG Regulatory Asset	(162,196)	(63,094)	(41,749)				21,345	21,226	21,108	20,989	20,871	20,75
Contingency Reserve	2,433,539	946,647	626,393	(320,254)			(320,254)	(318,475)	(316,695)	(314,916)	(313,137)	(311,35)
Deferred Rent Payable	29,150	11,339	7,503	(3,836)			(3,836)	(3,815)	(3,794)	(3,772)	(3,751)	(3,73
Demand Side Management	(482,957)	(187,870)	(124,313)	63,557			63,557	63,204	62,851	62,498	62,145	61,79
Emission Allowances	(131,237)	(51,051)	(33,780)	17,271			17,271	17,175	17,079	16,983	16,887	16,79
Environmental Cost Recovery - Current	1,118,000	434,902	287,773				(147,129)	(146,311)	(145,494)	(144,677)	(143,859)	(143,04)
FAC Under Recovery KY	2,965,000	1,153,385	763,191				(390,194)	(388,026)	(385,859)	(383,691)	(381,523)	(379,35
FAS 105 Cost Write-Off (Post Retirement)	48,306,252	18,791,132	12,434,029	(6,357,103)			(6,357,103)	(6,321,785)	(6,286,468)	(6,251,151)	(6,215,834)	(6,180,517
FAS 112 Cost Write-Off (Post Employment)	6,891,417	2,680,761	1,773,851	(906,910)			(906,910)	(901,872)	(896,834)	(891,795)	(886,757)	(881,719
FAS 87 Pensions	(121,135,646)	(47,121,766)	(31,180,315)	15,941,451			15,941,451	15,852,887	15,764,324	15,675,760	15,587,196	15,498,633
Green River Regulatory Asset	(1,878,581)	(730,768)	(483,547)				247,221	245,848	244,474	243,101	241,727	240,354
Interest Rate Swaps	(1,166,592)	(453,804)	(300,281)	· · · · · · · · · · · · · · · · · · ·			153,524	152,671	151,818	150,965	·150,112	149,259
Muni True-up - Reg Asset	(5,673,389)	(2,206,948)	(1,460,330)				746,618	742,470	738,322	734,174	730,026	725,879
Off-System Sales Tracker - Reg Liab	6,219	2,419	1,601				(818)	(814)	(809)	(805)	(800)	(790
Over/Under Accrual FICA	634,533	246,834	163,329		14		(83,505)	(83,041)	(82,577)	(82,113)	(81,649)	(81,185
Over/Under Accrual of PSC Tax	(1,642,701)	(639,011)	(422,831)				216,179	214,978	213,777	212,576	211,375	210,174
Over/Under Accrual of UN/INS	8,338	3,243	2,146				(1,097)	(1,091)	(1,085)	(1,079)	(1,073)	(1,067
Performance Incentive	148,278	57,680	38,167				(19,513)	(19,405)	(19,297)	(19,188)	(19,080)	(18,971
Plant Outage Normalization - Reg Liability	1,220,138	474,634	314,063				(160,570)	(159,678)	(158,786)	(157,894)	(157,002)	(156,110
Refined Coal - KY - Reg Liab	2,882,885	1,121,442	742,054				(379,388)	(377,280)	(375,172)	(373,064)	(370,957)	(368,849
Refined Coal - VA - Reg Liab	313,709	122,033	80,749				(41,284)	(41,055)	(40,825)	(40,596)	(40,367)	(40,137
Regulatory Expenses	(3,111,003)	(1,210,180)	(800,772)				409,408	407,134	404,859	402,585	400,310	398,036
Research Dev. & Demo Exp.	(1,286,609)	(500,491)	(331,173)				169,318	168,377.09	167,436	166,496	165,555	164,614
State Tax Current	1,760,599	616,210	369,726				(246,484)	(245,115)	(243,745)	(242,376)	(241,006)	(239,637
Tenant Incentive Amortization	(940,337)	(365,791)	(242,043)				123,748	123,061	122,373	121,686	120,998	120.311
VA over/under Recovery Fuel Clause - Current	856,000	332,984	220,334	(112,650)			(112,650)	(112,024)	(111,398)	(110,772)	(110,146)	(109,520
Vacation Pay	4,953,373	1,926,862	1,274,998				(651,864)	(648,242)	(644,621)	(640,999)	(637,378)	(633,757
Workers Compensation	3,421,394	1,330,922	880,667	(450,255)			(450,255)	(447,754)	(445,253)	(442,751)	(440,250)	(437,748
	5,765,554		Barrier States Commence			-						10,415,846
Total Unprotected Deferred Taxes 16 Month 01/18 to 04/19 - Excess Deferred Amortization (15 Year Amort)		(31,780,531)	(21,067,089)		•	*	10,713,442	10,653,923	10,594,403	10,534,884	10,475,365	

16 Month 01/18 to 04/19 - Excess Deferred Amortization (15 Year Amort)

Jurisdictional Factor

Kentucky Jurisdictional Amount

LGE Excess Detail - Electric

Louisville Gas and Electric Company Excess Deferred Taxes - Protected and Unprotected

Tax Cuts and Jobs Act				4	Unamortized E	xcess Accumulated Defe	rred Income Tax as of	12/31/17	¥14					
	Cumulative Timing	Deferred Tax Balance												
Description	Difference	at Old Rates	at New Rates	Excess Deferred Taxes	ECR	GLT	DSM	Gas Base	Electric Base	Jan-18	Feb-18	Mar-18	Apr-18	May-18
Protected (Property Related) Deferred Taxes:														
ax Repairs Expensing	(65,353,044)	(25,422,334)	(16,821,873)	8,600,461				1,733,135	6,867,325.56					
Contributions in Aid of Construction (CIAC)	41,826,782	16,270,618	10,766,214	(5,504,404)				(795,168)	(4,709,236)					
nterest Capitalized	90,776,883	35,312,207	23,365,970	(11,946,238)				(840,235)	(11,106,003)					
Other Basis Adjustments	4,165,700	1,620,457	1,072,251	(548,206)				(109,641)	(438,565)	7.				
otal Basis Adjustments	71,416,321	27,780,949	18,382,561	(9,398,388)	-			(11,909)	(9,386,479)	6.4				
ax versus Book (method/life) Depreciation - Federal	(3,020,674,667)		(634,341,680)		92,764,015	1,463,851	540,867	80,432,412	247,693,308					
ax versus Book (method/life) Depreciation - State	(1,950,817,132)	and the second se	(92,468,732)					(3,959,131)	(12,427,733)	1				
ederal Net Operating Losses	140,367,097	49,128,484	29,477,090	(19,651,394)				(1,292,395)	(18,358,999)					
CR ARO Ponds ¹	(8,908,774)		(2,293,118)	1,172,395	1,172,395			(-,,,						
Total Protected Deferred Taxes	(0,500,774)	(1,059,874,082)	(681,243,879)		93,936,410	1,463,851	540,867	75,168,977	207,520,097	207,059,177	206,598,257	206,137,337	205,676,416	205,215,496
6 Month 01/18 to 04/19 - Excess Deferred Amortization	(ARAM Method)	(2,033,074,002)	(002/245/015)	510,050,205	55,550,420	x,+03,031	540,507	/3,200,577	207,520,057	207,033,177	200,330,237	200,237,337	203,070,410	203,213,430
6 Molitil 01/18 to 04/19 - Excess Deletted Amol dation	(Albein Method)													
Inprotected Deferred Taxes:														
008 Wind Storm Damages	(6,081,253)	(2,365,607)	(1,565,314)	800,293					800,293	795,847	791,401	786,955	782,509	778,062
009 Winter Storm Damages	(11,324,918)	(4,405,393)	(2,915,034)	1,490,359				5,701	1,484,658	1,476,410	1,468,162	1,459,914	1,451,666	1,443,418
011 Summer Storm Damages	(402,606)	(156,614)	(103,631)	52,983					52,983	52,689	52,394	52,100	51,806	51,511
frican American Venture Fund	113,693	44,227	29,265	(14,962)				(2,095)	(12,867)	(12,796)	(12,724)	(12,653)	(12,582)	(12,510
mortization Loss on Reacquired Debt	(15,557,928)	(6,052,034)	(4,004,611)	2,047,423				130,003	1,917,420	1,906,768	1,896,116	1,885,463	1,874,811	1,864,159
ad Debts Reserves	1,126,694	438,284	290,011	(148,273)				(43,719)	(104,554)	(103,973)	(103,393)	(102,812)	(102,231)	(101,650
AFC - Federal	17,274,173	6,045,961	3,627,576	(2,418,384)				(635,610)	(1,782,774)	(1,772,870)	(1,762,965)	(1,753,061)	(1,743,157)	(1,733,253
AFC - State	17,048,356	664,886	808,092	143,206				43,608	99,599	99,045	98,492	97,939	97,385	96,832
apitalized Gas Inventory Costs	6,557,840	2,551,000	1,687,988	(863,012)				(863,012)	(0)	(0)	(0)	(0)	(0)	(0
MRG Regulatory Asset	(154,470)	(60,089)	(39,761)	20,328					20,328	20,215	20,102	19,989	19,877	19,764
ontingency Reserve	1,769,727	688,424	455,528	(232,896)		19			(232,896)	(231,602)	(230,308)	(229,014)	(227,721)	(226,427
emand Side Management	106,288	41,346	27,358	(13,987)				(12,449)	(1,539)	(1,530)	(1,522)	(1,513)	(1,504)	(1,496
mission Allowances	(144)	(56)	(37)						19	19	19	19	19	18
nvironmental Cost Recovery - Current	(4,700,000)	(1,828,300)	(1,209,780)	618,520			1		618,520	615,084	611,648	608,211	604,775	. 601,339
AC Under Recovery KY - Current	409,000	159,101	105,277	(53,824)					(53,824)	(53,525)	(53,226)	(52,927)	(52,628)	(52,329
AS 106 Cost Write-Off (Post Retirement)	52,392,675	20,380,750	13,485,874	(6,894,876)				(1,506,133)	(5,388,743)	(5,358,806)	(5,328,868)	(5,298,931)	(5,268,994)	(5,239,056
AS 112 Cost Write-Off (Post Employment)	3,942,900	1,533,788	1,014,902	(518,886)				(112,256)	(406,630)	(404,371)	(402,112)	(399,853)	(397,594)	(395,335
AS 87 Pensions	(187,629,512)	(72,987,880)	(48,295,836)	24,692,044				5,373,591	19,318,452	19,211,128	19,103,803	18,996,478	18,889,153	18,781,829
Sas Line Tracker Reg Liab - Current	1,907,100	741,862	490,888	(250,974)				(250,974)	-	-	-	-	-	-
nterest Rate Swaps	(1,166,565)	(453,794)	(300,274)	153,520				30,704	122,816	122,134	121,451	120,769	120,087	119,404
ine Pack - IRS Audit	174,919	68,043	45,024	(23,019)				(23,019)	(0)	(0)	(0)	(0)	(0)	(0
Off-System Sales Tracker - Reg Liab	231,803	90,171	59,666	(30,505)					(30,505)	(30,336)	(30,166)	(29,997)	(29,827)	(29,658
Performance Incentive	272,437	105,978	70,125	(35,853)				(7,171)	(28,682)	(28,523)	(28,363)	(28,204)	(28,045)	(27,885
lant Outage Normalization - Reg Asset	(3,043,316)	(1,183,850)	(783,350)	400,500					400,500	398,275	396,050	393,825	391,600	389,375
Prepaid Insurance	(1,684,012)	(655,081)	(433,465)	221,616				42,107	179,509	178,512	177,514	176,517	175,520	174,523
Purchased Gas Adjustment - Current	(3,801,686)	(1,478,856)	(978,554)	500,302				500,302	0	0	. 0	0	0	0
lefined Coal - KY - Reg Liab	722,646	281,109	186,009	(95,100)					(95,100)	(94,572)	(94,044)	(93,515)	(92,987)	(92,459
Regulatory Expenses	(2,106,720)	(819,514)	(542,270)	277,244				59,860	217,384	216,177	214,969	213,761	212,554	211,346
Research Dev. & Demo Exp.	(753,306)	(293,036)	(193,901)	99,135					99,135	98,584	98,034	97,483	96,932	96,381
itate Tax Current	2,103,760	736,316	441,790	(294,526)				45,056	(339,582)	(337,695)	(335,809)	(333,922)	(332,036)	(330,149
Swap Termination	(15,864,976)	(6,171,476)	(4,083,645)	2,087,831					2,087,831	2,076,232	2,064,633	2,053,034	2,041,435	2,029,836
enant Incentive Amortization	(796,573)		(205,038)						104,829	104,247	103,664	103,082	102,499	101,917
Unclaimed Checks	383,392	149,139	98,685	(50,454)				(10,091)	(40,363)	(40,139)	(39,915)	(39,691)	(39,467)	(39,242
/acation Pay	4,606,811	1,792,049	1,185,793	(606,256)			+0	(145,849)	(460,408)	(457,850)	(455,292)	(452,734)	(450,176)	(447,619
Workers Compensation	3,320,954	1,291,851	854,814	(437,038)				(103,223)	(333,814)	(331,960)	(330,105)	(328,251)	(326,396)	(324,542)
Total Unprotected Deferred Taxes		(61,417,160)	(40,689,834)	20,727,326				2,515,332	18,211,994	18,110,816	18,009,639	17,908,461	17,807,283	17,706,105

16 Month 01/18 to 04/19 - Excess Deferred Amortization (15 Year Amort)

LGE Excess Detail - Gas

Louisville Gas and Electric Company Excess Deferred Taxes - Protected and Unprotected

Tax Cuts and Jobs Act					Unamortized I	excess Accumulated Defe	erred Income Tax as of	12/31/17				•		
				h						· · · · · · · · · · · · · · · · · · ·	a and a star of the star			
	Cumulative Timing	Deferred Tax Balance	Deferred Tax Balance											
Description	Difference	at Old Rates	at New Rates	Excess Deferred Taxes	ECR	GLT	DSM	Electric Base	Gas Base	Jan-18	Feb-18	Mar-18	Apr-18	May-18
Protected (Property Related) Deferred Taxes:														
Tax Repairs Expensing	(65,353,044)	(25,422,334)	(16,821,873)	8,600,461				6,867,326	1,733,134.99					
Contributions in Aid of Construction (CIAC)	41,826,782	16,270,618	10,766,214	(5,504,404)				(4,709,236)	(795,168)					
Interest Capitalized	90,776,883	35,312,207	23,365,970	(11,946,238)				(11,106,003)	(840,235)					
Other Basis Adjustments	4,165,700	1,620,457	1,072,251	(548,206)				(438,565)	(109,641)			54 C		
Total Basis Adjustments	71,416,321	27,780,949	18,382,561	(9,398,388)	-	-	-	(9,386,479)	(11,909)					
Tax versus Book (method/life) Depreciation - Federal	(3,020,674,667)	(1,057,236,133)	(634,341,680)	422,894,453 .	92,764,015	1,463,851	540,867	247,693,308	80,432,412					
Tax versus Book (method/life) Depreciation - State	(1,950,817,132)	(76,081,868)	(92,468,732)	(16,386,864)				(12,427,733)	(3,959,131)					
Federal Net Operating Losses	140,367,097	49,128,484	29,477,090	(19,651,394)				(18,358,999)	(1,292,395)					
CCR ARO Ponds 1	(8,908,774)	(3,465,513)	(2,293,118)	1,172,395	1,172,395			-						
Total Protected Deferred Taxes		(1,059,874,082)	(681,243,879)		93,936,410	1,463,851	540,867	207,520,097	75,168,977	75,051,020	74,933,063	74,815,106	74,697,150	74,579,193
16 Month 01/18 to 04/19 - Excess Deferred Amortization	(ARAM Method)				100									
Unprotected Deferred Taxes:														
2008 Wind Storm Damages	(6,081,253)	(2,365,607)	(1,565,314)	800,293				800,293		-		-		-
2009 Winter Storm Damages	(11,324,918)	(4,405,393)	(2,915,034)					1,484,658	5,701	5,669	5,638	5,606	5,574	5,543
2011 Summer Storm Damages	(402,606)	(156,614)	(103,631)	52,983				52,983	-	-	94 - L	-	2	(c)
African American Venture Fund	113,693	44,227	29,265	(14,962)				(12,867)	(2,095)	(2,083)	(2,071)	(2,060)	(2,048)	(2,036
Amortization Loss on Reacquired Debt	(15,557,928)	(6,052,034)	(4,004,611)					1,917,420	130,003	129,281	128,558	127,836	127,114	126,392
Bad Debts Reserves	1,126,694	438,284	290,011	. (148,273)				(104,554)	(43,719)	(43,476)	(43,233)	(42,990)	(42,747)	(42,504
CAFC - Federal	17,274,173	6,045,961	3,627,576	(2,418,384)				(1,782,774)	(635,610)	(632,079)	(628,548)	(625,017)	(621,486)	(617,954
CAFC - State	17,048,356	664,886	808,092					99,599	43,608	43,365	43,123	42,881	42,639	42,396
Capitalized Gas Inventory Costs	6,557,840	2,551,000	1,687,988	(863,012)				(0)	(863,012)	(858,217)	(853,423)	(848,628)	(843,834)	(839,039
CMRG Regulatory Asset	(154,470)	(60,089)	(39,761)	20,328				20,328	2.41	-		_		
Contingency Reserve	1,769,727	688,424	455,528	(232,896)				(232,896)		-		-	-	
Demand Side Management	106,288	41,346	27,358	(13,987)				(1,539)	(12,449)	(12,380)	(12,310)	(12,241)	(12,172)	(12,103
Emission Allowances	(144)	(56)	(37)					19	-	-	-	-		
Environmental Cost Recovery - Current	(4,700,000)	(1,828,300)	(1,209,780)	618,520				618,520		· ·	-	-	45	
FAC Under Recovery KY - Current	409,000	159,101	105,277	(53,824)				(53,824)		· ·			· · · ·	-
FAS 106 Cost Write-Off (Post Retirement)	52,392,675	20,380,750	13,485,874	(6,894,876)				(5,388,743)	(1,506,133)	(1,497,765)	(1,489,398)	(1,481,030)	(1,472,663)	(1,464,296
FAS 112 Cost Write-Off (Post Employment)	3,942,900	1,533,788	1,014,902	(518,886)				(406,630)	(112,256)	(111,632)	(111,008)	(110,385)	(109,761)	(109,137
FAS 87 Pensions	(187,629,512)	(72,987,880)	(48,295,836)					19,318,452	5,373,591	5,343,738	5,313,885	5,284,032	5,254,178	5,224,325
Gas Line Tracker Reg Liab - Current	1,907,100	741,862	490,888	(250,974)				-	(250,974)	(249,580)	(248,186)	(246,791)	(245,397)	(244,003
Interest Rate Swaps	(1,166,565)	(453,794)	(300,274)	153,520				122,816	30,704	30,533	30,363	30,192	30,022	29,851
Line Pack - IRS Audit	174,919	68,043	45,024	(23,019)				. (0)	(23,019)	(22,891)	(22,764)	(22,636)	(22,508)	(22,380
Off-System Sales Tracker - Reg Liab	231,803	90,171	59,666	(30,505)				(30,505)				-		
Performance Incentive	272,437	105,978	70,125	(35,853)				(28,682)	(7,171)	(7,131)	(7,091)	(7,051)	(7,011)	(6,971
Plant Outage Normalization - Reg Asset	(3,043,316)	(1,183,850)	(783,350)					400,500	-				-	
Prepaid Insurance	(1,684,012)	(655,081)	(433,465)	221,616				179,509	42,107	41,873	41,639	41,405	41,171	40,937
Purchased Gas Adjustment - Current	(3,801,686)	(1,478,856)	(978,554)	500,302				0	500,302	497,522	494,743	491,963	489,184	486,405
Refined Coal - KY - Reg Liab	722,646	281,109	186,009	(95,100)				(95,100)	-					
Regulatory Expenses	(2,106,720)	(819,514)	(542,270)					217,384	59,860	59,527	59,195	58,862	58,530	58,197
Research Dev. & Demo Exp.	(753,306)	(293,036)	(193,901)					99,135	<u>i</u>		-			-
State Tax Current	2,103,760	736,316	441,790				(1)	(339,582)	45,056	44,805	44,555	44,305	44,054	43,804
Swap Termination	(15,864,976)	(6,171,476)	(4,083,645)		· 23			2,087,831		-				-
Tenant Incentive Amortization	(796,573)	(309,867)	(205,038)					104,829	-			-		-
Unclaimed Checks	383,392	149,139	98,685	(50,454)				(40,363)	(10,091)	(10,035)	(9,979)	(9,923)	(9,867)	(9,811
Vacation Pay	4,606,811	1,792,049	1,185,793	(606,256)				(460,408)	(145,849)	(145,038)	(144,228)	(143,418)	(142,608)	(141,797
Workers Compensation	3,320,954	1,291,851	854,814	(437,038)				(333,814)	(103,223)	(102,650)	(102,076)	(101,503)	(100,929)	(100,356
Total Unprotected Deferred Taxes	.,,	(61,417,160)	(40,689,834)					18,211,994	2,515,332	2,501,358	2,487,384	2,473,410	2,459,436	2,445,462

16 Month 01/18 to 04/19 - Excess Deferred Amortization (15 Year Amort)

KU Excess Detail

Kentucky Utilities Company

Excess Deferred Taxes - Protected and Unprotected

Excess Deferred Taxes - Protected and Unprotected				· · · · · · · · · · · · · · · · · · ·			in textue					
Tax Cuts and Jobs Act				Unamortized E	cess Accumulated Defe	rred Income Tax as of	12/31/17					
	Cumulative Timing	Deferred Tax Balance	Deferred Tax Balance									
Description	Difference	at Old Rates	at New Rates	Excess Deferred Taxes	ECR	DSM	Electric Base	Jan-18	Feb-18	Mar-18	Apr-18	May-18
Protected (Property Related) Deferred Taxes:												
Tax Repairs Expensing	(85,164,450)	(33,128,971)	(21,921,330)	11,207,642			11,207,642					
Contributions in Aid of Construction (CIAC)	24,049,284	9,355,171	6,190,286	(3,164,886)			(3,164,886)					
Interest Capitalized	189,789,554	73,828,136	48,851,831	(24,976,305)			(24,976,305)					
Other Basis Adjustments	9,060,992	3,524,726										
	137,735,379	53,579,062	2,332,299	(1,192,427)		-	(1,192,427)					
Total Basis Adjustments	the second s		35,453,086	(18,125,976)	407 504 002		(18,125,976)					
Tax versus Book (method/life) Depreciation - Federal	(3,586,780,633)	(1,255,373,221)	(753,223,933)		107,594,802	690,622	393,863,865					
Tax versus Book (method/life) Depreciation - State	(2,488,807,312)	(97,063,485)	(117,969,467)				(20,905,981)					
Federal Net Operating Losses	61,410,399	21,493,640	12,896,184	(8,597,456)			(8,597,456)					
CCR ARO Ponds ¹	(28,421,223)	(11,055,856)	(7,315,623)		3,740,233		-					
Total Protected Deferred Taxes		(1,288,419,860)	(830,159,752)	458,260,108	111,335,035	690,622	346,234,452	345,465,331	344,696,210	343,927,088	343,157,967	342,388,84
16 Month 01/18 to 04/19 - Excess Deferred Amortization (ARAM Method	1)											
Jurisdictional Factor												
Kentucky Jurisdictional Amount							1					
Henretosted Deferred Texas												
Unprotected Deferred Taxes: 2008 Wind Storm Damages	1507 470	(220 624)	(145,991)	74 640			74 640	74 000	72.044	70.000	70.000	
	(567,175)	(220,631)					74,640	74,226	73,811	73,396	72,982	72,567
2009 Winter Storm Damages	(14,786,163)	(5,751,817)	(3,805,958)				1,945,859	1,935,049	1,924,238	1,913,428	1,902,618	1,891,80
Amortization Loss on Reacquired Debt	(8,826,063)	(3,433,338)	(2,271,829)				1,161,510	1,155,057	1,148,604	1,142,151	1,135,699	1,129,240
Bad Debts Reserves	1,478,120	574,989	380,468	(194,521)			(194,521)	(193,440)	(192,359)	(191,279)	(190,198)	(189,11
CAFC	842,194	327,614	216,781	(110,833)			(110,833)	(110,217)	(109,601)	(108,986)	(108,370)	(107,754
CMRG Regulatory Asset	(162,196)	(63,094)	(41,749)				21,345	21,226	21,108	20,989	20,871	20,753
Contingency Reserve	2,433,539	946,647	626,393	(320,254)			(320,254)	(318,475)	(316,695)	(314,916)	(313,137)	(311,35)
Deferred Rent Payable	29,150	11,339	7,503	(3,836)			(3,836)	(3,815)	(3,794)	(3,772)	(3,751)	(3,730
Demand Side Management	(482,957)	(187,870)	(124,313)				63,557	63,204	62,851	62,498	62,145	61,793
Emission Allowances	(131,237)	(51,051)	(33,780)				17,271	17,175	17,079	16,983	16,887	16,793
Environmental Cost Recovery - Current	1,118,000	434,902	287,773	(147,129)			(147,129)	(146,311)	(145,494)	(144,677)	(143,859)	(143,04)
FAC Under Recovery KY	2,965,000	1,153,385	763,191	(390,194)			(390,194)	(388,026)	(385,859)	(383,691)	(381,523)	(379,355
FAS 106 Cost Write-Off (Post Retirement)	48,306,252	18,791,132	12,434,029	(6,357,103)			(6,357,103)	(6,321,785)	(6,286,468)	(6,251,151)	(6,215,834)	(6,180,517
FAS 112 Cost Write-Off (Post Employment)	6,891,417	2,680,761	1,773,851	(906,910)			(906,910)	(901,872)	(896,834)	(891,795)	(886,757)	(881,719
FAS 87 Pensions	(121,135,646)	(47,121,766)	(31,180,315)	15,941,451			15,941,451	15,852,887	15,764,324	15,675,760	15,587,196	15,498,633
Green River Regulatory Asset	(1,878,581)	(730,768)	(483,547)	247,221			247,221	245,848	244,474	243,101	241,727	240,354
Interest Rate Swaps	(1,166,592)	(453,804)	(300,281)	153,524			153,524	152,671	151,818	150,965	·150,112	149,259
Muni True-up - Reg Asset	(5,673,389)	(2,206,948)	(1,460,330)	746,618			746,618	742,470	738,322	734,174	730,026	725,879
Off-System Sales Tracker - Reg Liab	6,219	2,419	1,601	(818)			(818)	(814)	(809)	(805)	(800)	(796
Over/Under Accrual FICA	634,533	246,834	163,329	(83,505)			(83,505)	(83,041)	(82,577)	(82,113)	(81,649)	(81,185
Over/Under Accrual of PSC Tax	(1,642,701)	(639,011)	(422,831)	216,179			216,179	214,978	213,777	212,576	211,375	210,174
Over/Under Accrual of UN/INS	8,338	3,243	2,146	. (1,097)			(1,097)	(1,091)	(1,085)	(1,079)	(1,073)	(1,067
Performance Incentive	148,278	57,680	38,167	(19,513)			(19,513)	(19,405)	(19,297)	(19,188)	(19,080)	(18,971
Plant Outage Normalization - Reg Liability	1,220,138	474,634	314,063	(160,570)			(160,570)	(159,678)	(158,786)	(157,894)	(157,002)	(156,110
Refined Coal - KY - Reg Liab	2,882,885	1,121,442	742,054	(379,388)			(379,388)	(377,280)	(375,172)	(373,064)	(370,957)	(368,849
Refined Coal - VA - Reg Liab	313,709	122,033	80,749	(41,284)			(41,284)	(41,055)	(40,825)	(40,596)	(40,367)	(40,137
Regulatory Expenses	(3,111,003)	(1,210,180)	(800,772)				409,408	407,134	404,859	402,585	400,310	398,036
Research Dev. & Demo Exp.	(1,286,609)	(500,491)	(331,173)				169,318	168,377.09	167,436	166,496	165,555	164,614
State Tax Current	1,760,599	616,210	369,726	(246,484)			(246,484)	(245,115)	(243,745)	(242,376)	(241,006)	(239,637
Tenant Incentive Amortization	(940,337)	(365,791)	(242,043)				123,748	123,061	122,373	121,686	120,998	120,311
VA over/under Recovery Fuel Clause - Current	856,000	332,984	220,334	(112,650)			(112,650)	(112,024)	(111,398)	(110,772)	(110,146)	(109,520
Vacation Pay	4,953,373	1,926,862	1,274,998	(651,864)			(651,864)	(648,242)	(644,621)	(640,999)	(637,378)	(633,757
Workers Compensation	3,421,394	1,330,922	880.667	(450,255)			(450,255)	(447,754)	(445,253)	(442,751)	(440,250)	(437,748
Total Unprotected Deferred Taxes	5,421,554	(31,780,531)	(21,067,089)	10,713,442			10,713,442	10,653,923	10,594,403	10,534,884	10,475,365	10,415,846
16 Month 01/18 to 04/19 - Excess Deferred Amortization (15 Year Amort)		1211001231	121,007,003	AU,1 23,442	20	-	10,113,442	10,033,363	10,004,400	10,004,004	10,473,303	10,413,640

Jurisdictional Factor

Kentucky Jurisdictional Amount

Louisville Gas and Electric Company

Excess Deferred Taxes - Protected and Unprotected

Excess Deferred Taxes - Protected and Unprotected														
Tax Cuts and Jobs Act				Unamortized Excess Accumulated Deferred Income Tax as of 12/31/17										
	Cumulative Timing	Deferred Tax Balance	Deferred Tax Balance											
Description	Difference	at Old Rates	at New Rates	Excess Deferred Taxes	ECR	GLT	DSM	Gas Base	Electric Base	Jan-18	Feb-18	Mar-18	Apr-18	May-18
Protected (Property Related) Deferred Taxes:														
Tax Repairs Expensing	(65,353,044)	(25,422,334)	(16,821,873)	8,600,461				1,733,135	6,867,325.56					
Contributions in Aid of Construction (CIAC)	41,826,782	16,270,618	10,766,214					(795,168)	(4,709,236)					
Interest Capitalized	90,776,883	35,312,207	23,365,970	(11,946,238)				(840,235)	(11,106,003)					
Other Basis Adjustments	4,165,700	1,620,457	1,072,251	(548,206)				(109.641)	(438,565)					
Fotal Basis Adjustments	71,416,321	27,780,949	18,382,561	(9,398,388)	13 · · · ·	-		(11,909)	(9,386,479)					
Tax versus Book (method/life) Depreciation - Federal	(3,020,674,667)	(1,057,236,133)	(634,341,680)		92,764,015	1,463,851	540,867	80,432,412	247,693,308					
Tax versus Book (method/life) Depreciation - State	(1,950,817,132)	(76,081,868)	(92,468,732)					(3,959,131)	(12,427,733)					
Federal Net Operating Losses	140,367,097	49,128,484	29,477,090					(1,292,395)	(18,358,999)					
CCR ARO Ponds ¹	(8,908,774)	(3,465,513)	(2,293,118)		1,172,395				1.00					
Total Protected Deferred Taxes	(0,000,114)	(1,059,874,082)	(681,243,879)	and the second sec	93,936,410	1,463,851	540,867	75,168,977	207,520,097	207,059,177	206,598,257	206,137,337	205,676,416	205,215,496
16 Month 01/18 to 04/19 - Excess Deferred Amortization	(ARAM Method)	(4)000/07 (1002)	(002/210/012/	0.0,000,000		.,					,,			
	(Allelin Methody						•							
Unprotected Deferred Taxes:														
2008 Wind Storm Damages	(6,081,253)	(2,365,607)	(1,565,314)	Contraction in the second s					800,293	795,847	791,401	786,955	782,509	778,062
2009 Winter Storm Damages	(11,324,918)	(4,405,393)	(2,915,034)	Contraction of the second s				5,701	1,484,658	1,476,410	1,468,162	1,459,914	1,451,666	1,443,418
2011 Summer Storm Damages	(402,606)	(156,614)	(103,631)						52,983	52,689	52,394	52,100	51,806	51,511
African American Venture Fund	113,693	44,227	29,265	and the second				(2,095)	(12,867)	(12,796)	(12,724)	(12,653)	(12,582)	(12,510
Amortization Loss on Reacquired Debt	(15,557,928)	(6,052,034)	(4,004,611)					130,003	1,917,420	1,906,768	1,896,116	1,885,463	1,874,811	1,864,159
Bad Debts Reserves	1,126,694	438,284	290,011	(148,273)				(43,719)	(104,554)	(103,973)	(103,393)	(102,812)	(102,231)	(101,650)
CAFC - Federal	17,274,173	6,045,961	3,627,576					(635,610)	(1,782,774)	(1,772,870)	(1,762,965)	(1,753,061)	(1,743,157)	(1,733,253)
CAFC - State	17,048,356	664,886	808,092	143,206				43,608	99,599	99,045	98,492	97,939	97,385	96,832
Capitalized Gas Inventory Costs	6,557,840	2,551,000	1,687,988	(863,012)				(863,012)	(0)	(0)	(0)	(0)	(0)	(0)
CMRG Regulatory Asset	(154,470)	(60,089)	(39,761)						20,328	20,215	20,102	19,989	19,877	19,764
Contingency Reserve	1,769,727	688,424	455,528	(232,896)				(*** * ***)	(232,896)	(231,602)	(230,308)	(229,014)	(227,721)	(226,427)
Demand Side Management	106,288	41,346	27,358	(13,987)				(12,449)	(1,539)	(1,530)	(1,522)	(1,513)	(1,504)	(1,496)
Emission Allowances	(144)	(56)	(37)						19	19	19	19	19	18
Environmental Cost Recovery - Current	(4,700,000)	(1,828,300)	(1,209,780)						618,520	615,084	611,648	608,211	604,775	601,339
FAC Under Recovery KY - Current	409,000	159,101	105,277	(53,824)				14 505 400)	(53,824)	(53,525)	(53,226)	(52,927)	(52,628)	(52,329) (5,239,056)
FAS 106 Cost Write-Off (Post Retirement)	52,392,675	20,380,750	13,485,874	(6,894,876)				(1,506,133)	(5,388,743)	(5,358,806)	(5,328,868)	(5,298,931)	(5,268,994)	
FAS 112 Cost Write-Off (Post Employment)	3,942,900	1,533,788	1,014,902	(518,886)				(112,256)	(406,630)	(404,371)	(402,112)	(399,853)	(397,594)	(395,335
FAS 87 Pensions	(187,629,512)	(72,987,880)	(48,295,836)					5,373,591	19,318,452	19,211,128	19,103,803	18,996,478	18,889,153	18,781,829
Gas Line Tracker Reg Liab - Current	1,907,100	741,862	490,888	(250,974)				(250,974) 30,704	122,816	122,134	121,451	120,769	120,087	119,404
Interest Rate Swaps Line Pack - IRS Audit	(1,166,565) 174,919	(453,794) 68,043	(300,274) 45,024	153,520 (23,019)				(23,019)	122,818	122,134	(0)	(0)	(0)	(0)
	231.803	90,171	45,024	(30,505)				(23,019)	(30,505)	(30,336)	(30,166)	(29,997)	(29,827)	(29,658)
Off-System Sales Tracker - Reg Liab		and the second se	70,125					(7,171)	(28,682)	(28,523)	(28,363)	(28,204)	(28,045)	(27,885)
Performance Incentive	272,437	105,978	the second se	(35,853)				(7,171)	400,500	398,275	396,050	393,825	391,600	389,375
Plant Outage Normalization - Reg Asset	(3,043,316)	(1,183,850) (655,081)	(783,350) (433,465)					42,107	179,509	178,512	177,514	176,517	175,520	174,523
Prepaid Insurance	(1,684,012)	(1,478,856)	(433,465) (978,554)					500,302	1/2/202	178,512	177,514	176,517	175,520	1/4,523
Purchased Gas Adjustment - Current Refined Coal - KY - Reg Liab	(3,801,686) 722,646	(1,478,856) 281,109	(978,554) 186,009	(95,100)				500,502	(95,100)	(94,572)	(94,044)	(93,515)	(92,987)	(92,459)
Regulatory Expenses	(2,106,720)	(819,514)	(542,270)					59,860	217,384	216,177	214,969	213,761	212,554	211,346
Regulatory Expenses Research Dev. & Demo Exp.	(2,106,720) (753,306)	(293,036)	(193,901)					33,000	99,135	98,584	98,034	97,483	96,932	96,381
State Tax Current	2,103,760	736,316	(193,901) 441,790	(294,526)				45,056	(339,582)	(337,695)	(335,809)	(333,922)	(332,036)	(330,149)
State Tax Current Swap Termination	(15,864,976)	(6,171,476)	(4,083,645)						2,087,831	2,076,232	2,064,633	2,053,034	2,041,435	2,029,836
Swap Termination Tenant Incentive Amortization	(15,864,978) (796,573)	(309,867)	(4,083,643) (205,038)						104,829	104,247	103,664	103,082	102,499	101,917
Unclaimed Checks	383,392	149,139	98,685	(50,454)				(10,091)	(40,363)	(40,139)	(39,915)	(39,691)	(39,467)	(39,242
Vacation Pay	4,606,811	1,792,049	1,185,793	(606,256)				(145,849)	(460,408)	(457,850)	(455,292)	(452,734)	(450,176)	(447,619
Workers Compensation	3,320,954	1,792,049	854,814	(437,038)				(103,223)	(333,814)	(331,960)	(330,105)	(328,251)	(326,396)	(324,542)
Total Unprotected Deferred Taxes	3,320,934	(61,417,160)	(40,689,834)					2,515,332	18,211,994	18,110,816	18,009,639	17,908,461	17,807,283	17,706,105

16 Month 01/18 to 04/19 - Excess Deferred Amortization (15 Year Amort)

LGE Excess Detail - Gas

Louisville Gas and Electric Company

Excess Deferred Taxes - Protected and Unprotected

Excess Deterred Taxes - Protected and Unprotected														
Tax Cuts and Jobs Act				-	Unamortized I	Excess Accumulated Defe	erred Income Tax as of							
	Cumulative Timing	Deferred Tax Balance	Deferred Tax Balance											
Description	Difference	at Old Rates	at New Rates	Excess Deferred Taxes	ECR	GLT	DSM	Electric Base	Gas Base	Jan-18	Feb-18	Mar-18	Apr-18	May-18
and the state of the second former														
Protected (Property Related) Deferred Taxes: Tax Repairs Expensing	(65,353,044)	(25,422,334)	(16,821,873)	8,600,461				6,867,326	1,733,134.99					
	41,826,782	16,270,618	10,766,214	and State and Comparison				(4,709,236)	(795,168)					
Contributions in Aid of Construction (CIAC) Interest Capitalized	90,776,883	35,312,207	23,365,970					(11,106,003)	(840,235)					
Other Basis Adjustments	4,165,700	1,620,457	1,072,251	(548.206)				(438,565)	(109,641)					
Total Basis Adjustments	71,416,321	27,780,949	18,382,561				-	(9,386,479)	(11,909)				· ·	
Fax versus Book (method/life) Depreciation - Federal	(3,020,674,667)		(634,341,680)		92,764,015	1,463,851	540,867	247,693,308	80,432,412					
Tax versus Book (method/life) Depreciation - Federal	(1,950,817,132)		(92,468,732)		52,104,015	1,403,031	540,007	(12,427,733)	(3,959,131)					
Federal Net Operating Losses	140,367,097	49,128,484	29,477,090					(18,358,999)	(1,292,395)					
					1 172 205			(10,000,000)	(1,252,555)					
CCR ARO Ponds ¹	(8,908,774)		(2,293,118)		1,172,395	1 463 054	540,867	202 520 007	75 469 077	75 054 030	74 033 063	74.015 105	74 607 150	74 570 103
Total Protected Deferred Taxes	(*************************************	(1,059,874,082)	(681,243,879)	378,630,203	93,936,410	1,463,851	540,867	207,520,097	75,168,977	75,051,020	74,933,063	74,815,106	74,697,150	74,579,193
16 Month 01/18 to 04/19 - Excess Deferred Amortization	h (AKAM Method)													
Unprotected Deferred Taxes:														
2008 Wind Storm Damages	(6,081,253)	(2,365,607)	(1,565,314)	800,293				800,293			÷	•		
2009 Winter Storm Damages	(11,324,918)	(4,405,393)	(2,915,034)	1,490,359				1,484,658	5,701	5,669	5,638	5,606	5,574	5,543
2011 Summer Storm Damages	(402,606)	(156,614)	(103,631)	52,983				52,983	-	-		Ξ.	-	
African American Venture Fund	113,693	44,227	29,265	(14,962)				(12,867)	(2,095)	(2,083)	(2,071)	(2,060)	(2,048)	(2,036)
Amortization Loss on Reacquired Debt	(15,557,928)	(6,052,034)	(4,004,611)	2,047,423				1,917,420	130,003	129,281	128,558	127,836	127,114	126,392
Bad Debts Reserves	1,126,694	438,284	290,011	• (148,273)				(104,554)	(43,719)	(43,476)	(43,233)	(42,990)	(42,747)	(42,504)
CAFC - Federal	17,274,173	6,045,961	3,627,576	(2,418,384)				(1,782,774)	(635,610)	(632,079)	(628,548)	(625,017)	(621,486)	(617,954)
CAFC - State	17,048,356	664,886	808,092	143,206				99,599	43,608	43,365	43,123	42,881	42,639	42,396
Capitalized Gas Inventory Costs	6,557,840	2,551,000	1,687,988	(863,012)				(0)	(863,012)	(858,217)	(853,423)	(848,628)	(843,834)	(839,039)
CMRG Regulatory Asset	(154,470)		(39,761)					20,328	-	•	-	-	-	-
Contingency Reserve	1,769,727	688,424	455,528	(232,896)				(232,896)	•	-		-	-	-
Demand Side Management	106,288	41,346	27,358	(13,987)				(1,539)	(12,449)	(12,380)	(12,310)	(12,241)	(12,172)	(12,103)
Emission Allowances	(144)	(56)	(37)	19				19	-		-	-	27	+
Environmental Cost Recovery - Current	(4,700,000)	(1,828,300)	(1,209,780)	618,520				618,520	1.5			-		-
FAC Under Recovery KY - Current	409,000	159,101	105,277	(53,824)				(53,824)	-	•	-	+	-	
FAS 106 Cost Write-Off (Post Retirement)	52,392,675	20,380,750	13,485,874	(6,894,876)				(5,388,743)	(1,506,133)	(1,497,765)	(1,489,398)	(1,481,030)	(1,472,663)	(1,464,296)
FAS 112 Cost Write-Off (Post Employment)	3,942,900	1,533,788	1,014,902	(518,886)				(406,630)	(112,256)	(111,632)	(111,008)	(110,385)	(109,761)	(109,137)
FAS 87 Pensions	(187,629,512)	(72,987,880)	(48,295,836)	24,692,044				19,318,452	5,373,591	5,343,738	5,313,885	5,284,032	5,254,178	5,224,325
Gas Line Tracker Reg Liab - Current	1,907,100	741,862	490,888	(250,974)				-	(250,974)	(249,580)	(248,186)	(246,791)	(245,397)	(244,003)
Interest Rate Swaps	(1,166,565)	(453,794)	(300,274)	153,520				122,816	30,704	30,533	30,363	30,192	30,022	29,851
Line Pack - IRS Audit	174,919	68,043	45,024	(23,019)				(0)	(23,019)	(22,891)	(22,764)	(22,636)	(22,508)	(22,380)
Off-System Sales Tracker - Reg Liab	231,803	90,171	59,666					(30,505)	-	=	-	-	-	
Performance Incentive	272,437	105,978	70,125					(28,682)	(7,171)	(7,131)	(7,091)	(7,051)	(7,011)	(6,971)
Plant Outage Normalization - Reg Asset	(3,043,316)		(783,350)	conversion and and and and and and and and and an				400,500	-	•	-	•	-	-
Prepaid Insurance	(1,684,012)		(433,465)					179,509	42,107	41,873	41,639	41,405	41,171	40,937
Purchased Gas Adjustment - Current	(3,801,686)	(1,478,856)	(978,554)					0	500,302	497,522	494,743	491,963	489,184	486,405
Refined Coal - KY - Reg Liab	722,646	281,109	186,009					(95,100)	-		-	•	-	-
Regulatory Expenses	(2,106,720)		(542,270)					217,384	59,860	59,527	59,195	58,862	58,530	58,197
Research Dev. & Demo Exp.	(753,306)		(193,901)					99,135	-	•	-	•	•	-
State Tax Current	2,103,760	736,316	441,790					(339,582)	45,056	44,805	44,555	44,305	44,054	43,804
Swap Termination	(15,864,976)		(4,083,645)					2,087,831	-	-	-	-	(#L	-
Tenant Incentive Amortization	(796,573)		(205,038)					104,829	-		-	-	-	-
Unclaimed Checks	383,392	149,139	98,685					(40,363)	(10,091)	(10,035)	(9,979)	(9,923)	(9,867)	(9,811)
Vacation Pay	4,606,811	1,792,049	1,185,793	(606,256)				(460,408)	(145,849)	(145,038)	(144,228)	(143,418)	(142,608)	(141,797)
Workers Compensation	3,320,954	1,291,851	854,814	(437,038)				(333,814)	(103,223)	(102,650)	(102,076)	(101,503)	(100,929)	(100,356)
Total Unprotected Deferred Taxes		(61,417,160)	(40,689,834)	20,727,326				18,211,994	2,515,332	2,501,358	2,487,384	2,473,410	2,459,436	2,445,462

16 Month 01/18 to 04/19 - Excess Deferred Amortization (15 Year Amort)

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF DUKE ENERGY KENTUCKY, INC. FOR: 1) AN ADJUSTMENT OF THE ELECTRIC RATES; 2) 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

CASE NO. 2017-00321

ORDER

Duke Energy Kentucky, Inc. ("Duke Kentucky") is a jurisdictional electric utility that generates, transmits, distributes, and sells electricity to approximately 140,600 consumers in Boone, Campbell, Grant, Kenton, and Pendleton counties.¹ Duke Kentucky also is a utility engaged in purchasing, selling, storing, and transporting natural gas to approximately 98,200 customers in Boone, Bracken, Campbell, Gallatin, Grant, Kenton, and Pendleton counties.² Its most recent general rate increase for its electric operations was granted in Case No. 2006-00172.³

¹ Application at 2. See also, Direct Testimony of James P. Henning ("Henning Testimony") at 4.

2 Id.

³ Application at 4. Case No. 2006-00172, *Application of the Union Light, Heat and Power Company* D/B/A Duke Energy Kentucky for an Adjustment of Electric Rates (Ky. PSC Dec. 21, 2006).

BACKGROUND

On September 1, 2017, Duke Kentucky filed an application requesting authorization to increase its electric base rate revenue to a new total of \$357.5 million, which reflects an increase from its current rates of approximately \$48.6 million.⁴ The monthly residential electric bill increase due to the proposed electric base rates would be 17.1 percent, or approximately \$15.17, for a typical residential customer using 1,000 kWh of electricity.⁵ Duke Kentucky subsequently revised its proposed revenue increase to \$30.12 million.⁶ The revised revenue requirement would amount to an 11 percent increase, or approximately \$9.73, for a typical residential customer using 1,000 kWh of electricity each month.⁷ Duke Kentucky states that the primary reason for the requested increase is that Duke Kentucky's earned rate of return on capitalization obtained from its current electric operations is 2.850 percent, which is inadequate to enable Duke Kentucky to continue providing safe, reasonable, and reliable service to its customers, and is insufficient to afford Duke Kentucky a reasonable opportunity to earn a fair return on its investment property that is used to provide such service while attracting necessary capital at reasonable rates.⁸ In addition to the base rate increase, Duke Kentucky also is requesting authority to recover certain regulatory assets, including storm restoration expenses resulting from Hurricane Ike in 2008; research and development investments;

⁶ Amended Rebuttal Testimony of Sarah E. Lawler at 1.

⁷ Duke Kentucky's response to Commission Staff's Post-Hearing Data Request ("Staff's PH-DR"), Item 9.

⁸ Application at 6.

⁴ Application at 5.

⁵ Id.

incremental operations and maintenance ("O&M") related to the acquisition of the entirety of the East Bend Generating Station ("East Bend"); and O&M expenses related to the creation of a residential Advanced Metering Infrastructure ("AMI") opt-out tariff.⁹

Duke Kentucky also is proposing to implement a distribution reliability and integrity improvement plan that will be comprised of specific new and Commission-approved measures to enhance the safety and reliability of Duke Kentucky's distribution system.¹⁰ Duke Kentucky requests to recover the costs of this plan through a surcharge mechanism called Rider Distribution Capital Investment ("Rider DCI").¹¹ Duke Kentucky proposes, as part of this application, a Targeted Underground program to improve distribution reliability by relocating at-risk overhead circuits to underground service.¹² Rider DCI would include incremental capital investment, depreciation, taxes, and a reasonable return that is incremental to base rates.¹³ Rider DCI would be adjusted and subject to annual true-up following Commission review and approval; the annual application also would include any new reliability or integrity programs for Commission consideration and approval for implementation as part of Duke Kentucky's distribution integrity and reliability plan.¹⁴

⁹ Id.
¹⁰ Id. at 13–14.
¹¹ Id.
¹² Application at 14.
¹³ Id.
¹⁴ Id.

-3-

Also as part of the instant application, Duke Kentucky is requesting approval of an environmental compliance plan and the establishment of an environmental surcharge mechanism, both pursuant to KRS 278.183.¹⁵

Duke Kentucky is seeking approval of a new reconciliation mechanism to recover FERC-jurisdictional transmission expenses that Duke Kentucky incurs, incremental (above and below) to what is reflected in base rates ("Rider FTR").¹⁶ According to Duke Kentucky, Rider FTR will operate much like its fuel adjustment clause ("FAC") and Accelerated Service Replacement Program in that such transmission costs will be filed regularly and subject to periodic review by the Commission.¹⁷

Lastly, Duke Kentucky also is proposing to modify the following existing policies and tariffs and implement the following new programs and measures: a voluntary Enhanced Customer Solutions, including optional billing alternatives and notifications; a revised FAC; a revised Profit Sharing Mechanism Rider ("Rider PSM"); a new LED street lighting tariff; and revisions to its cogeneration tariff.¹⁸ Duke Kentucky submitted a depreciation study in support of its application, and requests that its proposed depreciation rates be approved.

By letter dated September 7, 2017, the Commission notified Duke Kentucky that its application was rejected because it contained filing deficiencies and that the application would not be deemed filed until the deficiencies were cured. Duke Kentucky submitted information on September 15, 2017, addressing the deficiencies. By Order

¹⁵ Application at 15.

¹⁶ Application at 18–19.

¹⁷ Application at 19.

¹⁸ Application at 20.

dated September 27, 2017, the Commission determined that Duke Kentucky had cured all of the filing deficiencies and that Duke Kentucky's application was deemed filed as of September 15, 2017. The September 27, 2017 Order also found that the earliest date that Duke Kentucky's proposed rates could be effective was October 15, 2017. Pursuant to the September 27, 2017 Order, the Commission suspended Duke Kentucky's proposed rates for six months, up to and including April 14, 2018. Further, the September 27, 2017 Order established a procedural schedule for the processing of this matter, which provided for a deadline for filing intervention requests; two rounds of discovery upon Duke Kentucky's application; a deadline for the filing of intervenor testimony; one round of discovery upon any intervenor testimony; and an opportunity for Duke Kentucky to file rebuttal testimony.

The following parties were granted intervention in this proceeding: the Attorney General of the Commonwealth of Kentucky, by and through his Office of Rate Intervention ("Attorney General"); Kentucky Industrial Utility Customers, Inc. ("KIUC"); Kentucky School Board Association ("KSBA"); Kroger Company ("Kroger"); and Northern Kentucky University ("NKU").

The Commission held an information session and public meeting for the purpose of taking public comments on February 8, 2018, at Boone County High School in Florence, Kentucky. A formal hearing was held at the Commission's offices on March 6– 8, 2018. Duke Kentucky provided responses to post-hearing data requests on March 23, 2018, and April 10, 2018. All of the parties filed simultaneous post-hearing briefs on April 2, 2018. The matter now stands submitted for a decision.

-5-

REVENUE AND EXPENSES

Contested Revenue Requirement Issues

Duke Kentucky originally proposed an annual increase in its electric revenues of \$48,646,213.¹⁹ Duke Kentucky subsequently revised its requested revenue requirement increase to \$30,119,059.²⁰ The Attorney General is the only intervenor who presented evidence addressing Duke Kentucky's proposed revenue increase, arguing that Duke Kentucky should be required to decrease its electric revenues by \$11,901,000.²¹ The Commission must consider the evidentiary record on these issues as presented by Duke Kentucky and the Attorney General and render a decision based on a determination of Duke Kentucky's capital, rate base, operating revenues, operating expenses, and revenue allocation.

Test Period

Duke Kentucky proposes the 12-month period ending March 31, 2019, as the forecasted test period for determining the reasonableness of its proposed rates. None of the intervenors contested the use of this period as the test period. The Commission finds it is reasonable to use the 12-month period ending March 31, 2019, as the test period in this case. That 12-month period is the most feasible period to use for setting rates based on the timing of Duke Kentucky's filing and, except for the adjustments approved herein, the revenues and expenses incurred during that period are neither unusual nor

-6-

¹⁹ Application, Schedule C-1.

²⁰ Amended Rebuttal Testimonies of William Don Wathen, Jr. and Sarah E. Lawler ("Amended Rebuttal Testimonies of Wathen and Lawler") at page 3.

²¹ Testimony Errata for Lane Kollen at page 4. In his Post-Hearing Brief, the Attorney General revised his recommended decrease to \$14.839 million.

extraordinary. In using this forecasted test period, the Commission has given full consideration to appropriate known and measurable changes.

Jurisdictional Rate Base Ratio

Duke Kentucky proposed a test-year-end Kentucky jurisdictional rate base of \$700,204,561.²² The Kentucky jurisdictional electric rate base is divided by Duke Kentucky's test-year-end total company electric rate base to derive the Kentucky jurisdictional electric rate base ratio ("Jurisdictional Ratio") for Duke Kentucky. This Jurisdictional Ratio is then applied to Duke Kentucky's total company electric capitalization to derive its Kentucky jurisdictional electric capitalization. The Jurisdictional Ratio uses the test-year-end rate base before any ratemaking adjustments applicable to either Kentucky jurisdictional operations or other jurisdictional operations. Duke Kentucky used a Jurisdictional Ratio of 100 percent.²³ The Commission has reviewed and agrees with the calculation of Duke Kentucky's test-year electric rate base for purposes of establishing the Jurisdictional Ratio.

Pro Forma Jurisdictional Rate Base

Duke Kentucky calculated a pro forma jurisdictional rate base of \$700,204,561,²⁴ which reflects the types of adjustments made by the Commission in prior rate cases to determine the pro forma rate base. The Attorney General provided testimony and several adjustments to Duke Kentucky's proposed rate base as discussed below. The Commission finds seven adjustments are warranted to Duke Kentucky's rate base. The

²² Application, Schedule B-1.

²³ Id., Schedule B-7.

²⁴ *Id.*, Schedule B.1. Duke Kentucky is not requesting to include recovery of Construction Work in Progress in base rates.

Commission finds that the excess amortization of the Carbon Management Research Group regulatory asset in the test year and the amortization of excess accumulated deferred income tax ("ADIT") should be added to the rate base. The Commission also finds that the East Bend Operations and Maintenance Expense ("East Bend O&M") regulatory asset, the East Bend Ash Pond Asset Retirement Obligation ("East Bend Ash Pond ARO") regulatory asset, the reduction in cash working capital ("CWC"), and the reduction in depreciation expense as discussed herein due to the Commission's decision to deny use of the Equal Life Group ("ELG") procedure and require use of the Average Life Group ("ALG") procedure for computing depreciation rates, net of the related ADIT as found reasonable herein, should be removed from rate base.

The Commission accepts Duke Kentucky's proposed amortization of the protected excess ADIT. The amortization for the protected excess ADIT is based upon the Average Rate Assumption Method ("ARAM"). For the unprotected excess ADIT, the Attorney General initially proposed a 20-year amortization period.²⁵ Subsequently, the Attorney General proposed a five-year amortization period for the unprotected excess ADIT but did not amend his testimony to reflect the change in the amortization period.²⁶ The Commission finds that a reasonable amortization period for the excess ADIT for Duke Kentucky's unprotected assets should be 10 years. A 10-year amortization period for the unprotected excess ADIT and provide ratepayers the full benefit of the reduction in the federal corporate income tax in a timely manner. As a result of the foregoing adjustments, the Commission finds the total

²⁶ March 8, 2018, Video Transcript of Evidence at 3:35:00.

²⁵ Id.

test-year amortization for the total excess ADIT to be \$4,471,984, which is an increase of \$1,651,639 over the amount proposed by Duke Kentucky. The Commission finds that the amortization of the excess ADIT related to protected and unprotected excess ADIT found reasonable herein should be removed from Duke Kentucky's ADIT, which increases its rate base. Therefore, Duke Kentucky's rate base should be increased by \$4,471,984 for this adjustment.

Duke Kentucky deferred \$2 million it incurred to fund carbon management research by the Carbon Management Research Group ("CMRG"). In Case No. 2008-00308, Duke Kentucky sought and obtained authorization from the Commission to defer these costs for accounting purposes.²⁷ The regulatory asset, net of ADIT, is included in the capitalization in this proceeding. In the instant matter, Duke Kentucky sought to recover the amortization of the deferred asset over a five-year period at \$400,000 per year. In the Commission's Order in Case No. 2008-00308, it stated that the CMRG regulatory asset will be amortized over a 10-year period or \$200,000 per year. Therefore, the Commission finds that the Duke Kentucky's capitalization should be increased by \$200,000 to reflect the proper amount of the regulatory asset in the rate base.

The Commission finds that the ADIT arising from its requirement to change Duke Kentucky's procedure for computing depreciation rates from the ELG to the ALG procedure should reduce Duke Kentucky's rate base. As discussed in the testimony of the Attorney General, the ELG procedure front-loads depreciation expense in earlier

-9-

²⁷ Case No. 2008-00308, Joint Application of Duke Energy Kentucky, Kentucky Utilities Company and Louisville Gas and Electric Company for an Order Approving Accounting Practices to Establish Regulatory Assets (Ky. PSC Oct. 30, 2008).

years and decreases it in the later years of an asset's depreciable life, creating a mismatch of revenues and expenses.²⁸ The Attorney General states that the ALG procedure is the dominant procedure for other electric utilities, including all other electric utilities in Kentucky.²⁹ Therefore, the Commission finds that the Attorney General's position on this issue is reasonable and that Duke Kentucky should use the ALG procedure for computing depreciation rates, and that its rate base should be reduced by \$2,733,299 to reflect the increase in ADIT.

The East Bend O&M regulatory asset was approved by the Commission in Case No. 2014-00201.³⁰ In addition, in that proceeding, the Commission authorized Duke Kentucky to defer carrying charges on the O&M expense at its cost of debt. The Attorney General disputed the amount of the regulatory asset and made a recommendation of the amount of amortization assuming that the regulatory asset was included in rate base.³¹

The Commission finds that the East Bend O&M regulatory asset should be removed from rate base and Duke Kentucky's request to amortize the East Bend O&M regulatory asset over a 10-year period is reasonable and should be approved. The Commission also finds that carrying charges should be based on the cost of debt approved herein. This adjustment reduces Duke Kentucky's rate base by \$36,540,123.

29 Id. at 32

³¹ Kollen Testimony at 31.

²⁸ Direct Testimony of Lane Kollen ("Kollen Testimony") beginning at 31.

³⁰ Case No. 2014-00201, Application of Duke Energy Kentucky, Inc. for (1) a Certificate of Public Convenience and Necessity Authorizing the Acquisition of the Dayton Power & Light Company's 31% Interest in the East Bend Generating Station; (2) Approval of Duke Energy Kentucky, Inc.'s Assumption of Certain Liabilities in Connection with the Acquisition; (3) Deferral of Costs Incurred as part of the Acquisition; and (4) All Other Necessary Waivers, Approvals and Relief (Ky. PSC Dec. 4, 2014).

The East Bend Ash Pond ARO was approved by the Commission in Case No. 2015-00187.³² Duke Kentucky proposed that the East Bend Ash Pond ARO amortization be recovered through the Environmental Surcharge Mechanism ("ESM") in its application. In addition, Duke Kentucky requested a 10-year amortization period. The Attorney General proposed that the East Bend Ash Pond ARO be removed from capitalization, as it was erroneous for Duke Kentucky to include it in both its ESM rider rate base and in base rates. The Commission finds the East Bend Ash Pond ARO should not be included in base rates because that amount is proposed to be recovered through Duke Kentucky's ESM. The Commission also finds that a 10-year amortization period is reasonable and should be approved. The parties have agreed upon this issue. This adjustment reduces Duke Kentucky's rate base by \$18,509,346.

The CWC allowance included in rate base shown below is based on the adjusted operation and maintenance expenses discussed in this Order, as approved by the Commission. This adjustment reduces Duke Kentucky's rate base by \$2,008,320.

Based on the Commission's finding herein where it denied Duke Kentucky's proposal to use ELG procedure rather than the ALG procedure for computing depreciation rates, the Commission finds that Duke Kentucky's accumulated depreciation in its rate base should be increased by \$6,919,475.

We have determined Duke Kentucky's pro forma jurisdictional rate base for ratemaking purposes for the test year to be as follows:

³² Case No. 2015-00187, Application of Duke Energy Kentucky, Inc. for an Order Approving the Establishment of a Regulatory Asset for the Liabilities Associated with Ash Pond Asset Retirement Obligations (Ky. PSC Dec. 15, 2015).

Total Utility Plant in Service

Add:

Cash Working Capital Allowance Other Working Capital Allowances Subtotal

Deduct: Accumulated Depreciation Accumulated Deferred Income Taxes Subtotal

Pro Forma Rate Base

Reproduction Cost Rate Base

KRS 278.290 (1) states, in relevant part, that:

the commission shall give due consideration to the history and development of the utility and its property, original cost, cost of reproduction as a going concern, capital structure, and other elements of value recognized by the law of the land for rate-making purposes.

Neither Duke Kentucky nor the Attorney General provided information relative to

Duke Kentucky's proposed Kentucky jurisdictional reproduction cost rate base.

Therefore, the Commission finds that using Duke Kentucky's historic costs for deriving its

rate base is appropriate and consistent with Commission precedents involving Duke

Kentucky as well as other Kentucky jurisdictional utilities.

Case No. 2017-00321

\$1,675,994,650

12,207,087 40,420,974 \$52,628,061

839,228,648 237,388,861 \$1,076,617,509

\$652,005,202

Revenue and Expenses

For the test year, Duke Kentucky reported actual net operating income from its electric operations of \$19,212,679.³³ Duke Kentucky proposed 33 adjustments to revenues and expenses to reflect more current and anticipated operating conditions, resulting in an adjusted net operating income of \$20,091,071.³⁴ Through discovery, this amount was adjusted to \$38,533,427. With this level of net operating income, Duke Kentucky reported an adjusted test-year revenue deficiency of \$30,119,059.³⁵

The Attorney General accepted 28 of Duke Kentucky's proposed adjustments to its test-year revenues and expenses; adjustments that are also acceptable to the Commission.³⁶ A list of the accepted adjustments is contained in the attached Appendix A.

The Attorney General proposed 17 adjustments to Duke Kentucky's operating income. Through discovery, the Attorney General and Duke Kentucky agreed on four of the operating income issues. The four items agreed upon are the inclusion of PJM makewhole and other revenues not included in Duke Kentucky's revenue forecast, the reduction in RTEP charges, the CMRG regulatory amortization expense, and the reduction in income tax expense for the research tax credits. The remaining operating income issues relate to: 1) including off-system sales ("OSS") margins to reset Rider PSM to zero; 2) reduce replacement power expense; 3) reduce vegetation management

34 Id.

³⁵ Amended Rebuttal Testimonies of Wathen and Lawler at 3.

³⁶ Appendix A shows the 33 adjustments to revenues and expenses accepted by the Attorney General.

³³ Application, Schedule C-2.

expense to historic levels; 4) reduce planned outage O&M normalization; 5) reduce incentive compensation expense tied to financial performance; 6) reduce retirement plan expense; 7) increase AMI benefit levelization adjustment; 8) reduce amortization of East Bend regulatory asset to reflect lower O&M expense prior to test year; 9) reduce depreciation expense by using the ALG procedure; 10) reduce depreciation expense by removing terminal net salvage for generating units; 11) reduce remaining net salvage value included in depreciation expense; 12) reduce income tax expense to reflect reduction in federal rate; and, 13) reduce income tax expense to reflect amortization of excess ADIT, which the Commission makes the following conclusions listed below. In addition, the Commission has a discussion on the impacts of the Tax Cuts and Jobs Act ("TCJA") which was enacted on December 23, 2017.

These adjustments, and the discussion and findings thereon pertain solely to Duke Kentucky's base-rate revenue requirements. In addition to base rates, Duke Kentucky's application includes a number of proposed riders or surcharges. On the various baserate adjustments, the Commission makes the following findings:

Rider PSM Margins

Duke Kentucky proposes to continue to include all OSS margins in the Rider PSM and that the margins be shared between customers and shareholders. Currently, ratepayers receive the benefit of the first \$1 million and any margins above \$1 million are shared 75 percent to ratepayers and 25 percent to shareholders. Duke Kentucky proposes to have all margins shared 90 percent to ratepayers and 10 percent to shareholders. In response to Staff's Post-Hearing Data Request, Item 11, regarding a comparison of the level of sharing under the current methodology and under the proposed

-14-

change for the last three years, if Duke Kentucky's proposed split had been in effect for the years 2015, 2016, and 2017, customers would have benefited by an additional \$2.1 million in 2015, \$0.8 million in 2016, and \$1.6 million in 2017.

The Attorney General recommends the forecasted OSS margins be removed from Rider PSM and be included as a reduction to base rates. The Attorney General states that the Commission has historically included OSS margins in the base revenue requirement and contemporaneously reset the relevant sharing mechanism to \$0. The impact of this adjustment would be to reduce Duke Kentucky's proposed revenue requirement by \$3.826 million.

The Commission finds that Duke Kentucky's proposal to not include PSM margins in base rates is reasonable and should be approved because the proposal would provide savings to its customers. The other Duke Kentucky proposals related to Rider PSM are discussed in the Proposed Tariff Changes section of this Order.

Replacement Power Expense

Duke Kentucky proposes to include \$5.668 million that cannot be recovered through the FAC as replacement power expense for the incremental fuel and other expenses due to unplanned outages at the East Bend Station.³⁷ Duke Kentucky also requests authority to defer replacement power expense greater than or less than the expense included in the base rate requirement, subject to future review for ratemaking recovery.

³⁷ Duke Kentucky's response to the Attorney General's First Set of Data Requests ("AG's First Request"), Item 11.

The Attorney General argues that Duke Kentucky's forecasted replacement power expense is excessive compared to the actual replacement power expense of the East Bend Station for the last three years.³⁸ Based on the average actual replacement power expense of \$1.610 million for the years 2015–2017, the Attorney General recommends Duke Kentucky's purchased power expense be reduced by \$4.058 million. The Attorney General, however, agrees that Duke Kentucky should be authorized to establish a deferral mechanism for those incremental amounts greater than or less than what is in base rates for replacement power expense.³⁹

The Commission agrees with the Attorney General's recommendation to reduce replacement power expense by \$4.058 million, as Duke Kentucky's proposed adjustment is significantly greater than its actual costs for the prior three years (2015-2017). The changes in Duke Kentucky's generation mix, the abnormal purchased power costs in 2014 due to the polar vortex, and the use of future years in the computation of the replacement power expense make Duke Kentucky's proposed adjustment unreasonable relative to historical normalized costs. The Commission also finds that Duke Kentucky's proposed deferral mechanism is reasonable and should be approved.

Vegetation Management Expense

Duke Kentucky proposed a vegetation management expense of \$4.480 million in its application.⁴⁰ This number is based in part upon Duke Energy Business Services' ("DEBS") experience in the Midwest market in its three jurisdictions (Kentucky, Indiana,

³⁸ Kollen Testimony at 11.

³⁹ Id. at 12.

⁴⁰ Duke Kentucky's response to Commission Staff's Second Request for Information ("Staff's Second Request"), Item 18.

and Ohio) for the period that extends into the first quarter of 2019. The proposed amount for the vegetation management expense represents an increase of \$2.879 million over the base period amount.

Duke Kentucky states that its vegetation management service is almost exclusively performed by outside contractors.⁴¹ It maintains that the large increase was primarily due to market forces as resources eligible to properly engage in vegetation management activities have become constrictive and extremely competitive for limited qualified resources.⁴² Duke Energy Corporation contracts for vegetation management services throughout its service territory.⁴³ Its sourcing specialists engage in a Request for Proposal ("RFP") process to seek out companies that can provide the best service at the least cost throughout its entire service territory.⁴⁴ Duke Energy Corporation issued a RFP for vegetation management services for calendar years 2018 through 2020. Duke Kentucky chose a contractor who could perform the required service, but it resulted in a substantially higher cost than it had historically incurred.

Duke Kentucky maintains that it is not cost-effective for a supplier to split up vegetation management services by a smaller geographic area in its service territory.⁴⁵ Duke Kentucky further states that the means to gain the most effective contract pricing is to have sufficient work to keep a contractor's resources working all year, and that

- ⁴³ Id.
- 44 Id.

⁴¹ April N. Edwards Rebuttal Testimony at 5.

⁴² Id. at 6.

⁴⁵ Duke Kentucky's response to Staff's Post-Hearing Data Request, Item 2.b.

subdividing its zone into smaller segments would not provide enough work to allow that to take place.⁴⁶

The Attorney General argued that Duke Kentucky's proposed vegetation management expense is excessive compared to the company's actual expense in the years 2012 through 2016, which ranged from a low of \$1.774 million to a high of \$2.309 million, with an average of \$2.080 million.⁴⁷ The Attorney General recommended the Commission use a more realistic forecast based on the actual average expense mentioned above, which results in a reduction in vegetation management expense of \$2.400 million.

The Commission has reviewed the confidential cost-benefit study⁴⁸ and other information related to vegetation management expense in the record of this case. We understand the market forces that have influenced this area of expense. However, we are concerned about the large increase and will require Duke Kentucky to study this issue further in order to find ways of making its vegetation management more cost-effective.

The Commission finds Duke Kentucky's proposed vegetation management expense should be reduced by \$0.444 million, based on deducting the four-year average for fiscal years ending March 31, 2019, through March 31, 2022, of \$4,035,571 from Duke Kentucky's proposed test year amount of vegetation management expense of \$4,479,887.⁴⁹ Further, the Commission finds that, in conjunction with its next Master

46 Id.

⁴⁸ Duke Kentucky's response to the Attorney General's Post-Hearing Data Request, Item 4.

⁴⁹ Duke Kentucky response to Commission Staff's Third Request for Information ("Staff's Third Request"), Item 14.

⁴⁷ Kollen Testimony at 15.

Agreement for Vegetation Management Service ("MAVMS") contract, DEBS, in conjunction with Duke Kentucky, should bid the next MAVMS contract for the Midwest market that includes Kentucky, Indiana, and Ohio, and for a smaller geographic area limited to Duke Kentucky's service territory. The smaller geographic area should include Duke Kentucky's service territory by itself or by county or such other discrete area(s) within its service territory that it deems to be reasonable. Duke Kentucky shall provide an update of this process in its annual Vegetation Management Plan ("VMP") filings beginning with the 2019 VMP.

Planned Outage Expense

Duke Kentucky's forecasted test year included \$8.400 million in East Bend planned outage expense, which was calculated based on the average of the actual expense for years 2013 through 2016 and forecast expense for years 2017 and 2018.⁵⁰ Duke Kentucky also requests authority to defer any actual planned outage expense that is more or less than the normalized planned outage expense included in its base rates.

The Attorney General contends that the amount is excessive because Duke Kentucky failed to include the forecast expense for 2019, which would have reduced the average amount of planned outage expenses to \$7.200 million.⁵¹ The Attorney General recommends reducing Duke Kentucky's revenue requirement by \$1.200 million for the planned outage expense.⁵² The Attorney General also recommends denying Duke Kentucky's request for a new accounting deferral mechanism for its planned outage

⁵⁰ Duke Kentucky's response to Staff's Second Request, Item 23.

⁵¹ Kollen Testimony at 16.

⁵² Id. at 17.

expense, arguing that such a mechanism would remove any incentive for Duke Kentucky to minimize planned outage costs.

The Commission finds that Duke Kentucky's planned outage expense should be reduced by \$1.223 million based on Commission precedent of using the average of four historical and four projected years for the calculation.⁵³ The Commission also finds Duke Kentucky's request for a deferral mechanism is reasonable and should be approved.

Incentive Compensation

Duke Kentucky included \$1.634 million of incentive compensation plan expense tied to financial performance in its test year.⁵⁴ The Attorney General recommends reducing Duke Kentucky's incentive compensation expense tied to Duke Kentucky's financial performance by \$1.634 million.⁵⁵

Duke Kentucky argues that its incentive compensation plans are designed to be market-based and competitive and that disallowing recovery of a portion of its compensation program would place Duke Kentucky at a competitive disadvantage and hinder its ability to attract the talent the company needs to run a safe, efficient, and reliable electric system.⁵⁶ Duke Kentucky asserts that the earnings-per-share ("EPS") or totalshareholder-reward metrics, whether tied to long-term or short-term incentive compensation, encourage eligible employees to reduce expenses, operate efficiently,

55 Id.

⁵³ Duke Kentucky's response to Staff's Post-Hearing Request, Item 12.

⁵⁴ Kollen Testimony at 21.

⁵⁶ Thomas Silinski Rebuttal Testimony ("Silinski Rebuttal Testimony") at 2.

and conserve financial resources, all of which inure to the benefit of ratepayers by keeping rates competitive.⁵⁷

The Attorney General asserts that Duke Kentucky included \$0.751 million in Short-Term Incentive Plan expense tied to the achievement of earnings per share and \$0.883 million in Long-Term Incentive Plan expense paid in the form of performance shares and restricted stock units tied primarily to Duke Kentucky's financial performance. The Attorney General argues that the Commission has historically disallowed all incentive compensation expenses from the revenue requirement that were incurred to incentivize the achievement of shareholder goals as measured by financial performance.

The Commission is in agreement with the Attorney General on this matter. Incentive criteria based on a measure of EPS, with no measure of improvement in areas such as service quality, call-center response, or other customer-focused criteria, are clearly shareholder-oriented. As noted in Case Nos. 2010-00036⁵⁸ and 2013-00148,⁵⁹ the Commission has long held that ratepayers receive little, if any, benefit from these types of incentive plans. It has been the Commission's practice to disallow recovery of the cost of employee incentive plans that are tied to EPS or other earnings measures and we find that Duke Kentucky's argument to the contrary does nothing to change this holding, as it is unpersuasive. The Commission finds the Attorney General's position is

57 Id.

⁵⁸ Case No. 2010-00036, Application of Kentucky-American Water Company for an Adjustment of Rates Supported by a Fully Forecasted Test Year (Ky. PSC Dec. 14, 2010).

⁵⁹ Case No. 2013-00148, Application of Atmos Energy Corporation for an Adjustment of Rates and Tariff Modifications, (Ky. PSC Apr. 22, 2014).

reasonable and that Duke Kentucky's incentive compensation expense should be reduced by \$1.634 million.

Retirement Plan Expense

Duke Kentucky included \$1.580 million in retirement plan expense related to its employees or its affiliates' employees who were covered by both a defined dollar benefit ("DDB") plan and a defined contribution ("DC") plan.⁶⁰

The Attorney General recommends reducing Duke Kentucky's retirement plan expense by \$1.584 million based on recent decisions in which the Commission denied recovery of retirement expenses in which a utility made contributions to both a DDB pension plan and a DC plan for certain employees.⁶¹

Duke Kentucky contends that the Attorney General has offered no justification as to why the company's test-year retirement plan expense is unreasonable.⁶² Duke Kentucky argues that it has significantly reduced retirement-related expenses by transitioning many employees eligible for pension benefits from a DDB plan to a less rich formula and partially utilizing those pension savings to enhance DC 401(k) matching formulas.⁶³ Duke Kentucky states that it has aggressively managed costs related to its retirement benefits program by closing the DDB pension plans to new hires, and, for existing employees, lock and freezing final average pay benefit formulas for all non-union employees and transitioning those employees from a final average pay formula to a more

63 Id.

⁶⁰ Duke Kentucky's response to Staff's Post-Hearing Request, Item 4.

⁶¹ Kollen Testimony at 19–21.

⁶² Silinski Rebuttal Testimony at 9.

"Defined Contribution like" cash balance benefit formula.⁶⁴ Lastly, Duke Kentucky asserts that its benefits packages, including retirement programs, as a whole are designed to be market competitive and are benchmarked to ensure that is the case.⁶⁵

The Commission is in partial agreement with Duke Kentucky on this issue and concludes that Duke Kentucky's retirement plan expense should be accepted as proposed. However, the Commission notes that the changes Duke Kentucky has made to the DDB pension plan were not applicable to union employees.⁶⁶ We will not make a distinction between union and non-union employees at this time in order to provide Duke Kentucky an opportunity to address these costs prior to its next base rate case, as rate recovery of these duplicative pension contributions for union employees will be evaluated for appropriateness as part of its next base rate case.

AMI Benefit Levelization Adjustment

Duke Kentucky incorporated an AMI benefit levelization adjustment, as required by the stipulation approved by the Commission in Case No. 2016-00152,⁶⁷ of \$2.321 million.⁶⁸ However, Duke Kentucky's calculation of the AMI benefit was based on the net present value annual savings forecast for the five years from 2018 through 2022.

66 Duke Energy Kentucky Inc.'s Brief at 57.

⁶⁷ 2016-00152, Application of Duke Energy Kentucky, Inc. for (1) A Certificate of Public Convenience and Necessity Authorizing the Construction of an Advanced Metering Infrastructure; (2) Request for Accounting Treatment; and (3) All Other Necessary Waivers, Approvals, and Relief (Ky. PSC May 25, 2017).

68 Kollen Testimony at 21.

⁶⁴ Duke Energy Kentucky Inc.'s Brief at 57.

⁶⁵ Id. at 9-10.

The Attorney General contends that the economic analysis conducted by Duke Kentucky and reflected in the stipulation in Case No. 2016-00152 represents a savings period of 15 years.⁶⁹ The Attorney General argues that Duke Kentucky unilaterally shortened the benefits period in providing the AMI benefit adjustment in this case, causing the adjustment to be reduced.⁷⁰ The Attorney General maintains that using a 15-year benefits period results in an increase in the AMI levelization adjustment to \$3.177 million. This reflects an increase of \$0.856 million from the \$2.321 million calculated by Duke Kentucky.

Based on the changes made by Duke Kentucky to the AMI levelization calculation to reflect a full 15-year benefits period, Duke Kentucky maintains that the maximum adjustment the Commission should make to Duke Kentucky's request is \$0.855 million if the Attorney General's position is accepted.⁷¹

The Attorney General filed Errata Testimony for Lane Kollen and, based on the changes made during discovery, amended his AMI benefit levelization adjustment to a revenue requirement reduction of \$0.858 million.

Given the parties changes in position and the small difference in the amount of the AMI benefit levelization adjustment, the Commission finds that the levelization adjustment should be based on cost savings before gross-up of \$0.855 million.

69 Id. at 22.

70 Id.

⁷¹ Rebuttal Testimony of William Don Wathen, Jr., at 11.

East Bend O&M Expense Regulatory Asset

Duke Kentucky is seeking to recover the East Bend O&M expense regulatory asset in the amount of \$4.490 million, based on a levelized recovery of the \$36.540 million regulatory asset over 10 years using Duke Kentucky's forecasted cost of debt.⁷² This correction reduced the East Bend O&M expense related to the regulatory asset by \$0.323 million. Duke Kentucky also provided an adjustment in rebuttal reducing its revenue requirement by \$1.555 million to reflect the debt return that is already accruing on the regulatory asset at Duke Kentucky's long-term debt rate.⁷³

The Attorney General argues that Duke Kentucky's forecast deferrals from January 2017 through March 2018 are excessive.⁷⁴ The Attorney General recommends that the regulatory asset be reduced to reflect the actual deferrals through October 2017, and to revise the forecast so that it is consistent with the actual monthly deferrals for the 12 months ending October 2017.⁷⁵ The Attorney General thus recommends that Duke Kentucky's revenue requirement be reduced by \$0.406 million.

The Commission finds that Duke Kentucky's adjustment for the East Bend O&M regulatory asset amortization is more accurate as it is based upon corrections made to the Attorney General's calculation. Therefore, the Commission finds that no further adjustment is warranted for this issue.

74 Kollen Testimony at 29.

75 Id. at 30-31.

⁷² Amended Rebuttal Testimony of Wathen and Waller, Errata Sheet at 1.

⁷³ Amended Rebuttal Testimony of Sarah E. Lawler at 1.

Depreciation Expense

Duke Kentucky proposes, as part of developing its depreciation rates, the continued use of the ELG procedure. The Attorney General recommends the Commission adopt the ALG procedure in developing Duke Kentucky's depreciation rates. The Attorney General contends that the ALG methodology is the predominant method that is used in the electric industry for developing depreciation rates. The Attorney General contends that, under the ELG methodology, the capital recovery periods are accelerated and shortened and, thus, the depreciation rates are greater than if the ALG procedure was used.⁷⁶ The Attorney General argues that the ALG procedure is as accurate as the ELG procedure and the ALG procedure smooths the data so that the depreciation rates for the group of assets tend to remain constant.⁷⁷ Use of the ALG procedure will result in a decrease in Duke Kentucky's depreciation expense of \$6.920 million.

Duke Kentucky requested an increase in depreciation expense of \$6.920 million, based on its request to utilize the ELG procedure for computing depreciation rates. As was discussed in the rate base section of this Order, this Commission has found that the ELG procedure does not accurately match revenues and expenses, is front-loaded, and Duke Kentucky is the only Kentucky based utility that utilizes the ELG procedure for computing depreciation rates.

Regulatory accounting requires the proper matching of revenues and expense in order to produce fair, just and reasonable rates. The Commission finds Duke Kentucky's

⁷⁶ Id. at 33.

⁷⁷ Id. at 35

proposed ELG procedure does not meet that criteria and that Duke Kentucky's depreciation expense should be reduced by \$6.920 million.

Terminal Net Salvage - Generation Units

Duke Kentucky included an adjustment of its depreciation expense of \$4.506 million to reflect the impact of terminal net salvage value.⁷⁸ Duke Kentucky's proposed depreciation rates reflect terminal net salvage, which the company contends is required under the Federal Energy Regulatory Commissions' Uniform System of Accounts.⁷⁹ Duke Kentucky further contends that, to avoid intergenerational inequity, these costs should be borne by those ratepayers who receive the benefit from the production assets.⁸⁰

The Attorney General recommends reducing the proposed depreciation rates by removing terminal net salvage from production plant depreciation rates. The Attorney General argues that Duke Kentucky's proposed recovery of future terminal net negative salvage for production plant is unreasonable because those costs are not known with reasonable certainty today.⁸¹ The Attorney General's recommendation is to reduce Duke Kentucky's depreciation expense by \$4.506 million.⁸²

The Commission finds Dukes Kentucky's recommendation on the treatment of terminal net salvage value in the computing the depreciation rates for generating units is reasonable in order to avoid intergenerational inequity and should be approved.

⁷⁸ Id. at 42.

⁷⁹ John J. Spanos Rebuttal Testimony ("Spanos Rebuttal Testimony") at 4-5.

⁸⁰ Spanos Rebuttal Testimony at 4.

⁸¹ Kollen Testimony at 39.

⁸² Id. at 42.

Interim Net Salvage

Duke Kentucky proposed a \$4.617 increase in depreciation expense to reflect the impact of interim net salvage value in its depreciation rates.⁸³ Duke Kentucky included interim net salvage based on forecasts of the future cost of removal and salvage income.⁸⁴

The Attorney General contends that Duke Kentucky's methodology front-loads forecasted costs based on limited data applied to the interim retirement portion of the production plant accounts and the entirety of the transmission and distribution plant accounts.⁸⁵ By presuming to recover costs that have not and may not be incurred, the Attorney General argues that Duke Kentucky's methodology overstates depreciation rates and expense. The Attorney General recommends applying a methodology that calculates the interim net salvage based on the same historical data used by Duke Kentucky, but uses the average annual historic interim net salvage dollars divided by the interim retirement portion of the production plant account and the entirety of the transmission and distribution plant accounts, rather than the annual historic retirements. Under the Attorney General's recommended methodology, Duke Kentucky's depreciation

The Commission finds Duke Kentucky's recommendation for the treatment of interim net salvage value in the computing of its depreciation rates to be reasonable to avoid intergenerational inequity and should be approved.

⁸³ *Id.* at 45.
⁸⁴ *Id.* at 43.
⁸⁵ *Id.* at 44.

Federal Income Tax Expense

In its rebuttal testimony, Duke Kentucky proposed a reduction in Federal Income Tax ("FIT") of \$10.623 million to reflect the impacts of the TCJA.⁸⁶ Duke Kentucky states that the adjustment is due to updating the gross-revenue conversion factor ("GRCF") for the decrease in the federal income tax rate.⁸⁷ The Attorney General proposed a \$10.255 million reduction to reflect the impact of the TCJA, using the same methodology.⁸⁸

The Commission has carefully reviewed the parties' methodology and computations in determining their respective FIT impacts of the TCJA. The Commission finds the Attorney General's calculations to be more accurate and therefore will reduce Duke Kentucky's revenue requirement by \$10.255 million.

Excess Deferred Taxes

Duke Kentucky proposed a reduction in its revenue requirement of \$3.782 million to reflect the impact of the TCJA on the amortization of its excess ADIT.⁸⁹ The Attorney General proposed a reduction of \$6.054 million. Both Duke Kentucky and the Attorney General utilized the ARAM method to compute the amortization of the protected excess ADIT and both parties originally utilized a 20-year amortization for the unprotected excess ADIT. As was discussed in the rate base section of this Order, the Commission has accepted the ARAM calculation of the protected excess ADIT and has found a ten-year amortization period for the unprotected excess ADIT to be reasonable. As a result, the

⁸⁹ Lawler Rebuttal Testimony at 3.

⁸⁶ Sarah E. Lawler Rebuttal Testimony ("Lawler Rebuttal Testimony") at 3.

⁸⁷ Id.

⁸⁸ Kollen Testimony at 48.

Commission finds that Duke Kentucky's test-year federal income tax expense should be reduced by \$4.472 million to reflect this adjustment.

Net Operating Income Summary

After considering all pro forma adjustments and applicable income taxes, Duke Kentucky's adjusted net operating income is as follows:

Operating Revenues	\$308,549,356
Operating Expenses	270,589,404
Adjusted Net Operating Income	<u>\$ 37,959,952</u>

Capitalization

Duke Kentucky's proposed capitalization represents the end-of-year balances of the 13-month average for the test period ending March 31, 2019. Because Duke Kentucky's total capitalization is for its electric and gas operations, the amount allocated to its electric operations is determined by taking the total capitalization for both electric and gas and applying the electric rate base ratio.⁹⁰ This is consistent with the approach used in previous Duke Kentucky rate cases. Accordingly, the total capitalization allocated to its electric operations is \$705,051,140.⁹¹

The Attorney General recommended several adjustments to Duke Kentucky's capitalization. Each adjustment was made proportionally based upon Duke Kentucky's capital ratio for a final capitalization of \$647,314,275.⁹² No other intervenor

- ⁹¹ Direct Testimony of Sarah E. Lawler ("Lawler Testimony") at 5.
- 92 Kollen Testimony, Exhibit 23.

⁹⁰ See Application, Work Papers, WPA1 d for the electric rate base ratio.

recommended any capitalization adjustment. The Attorney General proposed the following adjustments:

• A reduction of \$5.126 million for loans Duke Kentucky made to other Duke Energy affiliates as a member of Duke Energy Money Pool ("Money Pool"). The Money Pool is used to meet short-term cash requirements and the Attorney General states that Duke Kentucky should not be allowed a return on these investments because if the revenue requirements were calculated using rate base this Money Pool investment would be excluded. The Attorney General adjusted the capitalization downward by Duke Kentucky's forecasted test year Money Pool investments, reducing Duke Kentucky's revenue requirement by \$0.451 million.⁹³ In its rebuttal testimony, Duke Kentucky states that the money pool is used to manage short-term cash positions and any reduction to its capitalization should be solely attributed to the short-term debt portion of the capital structure and not applied proportionally based on its capital ratio of short-term debt, longterm debt, and common equity.⁹⁴ The Commission agrees that any adjustment should be made solely to short-term debt and will adjust the capitalization downward for a revenue reduction of \$0.158 million.⁹⁵

• A reduction of \$39.162 million to reflect the removal of the East Bend O&M expense regulatory asset. The Attorney General argues that Duke Kentucky has already included a debt-only rate of return in the levelized amortization expense for the East Bend O&M expense regulatory asset and in the revenue requirement. The adjustment reduces

⁹³ Id. at 51-52.

⁹⁴ Rebuttal Testimony of Stephen G. De May at 17–18.

⁹⁵ This adjustment alters the capitalization ratio. Further adjustments are made to this revised capitalization.

Duke Kentucky's revenue requirement by \$3.449 million. In its rebuttal testimony, Duke Kentucky agrees to remove this regulatory asset from capitalization and, in response to Duke Kentucky's Post-Hearing Data Request, the projected East Bend O&M Expense regulatory asset was updated to \$36.540 million.⁹⁶ Removing this updated amount from the Commission adjusted capitalization results in a decrease in the revenue requirement of \$3.231 million.

• The removal of the demand-side management ("DSM") regulatory asset for a reduction of \$1.477 million from the capitalization and a reduction in the revenue requirement of \$0.130 million. The Attorney General states that Duke Kentucky erred by not removing the DSM regulatory asset from its electric capitalization. Duke Kentucky counters that all DSM revenue and expenses have been removed, but the deferred balance should not be removed as it is exclusively related to a cash flow issue and is financed by shareholders and recommended rejecting this adjustment as it is an asset on Duke Kentucky's balance sheet and is not accruing carrying costs.⁹⁷ The Commission agrees that the DSM regulatory asset is a cash flow issue and rejects the proposed adjustment.

• The removal of \$18.509 million from capitalization for the East Bend coal ash regulatory asset as the Attorney General proposed that these costs be recovered through the proposed Environmental Surcharge Mechanism Rider. The impact of this adjustment is a reduction in Duke Kentucky's revenue requirement of \$1.630 million.

⁹⁶ Duke Kentucky's Response to Staff's PH–DR, Item 2.

⁹⁷ Rebuttal Testimony of Sarah E. Lawler ("Lawler Rebuttal") at 7.

Duke Kentucky agreed with this adjustment.⁹⁸ The Commission finds this proposed adjustment to be reasonable and will remove this from the Commission's adjusted capitalization, which results in a decrease of \$1.637 million in the revenue requirement.

• An increase to the revenue requirement of \$0.018 million to reflect a \$0.200 million increase to capitalization to account for the impact of amortizing the Carbon Management Research Group regulatory asset over a ten-year period as compared to Duke Kentucky's proposed five-year period. Duke Kentucky agrees with this recommendation and the Commission finds this adjustment to be reasonable and should be accepted. This adjustment increases the revenue requirement by \$0.018 million on the Commission's adjusted capitalization.

• An increase of \$2.733 million to reflect the reduction in depreciation expense resulting from use of the ALG depreciation method instead of Duke Kentucky's proposed ELG depreciation method. As stated earlier, the Commission agrees with the application of the ALG methodology in developing Duke Kentucky's depreciation rates and, accordingly, accepts the corresponding adjustment to capitalization. Based on the revised capitalization, the revenue impact is \$0.242 million.

• The Attorney General recommends Duke Kentucky's revenue requirement be increased \$0.157 million to reflect the \$1.780 million increase in capitalization resulting from the reduction in depreciation expense from the proposed removal of terminal net salvage value. As stated earlier, the Commission rejected the Attorney General's recommendation on this issue and, therefore, no corresponding adjustment to capitalization will be made.

-33-

⁹⁸ Duke Kentucky's Response to the Attorney General's Second Request for Information, Item 4e.

• An increase of \$1.824 million to capitalization to reflect the increased capitalization resulting from the reduction in depreciation expense from the proposed removal of the remaining net salvage. The Commission rejected the Attorney General's recommendation on this issue and, therefore, no corresponding adjustment to capitalization will be made.

Appendix B illustrates the impact of each capitalization adjustment. The total Commission approved adjustments lower Duke Kentucky's electric operations capitalization to \$647,809,050.

Rate of Return, Capital Structure, and Cost of Debt

Duke Kentucky proposed a test-year-end capital structure consisting of 40.68 percent long-term debt at a cost of 4.24 percent; 10.43 percent short-term debt at a cost of 3.08 percent; and 48.89 percent common equity with a proposed return of 10.30 percent.⁹⁹ Although the capitalization is lower, the capital structure proposed by the Attorney General maintains the same capital ratios and short-term and long-term debt costs but adjusts the cost of common equity. Neither NKU, KSBA, nor Kroger addressed the capital structure.

Return on Equity

In its application, Duke Kentucky developed its proposed return on equity ("ROE") using the discounted cash flow method ("DCF"), the capital asset pricing model ("CAPM"), the Empirical CAPM model, and Risk Premium analysis ("RP"). Derived from these cost of capital evaluations, Duke Kentucky proposed an ROE range, adjusted for flotation costs, of 9.0 percent to 10.7 percent, and recommended an ROE be awarded within the

⁹⁹ Application, Schedule J-1, page 2.

upper half portion of this range, or between 9.9 and 10.7 percent.¹⁰⁰ Duke Kentucky used the midpoint of this upper portion, or 10.3 percent, in calculating its revenue requirements. Duke Kentucky maintained that an ROE in this range fairly compensates investors, maintains Duke Kentucky's credit strength and attracts the capital needed for utility infrastructure and reliability capital investments.¹⁰¹ Duke Kentucky further emphasized that an ROE in the upper portion of the recommended range accounts for the high external financing risks facing Duke Kentucky relative to its small size, forecasted increases in interest rates, a highly concentrated generation mix, and a higher degree of regulatory risk.¹⁰² The table below summarizes Duke Kentucky's ROE estimates:¹⁰³

STUDY	ROE
DCF – Value Line Growth	9.4%
DCF – Analyst Growth	9.0%
CAPM	9.5%
Empirical CAPM	10.0%
Historical Risk Premium Electric	10.7%
Allowed Risk Premium	10.5%

Direct testimony and analysis regarding the ROE were also provided by the Attorney General. The Attorney General employed the DCF and CAPM models for its analysis but based its recommendation on the results of the DCF model.¹⁰⁴ The Attorney General used 19 proxy companies as compared to the 23 Duke Kentucky utilized. The Attorney General stated that due to significant events, including acquisition activity,

101 Id. at 5.

102 Id. at 4.

103 Id. at 62.

¹⁰⁰ Direct Testimony of Roger A. Morin, PhD ("Morin Testimony") at 4.

¹⁰⁴ Direct Testimony of Richard A. Baudino ("Baudino Testimony") at 3.

natural disasters, and capital investment cancellations, the exclusion of the four proxy companies was warranted.¹⁰⁵ In the DCF model, the Attorney General employed both the average and the median values for the expected growth rates. The model results indicated equity cost rates ranging from 8.07 percent to 9.16 percent for the average growth rates and for the median growth rates, 8.19 percent to 9.21 percent. The Attorney General recommended removing the low end of the average growth range, stating that 8.07 percent appeared to be understated and that the remaining DCF estimates reflect a range of approximately 8.2 percent to 9.2 percent. Thus, the Attorney General recommended a point slightly higher than the midpoint, or 8.8 percent.¹⁰⁶

The Attorney General disagreed with Duke Kentucky's overall analysis, stating that Duke Kentucky's requested ROE is overstated, inconsistent with the current low–interestrate environment, and not supported by current market evidence.¹⁰⁷ In particular, the Attorney General disagreed with Duke Kentucky's DCF analysis, arguing that Duke Kentucky's exclusion of forecasted dividend growth in the DCF analysis, due to Duke Kentucky's concern regarding slower dividend growth in the near term was not reflective of long-run expected earnings growth. The Attorney General also questioned Duke Kentucky's use of 1+g to calculate the expected dividend yield as compared to 1+.5g. The Attorney General noted that although the two approaches do not yield significantly different results, the 1+g approach is overstated as it assumes an investor receives the

106 Id. at 31.

107 Id. at 32.

¹⁰⁵ *Id.* at 19. The four companies were Avista Corp. (which had announced that it would be acquired by Hydro One); PG&E Corp. (which recently announced that it would be eliminating its common and deferred stock dividends); SCANA (who's stock price has fallen significantly due to the cancellation of the Summer nuclear power plant); and Sempra Energy (which recently announced its acquisition of Oncor).

full amount of growth throughout the next year and given the timing of dividend increases and the level of the dividend, the investor may or may not actually receive a full year of increased dividend payments.¹⁰⁸

The Attorney General's CAPM results range from 7.01 percent to 7.23 percent for the forward-looking CAPM ROE estimates and 6.02 percent to 7.39 percent using historical risk premiums.¹⁰⁹ The Attorney General stated that Duke Kentucky's CAPM analysis employed an inflated projected interest rate, and that current interest rates and bond yields embody all relevant market data and expectations of investors.¹¹⁰ He further argues that the use of the Empirical CAPM analysis is not a reasonable method to use for Duke Kentucky's ROE estimate, as the use of an adjustment factor to "correct" the CAPM results for companies with betas less than 1.0 suggests that published betas are incorrect and investors should not rely on them.¹¹¹ The Attorney General rejects the RP analysis calling it imprecise and stating that it should only be used for general guidance.¹¹²

Finally, the Attorney General disagreed with Duke Kentucky's inclusion of an upward adjustment for flotation costs. The Attorney General notes that flotation costs attempt to collect the costs of issuing common stock and that these costs are already accounted for in current stock prices and that adding an adjustment for flotation costs

¹⁰⁸ *Id.* at 34,
¹⁰⁹ *Id.* at 30.
¹¹⁰ *Id.* at 34.
¹¹¹ *Id.* at 39.
¹¹² *Id.* at 40.

amounts to double counting.¹¹³ The Attorney General further notes that if flotation costs are excluded from the Duke Kentucky's DCF analysis, the cost of equity results fall to a range of 8.86 percent to 9.27 percent.¹¹⁴

In its rebuttal testimony, Duke Kentucky contends that the Attorney General's proposed ROE would be one of the lowest authorized returns in the industry, that it lies outside the zone of reasonableness, and, if adopted, would cause adverse consequences to Duke Kentucky's creditworthiness, financial integrity, capital-raising ability and ultimately to its customers. Duke Kentucky further disagrees with the Attorney General exclusively relying on the results of the DCF analysis and the procedures and methodologies used in his analysis.

In his post-hearing brief, the Attorney General pointed out that in the recent Kentucky Power Company ("Kentucky Power") rate case,¹¹⁵ the Commission noted that the increase in interest rates is happening slowly and interest rates are still historically low. He also noted that the Commission stated that models supporting a low-interest-rate environment should be given more weight. The Attorney General contends that Duke Kentucky did not provide any evidence to sway this Commission from that position and that an ROE of 8.8 percent should be adopted.¹¹⁶ Duke Kentucky's post-hearing brief

113 Id. at 33.

114 Id.

¹¹⁵ Case No. 2017-00179, Electronic Application of Kentucky Power Company for (1) A General Adjustment of its Rates for Electric Service, (2) An Order Approving its 2017 Environmental Compliance Plan; (3) An Order Approving its Tariffs and Riders; (4) An Order Approving Accounting Practices to Establish Regulatory Assets and Liabilities; and (5) An Order Granting All Other Required Approvals and Relief (Ky. PSC Jan. 18, 2018).

¹¹⁶ Attorney General's Post Hearing Brief at 5-6.

contends that the Attorney General's proposed ROE is unreasonable and lies outside the zone of currently authorized ROEs for electric utilities.¹¹⁷ For the reasons discussed below, the Commission finds a ROE of 9.725 percent to be reasonable, and for the purpose of base rate revenues and certain tariffs, an ROE of 9.725 percent should be applied.

The Commission agrees that financial markets are still in a low-interest-rate environment. However, economic data indicates a healthy outlook with steady growth, low unemployment, and inflation at the Federal Reserve's ("Fed") target level. Citing a solid economic outlook, the Fed increased the federal funds interest rate to 1.75 percent this past March, the highest level in a decade, and signaled that two to three more rate hikes are possible in 2018. Increased government spending, the possible impact of current tariff policy on net imports, and the Tax Cut and Jobs Act of 2017 should all contribute to a healthier economy. These macroeconomic inputs point to a robust outlook and an economy that has recovered from the Great Recession. However, notwithstanding these improvements, interest rates are still historically low, the impact of interest rate changes is unpredictable, and increases in the federal funds rate are not guaranteed.

The Commission agrees with the Attorney General that flotation costs should be excluded from the analysis as they are already accounted for in the current stock prices. Removal of the flotation costs from Duke Kentucky's ROE model produces the following results:

¹¹⁷ Duke Kentucky's Post-Hearing Brief at 73.

STUDY	ROE
DCF - Value Line Growth	9.3%118
DCF - Analyst Growth	8.9%119
CAPM	9.3%120
Empirical CAPM	9.8%121
Historical Risk Premium	10.5%122
Allowed Risk Premium	10.5%123

For 2017, the average authorized ROE in the electric utility industry as reported in the Regulatory Research Associates ("RRA") quarterly review was 9.80 percent, and the average of allowed ROEs for the proxy group of 19 companies is 9.88.¹²⁴ Further, the Commission notes its last award of 9.7 percent for an investor-owned electric utility. The Commission believes these ROE reports are benchmarks worthy of consideration in determining a reasonable ROE. The Commission believes that since its last award of 9.7 percent, the economy has shown quantifiable signs of improvement. Further, the Commission recognizes the risk inherent to Duke Kentucky's lack of diversity in its generation fleet. Based on the entire record developed in this proceeding, we find that the approved ROE of 9.725 falls within the range of Duke Kentucky's proposed ROE of 8.86 percent to 10.5 percent, adjusted for flotation costs. While the ROE of 9.725 exceeds the Attorney General's range of 8.2 percent to 9.2 percent, the Commission believes that

¹²³ Id. at 52. No flotation cost is noted.

¹²⁴ Id. See also, Rebuttal Testimony of Roger A. Morin, PhD at 10.

¹¹⁸ Morin Testimony at 30.
¹¹⁹ *Id.* at 31.
¹²⁰ *Id.* at 44.
¹²¹ *Id.* at 47.
¹²² *Id.* at 49.

the Attorney General recommended range is unreasonably low. The Commission agrees with Duke Kentucky that awarding an ROE that is significantly lower than other electric utility authorized ROEs may cause it financial stress and fails to take into account Duke Kentucky's highly concentrated generation portfolio. Additionally, an ROE of 9.725 is within the range of the benchmarks provided by RRA and approved for the proxy group, and recognizes the economic improvements since the last Commission decisions involving rate cases of other investor-owned electric utilities in Kentucky.

Rate-of-Return Summary

Applying the rates of 3.08 percent for short-term debt, 4.24 percent for long-term debt, and 9.725 for common equity to the Commission adjusted capital structure consisting of 9.77 percent, 40.98 percent, and 49.25 percent, respectively, produces an overall cost of capital of 6.83 percent.¹²⁵

Base Rate Revenue Requirement

The Commission has determined that, based upon Duke Kentucky's capitalization of \$647,809,050 and an overall cost of capital of 6.83 percent, Duke Kentucky's net operating income that could be justified by the evidence of record is \$44,245,358. Based on the adjustments found reasonable herein, Duke Kentucky's pro forma net operating income for the test year is \$37,959,952. Therefore, Duke Kentucky would need an increase in annual base rate operating income of \$6,285,406. After the provision for uncollectible accounts, the PSC Assessment, and state and federal income taxes, Duke Kentucky would have a base-rate electric revenue deficiency of \$8,428,645.

The calculation of this base-rate revenue deficiency is as follows:

125 See, Appendix B.

Net Operating Income Found Reasonable Pro Forma Net Operating Income Net Operating Income Deficiency Gross Revenue Conversion Factor

Base Rate Revenue Deficiency

\$ 44,245,358 <u>37,959,952</u> \$ 6,285,406 1,3409866

\$ 8,428,645

REVENUE ALLOCATION AND RATE DESIGN

Cost of Service Study ("COSS") and Revenue Allocation

Duke Kentucky prepared three fully embedded COSSs in this proceeding that contain essentially the same data, except that different methodologies were used to develop the allocation factor for the demand component of Production-related costs. The demand allocation methods are as follows: (1) 12-CP method; (2) the Average and Excess method; and (3) the Summer/NonSummer method. Of those three, Duke Kentucky recommends using the 12-CP methodology, stating that it is generally accepted in the utility industry and was approved by the Commission in its most recent electric base rate case.¹²⁶ Using the 12-CP method, the allocation of capacity costs to each customer class is based on the class load contribution to the maximum peak, at the time of peak, regardless of what their respective loads were at other times of the day. Duke Kentucky states that due to an anticipated future replacement of its billing system, it is not seeking to implement any significant rate design changes. Duke Kentucky is proposing to increase customer charges and energy charges and, where applicable, demand charges, across the board. Duke Kentucky's proposed rate design is based upon its 12-CP COSS

126 Case No. 2006-00172, Duke Kentucky (Ky. PSC Dec. 21, 2006).

increases are supported by the COSS.¹²⁷ For the residential class, the customer charge is proposed to increase from \$4.50 to \$11.10, or 147 percent.¹²⁸ This amount represents nearly the full customer charge as calculated by the COSS.¹²⁹ Duke Kentucky is also proposing to increase its street lighting and traffic lighting rates. The revised proposed increase by rate class is as follows:¹³⁰

Rate RS	14,780,440
Rate DS	7,870,484
Rate GS-FL	51,793
Rate EH	54,744
Rate SP	1,897
Rate DT-Secondary	3,854,808
Rate DT-Primary	2,442,311
Rate DP	105,930
Rate TT	807,689
Lighting	146,956
Total	30,117,052

The Attorney General's witness, Mr. Glenn Watkins, prepared two COSSs but stated that he accepts Duke Kentucky's 12-CP method for evaluating class profitability. While Mr. Watkins stated that he believes that Duke Kentucky's revenue distribution is reasonable for the residential class, he states that Duke Kentucky's proposed revenue allocation produces anomalous results for several nonresidential classes but did not offer any suggested changes. In addition, Mr. Watkins calculated a customer charge between

¹²⁸ As revised in the billing analysis provided in Duke Kentucky's response to Staff's PH-DR, Item 9.

¹²⁹ The revised COSS filed by Duke Kentucky in response to Staff's PH-DR, Item 8, supports a residential customer charge of \$11.31.

¹³⁰ See revised billing analysis provided in Duke Kentucky's response to Staff's PH-DR, Item 9, Tab Sch M-2.2.

¹²⁷ As originally proposed, the customer charges for rate class DT, both Primary and Secondary, were not supported by the COSS. However, through discovery, Duke Kentucky proposed that the customer charges be revised to reflect the COSS.

any suggested changes. In addition, Mr. Watkins calculated a customer charge between \$2.69 and \$3.49 using "a direct customer cost analysis" and objected to any increase in the residential customer charge. Mr. Watkins asserts that Duke Kentucky's proposed residential rate design violates the principle of gradualism, the theory of efficiency competitive prices and is contrary to effective conservation efforts.

NKU did not object to Duke Kentucky's 12-CP COSS and did not oppose Duke Kentucky's revenue allocation. Kroger's witness, Mr. Justin Bieber, proposed that the Commission allocate 50 percent of the benefits of the tax impact to all rate classes and then use the remaining 50 percent to further reduce interclass subsidies, as he believes the proposed 10 percent subsidy reduction is insufficient. Duke Kentucky believes Mr. Bieber's proposal is not a fair result for its customers, stating the changes due to the tax reduction should follow the customer contribution to costs.

The Commission accepts Duke Kentucky's revised 12-CP COSS to use as a guide in determining revenue allocation and rate design. The Commission also accepts Duke Kentucky's proposed revenue allocation and finds that the proposed revenue allocation, which reduces class subsidies by 10 percent, conforms to the principle of gradualism. As previously stated, the Commission is granting less of an increase than that requested by Duke Kentucky. Therefore, the Commission will allocate the increase granted herein on a proportional basis to each of the rate classes, based generally on Duke Kentucky's proposed revenue allocation.

Rate Design

Duke Kentucky's revised 12-CP COSS supports a residential customer charge in the amount of \$11.31, which includes all costs identified as customer-related in its

-44-

COSS.¹³¹ This method of calculating the customer charge is generally accepted in the utility industry and is being accepted by the Commission. Although the Commission has been reluctant to approve an increase in the residential customer charge in excess of 50 percent due to the principle of gradualism, we believe that a larger increase is warranted in this proceeding given Duke Kentucky's lowest-in-Kentucky current residential customer charge of \$4.50 and the amount of time that has passed since the charge was established. Therefore, the Commission will approve a residential customer charge of \$11.00. Given the reduction to the requested increase granted herein, allocating the entirety of the increase authorized for the residential class to the customer charge will not achieve an \$11.00 customer charge. Therefore, the Commission will decrease the current residential energy charge in order to establish an \$11.00 customer charge and achieve the increase authorized for the residential class. The Commission will also accept Duke Kentucky's proposed customer charges and demand charges for the nonresidential rate classes, as revised. Therefore, in order to achieve the decrease in the requested increase granted herein, the Commission has adjusted the energy charges of all rate classes. The monthly increase for the residential class results in an increase of 3.2 percent, or approximately \$2.56, for a typical residential customer using 1,000 kWh of electricity per month.

PROPOSED TARIFF CHANGES

<u>Fixed Bill Program.</u> Duke Kentucky is proposing to offer a Fixed Bill program to its customers. A customer signing up for the Fixed Bill program would pay a flat monthly billing charge for electric service for 12 months. The flat monthly charge would include a

¹³¹ Duke Kentucky's Response to Staff's PH-DR, Item 8, Attachment, Tab Customer Charge.

premium in order to take into account the risk of weather and commodity volatility. Duke Kentucky stated that the premium has not yet been finalized for inclusion in the program but that, if approved, the premium to be charged to customers would be determined and added to the applicable section in the compliance tariff.¹³² Duke Kentucky also states that significant changes in the customer's consumption behavior may require the Fixed Bill amount to be recalculated before the 12-month period ends. If a customer's actual usage is more than 30 percent higher than their expected weather-adjusted usage, Duke Kentucky stated that it would send them a warning letter and, if the excessive usage continues, the company would have the right to remove the customer from the program or adjust their fixed bill amount to reflect the increased usage.¹³³ At the end of 12 months, Duke Kentucky would calculate a new charge to the customer, which will factor in any changes in usage patterns for the customer. The customer would be required to re-enroll in the Fixed Bill payment option every 12 months.

Duke Kentucky's initial proposed tariff did not contain the provisions of the Fixed Bill Program but Duke Kentucky indicated that it would be willing to include the provisions of the Fixed Bill Program in its tariff if the program is approved.¹³⁴

Mr. Watkins, the Attorney General's witness, filed testimony recommending that the Fixed Bill Program be rejected. Mr. Watkins stated that the Fixed Bill program is not in the public interest and provides windfall profits to Duke Kentucky with no realistic benefits to consumers. Mr. Watkins also states that the Fixed Bill program would provide

¹³² Duke Kentucky's Response to Staff's Fourth Request for Information ("Staff's Fourth Request"), Item 17 b.

¹³³ Duke Kentucky's Response to Staff's Fourth Request, Item 17. a.

¹³⁴ Duke Kentucky's Response to Commission Staff's Second Request for Information ("Staff's Second Request"), Item 9 d.

benefits to consumers. Mr. Watkins also states that the Fixed Bill program would provide for a constant "flat" bill to customers regardless of how much energy they consume or when they consume it, and that policies such as this are contrary to the objectives of efficient pricing.

The Commission finds that the Fixed Bill Program is not reasonable and should not be approved. A jurisdictional utility must charge its filed rates for usage and the Commission finds that this program does not adhere to the Commission's filed rate doctrine. Because Duke Kentucky included \$122,230 in the forecasted test year as the amount of premium associated with this program, in rejecting the Fixed Bill Program, the Commission has made an adjustment to increase the revenue requirement by \$122,230.

<u>Rate RTP-M, Real-Time Pricing.</u> Duke Kentucky is proposing to cancel and withdraw Rate RTP-M, Real-Time Pricing – Market-Based Pricing. Duke Kentucky states that this rate option has not been utilized by any customers since its inception and that it was proposed when Duke Kentucky purchased all of its power from Duke Energy Ohio, which is no longer the case. Duke Kentucky states that it has another RTP tariff available for nonresidential customers. There were no objections to this tariff change from the intervenors. The Commission finds that the proposed tariff change is reasonable and should be approved.

<u>Rate TT, Time of Day Rate – Transmission Voltage</u>. Duke Kentucky is proposing to add a summer and winter on-peak energy rate similar to Rate DT. There were no objections to this tariff change from the intervenors. The Commission finds that the proposed tariff change is reasonable and should be approved.

-47-

<u>Rate DT, Time of Day Rate – Distribution Voltage.</u> Duke Kentucky is proposing to remove language referencing an expired optional pilot rate for low load factor customers from this tariff. There were no objections to this tariff change from the intervenors. The Commission finds that the proposed tariff change is reasonable and should be approved.

Rate LED, LED Outdoor Lighting Service. Duke Kentucky is proposing to introduce a LED lighting tariff due to increased customer requests for LED fixtures. The minimum term for the tariff is proposed to be 10 years. The rates proposed by Duke Kentucky included a carrying charge based on a 10.30 percent ROE. As previously stated, the ROE approved in this proceeding is 9.725 percent. Therefore, the Commission has recalculated the proposed LED rates using a ROE of 9.725 percent. With this recalculation of rates, the Commission finds that the proposed LED lighting tariff is reasonable and should be approved.

Rate OL, Outdoor Lighting Service. Duke Kentucky is proposing to cancel and withdraw Rate OL, Outdoor Lighting Service. Per Duke Kentucky's current tariff, this rate schedule terminated December 31, 2016. Duke Kentucky is proposing that all remaining participants be moved to Rate UOLS, Unmetered Outdoor Lighting and, as applicable, Rate OL-E – Outdoor Lighting Equipment Installation. There were no objections to this tariff change from the intervenors. The Commission finds that the proposed tariff change is reasonable and should be approved.

Rate NSP, Private Outdoor Lighting Service for Nonstandard Units. Duke Kentucky is proposing to cancel and withdraw Rate NSP, Private Outdoor Lighting for Non-Standard Units. Per Duke Kentucky's current tariff, this rate schedule terminated December 31, 2016. Duke Kentucky is proposing that all remaining participants be

-48-

moved to Rate UOLS, Unmetered Outdoor Lighting and, as applicable, Rate OL-E, Outdoor Lighting Equipment Installation. There were no objections to this tariff change from the intervenors. The Commission finds that the proposed tariff change is reasonable and should be approved.

<u>Rider LM, Load Management Rider.</u> Duke Kentucky is proposing to revise Rider LM to reflect the fact that it no longer utilizes the magnetic tape recording devices included in Section II of the Rider. Section II will be eliminated and all participants utilizing interval data recorders and time-of-use meters will be combined under Section I.¹³⁵ There were no objections to this tariff change from the intervenors. The Commission finds that the proposed tariff change is reasonable and should be approved.

<u>Rate MDC, Meter Data Charges.</u> Duke Kentucky is proposing to revise Rate MDC to clarify that it is for nonresidential customers and to rename it Meter Data Charges for Enhanced Usage Data Services. In addition, the name of the software that enables the service is changed from EnFocus to Energy Profiler Online (EPO).¹³⁶ There were no objections to this tariff change from the intervenors. The Commission finds that the proposed tariff change is reasonable and should be approved.

<u>Rider GSS, Generation Support Service.</u> Duke Kentucky is proposing to combine the Monthly Distribution Reservation Charge, Monthly Transmission Reservation Charge, and Monthly Ancillary Services Reservation Charge values into a combined value called Monthly Transmission and Distribution Reservation Charge.¹³⁷ Duke Kentucky clarified

¹³⁵ Direct Testimony of Bruce L. Sailers ("Sailers Testimony") at 17.

¹³⁶ Sailers Testimony at 20.

¹³⁷ Sailers Testimony at 20.

in the discovery and at the hearing in this matter that proposed Rider GSS does not include a Monthly Ancillary Services Reservation Charge.¹³⁸ There were no objections to this tariff change from the intervenors. The Commission finds that the proposed tariff change is reasonable and should be approved.

<u>Rider FAC, Fuel Adjustment Clause.</u> Duke Kentucky is proposing to include additional PJM Interconnection, LLC ("PJM") Billing Line Items for recovery through its FAC. Duke Kentucky's proposal is the same, with respect to the PJM billing line items, as was made by Kentucky Power in its recent base-rate proceeding and approved by the Commission.¹³⁹ There were no objections to this tariff change from the intervenors. The Commission will approve Duke Kentucky's proposal with the requirement that Duke Kentucky list each of the PJM billing line items that will flow through the FAC in its compliance tariff.

<u>Rider PSM, Off-System Sales Profit Sharing Mechanism.</u> Duke Kentucky is proposing changes to its Rider PSM to expand the categories of revenues (net of costs) available for inclusion in Rider PSM and to streamline the administration and calculation of Rider PSM. Duke Kentucky is proposing to make adjustments to Rider PSM to reflect PJM billing line items that are related to credits and charges attributable to the off-system sales shared with customers under Rider PSM. Duke Kentucky is proposing to adjust the categories of eligible net proceeds (credits and charges) that can be flowed through the PSM to include all wholesale energy, capacity, and ancillary services markets (net of costs and credits) that are now available or may become available in PJM. This will

¹³⁸ Duke Kentucky's response to Staff's Fourth Request, Item 14, and March 7, 2018 hearing at 2:07:45.

¹³⁹ Case No. 2017-00179, Kentucky Power (Ky. PSC Jan. 18, 2018).

capacity performance market requirements and for short-term capacity purchases necessary to meet Duke Kentucky's three-year fixed resource requirement plan. Duke Kentucky is also proposing to include costs of any capacity payments made to cogeneration facilities under the terms of its cogeneration tariffs, as well as any net proceeds from the sale of renewable energy certificates derived from any Company-owned renewable generating resources. Since Duke Kentucky is proposing to implement an environmental surcharge mechanism, cost recovery and the sharing of any gains or losses on the sale of emission allowances will begin to be addressed in Rider ESM.¹⁴⁰ None of the intervenors filed testimony objecting to the expansion of items proposed to be included in Rider PSM. However, in its post-hearing brief, the Attorney General stated that the proposed changes to Rider PSM should be denied because Duke Kentucky has not met its burden as to the necessity of the changes. The Attorney General argued that Duke Kentucky is attempting to turn Rider PSM into a way to pass costs on to customers instead of a way to share profits.

Duke Kentucky is also proposing to revise the sharing percentage between customers and shareholders. Currently, the first \$1 million in annual margins from off-system sales flow to customers and anything over \$1 million is shared 75 percent to customers and 25 percent to Duke Kentucky shareholders. Duke Kentucky is proposing to revise the sharing percentage between customers and shareholders to a 90/10 split and eliminate the \$1 million threshold in the formula. Duke Kentucky argues that the proposed split will simplify and streamline the process. Duke Kentucky also provided

¹⁴⁰ Direct Testimony of William Don Wathen, Jr. ("Wathen Testimony") at 14 and 15.

calculations showing that the change to Rider PSM would benefit customers during the forecasted period in the amount of \$322,294.¹⁴¹

The Attorney General did not provide testimony opposing Duke Kentucky's proposed 90/10 customer/shareholder split but did recommend that the forecasted offsystem sales margins be removed from Rider PSM and be included in base rates, as discussed previously in this Order.

Having reviewed the record in this proceeding, the Commission finds Duke Kentucky's proposed changes to Rider PSM to be reasonable and will approve Duke Kentucky's proposal with the requirement that Duke Kentucky list each of the PJM billing line items that will flow through Rider PSM in its compliance tariff. In addition, the Commission will require Duke Kentucky to notify the Commission within seven days of incurring any capacity performance assessment from PJM.

<u>Reconnection of Service.</u> Duke Kentucky is proposing to revise its reconnection fees as follows:

Charge	Current Charge	Proposed Charge
Remote Reconnection	\$0.00	\$25.00
Reconnection (Nonremote, Electric Only)	25.00	75.00
Reconnection (Nonremote, Electric & Gas)	38.00	88.00
Reconnection at pole (Electric Only)	65.00	125.00
Reconnection at pole (Electric & Gas)	90.00	150.00
Collection Fee	15.00	50.00

¹⁴¹ Duke Kentucky's Response to Staff's Second Request, Item 28.

Duke Kentucky filed cost support for its proposed reconnection charges. In response to questioning from the Attorney General regarding the calculation of the remote reconnection charge, Duke Kentucky offered to revise its remote reconnection charge using an alternate labor rate which would result in a remote reconnection charge of \$3.45. Duke Kentucky stated that if this revised rate was approved rather than the proposed rate, a corresponding adjustment totaling \$170,759 would need to be made to its revenue requirement to account for the loss of the reconnection revenue.¹⁴²

With the exception of the remote reconnection charge, the Commission finds that the proposed charges in the table above are reasonable and should be approved. The Commission also finds that the remote reconnection charge should be \$3.45 and has made an adjustment to increase Duke Kentucky's revenue requirement in the amount of \$170,759.

<u>Rate CATV, Rate for Pole Attachments of Cable Television Systems.</u> Duke Kentucky is proposing to increase the pole attachment rates and to broaden the rate language to apply the per foot charge to other pole attachments on a contract basis based on the footage required for the attachment. Duke Kentucky is also proposing that this rate schedule be renamed to Rate DPA, Distribution Pole Attachment Rate, thereby limiting the attachments to distribution poles.¹⁴³ There were no objections to this tariff change from the intervenors. The Commission will approve Duke Kentucky's proposed changes to this tariff; however, the rates proposed by Duke Kentucky will not be approved as they were calculated using a rate of return based on a 10.30 percent ROE. Therefore,

¹⁴² Sailers Rebuttal Testimony at 15.

¹⁴³ Sailers Testimony at 18.

the Commission has recalculated the proposed pole attachment rates using the Commission approved ROE of 9.725 percent and will approve a two-user-pole rate of \$5.92 and a three-user-pole rate of \$4.95. Because this change to the proposed pole attachment rates will impact revenue, the Commission has made an adjustment to increase Duke Kentucky's revenue requirement in the amount of \$15,601.

<u>Cogeneration and Small Power Production Sale and Purchase Tariffs ("Cogen</u> <u>Tariffs").</u> Duke Kentucky has two Cogen Tariffs, one for cogeneration facilities that are 100 kW or less ("Small Cogen Tariff") and one for cogeneration facilities that are greater than 100 kW ("Large Cogen Tariff"). For the Small Cogen Tariff, Duke Kentucky is proposing to revise the Energy Purchase Rate to reflect avoided energy cost equal to a two-year average PJM Locational Marginal Price ("LMP") at the Duke Energy node. The Energy Purchase for the Large Cogen Tariff is based on the PJM real-time LMP for power at the DEK Aggregate price node for each hour of the billing month.

For both Cogen Tariffs, Duke Kentucky proposes to recover required energy purchases through the FAC as an economy energy purchase. Duke is also proposing to add a Capacity Purchase Rate to both Cogen tariffs that will be based on the Company's avoided capacity cost in Duke Kentucky's last Integrated Resource Plan, which was reviewed in Case No. 2014-00273.¹⁴⁴ Duke Kentucky proposes to adjust the Capacity Purchase Rate after the Commission completes its review of the next IRP, which is due to be filed in June 2018. Due to the fact that Duke Kentucky may need to purchase

¹⁴⁴ Case No. 2014-00273, 2014 Integrated Resource Plan of Duke Energy Kentucky, Inc. (Ky. PSC Sept. 23, 2015).

capacity to meet its own resource needs in PJM, it is proposing to reconcile and recover costs of any purchases of capacity under these tariffs through Rider PSM.

Duke Kentucky is also proposing to add language to both of its Cogen Tariffs stating that no capacity purchase will be made if the qualifying facility cannot satisfy the Company's capacity need or the Company does not have a capacity need.

The Commission finds that the proposed changes to Duke Kentucky's Cogen Tariffs should be approved except as discussed below.

<u>Capacity Rate</u>. Duke Kentucky's calculation of the capacity rate used an ROE of 10.3 percent. As the ROE approved in this proceeding is 9.725 percent, the Commission has recalculated the capacity rate using an ROE of 9.725 percent and will approve a capacity rate of \$3.61 per kW-month.

Language related to Capacity Purchases. 807 KAR 5:054, Section 6 states, in relevant part, as follows:

(1) Each electric utility shall purchase any energy and capacity which is made available from a qualifying facility except as provided in subsections (2) and (3) of this section.

(2) The qualifying facility's right to sell power to the utility shall be curtailed in periods when purchases from qualifying facilities will result in costs greater than those which the utility would incur if it generated an equivalent amount of energy instead of purchasing that energy.

(3) During any system emergency, an electric utility may discontinue:

(a) Purchases from a qualifying facility if such purchases would contribute to such emergency; and

(b) Sales to a qualifying facility if discontinuance is nondiscriminatory.

The Commission finds that Duke Kentucky's proposed language stating that no capacity purchase will be made if the qualifying facility cannot satisfy Duke Kentucky's capacity need or when Duke Kentucky does not have a capacity need is inconsistent with the requirements of 807 KAR 5:054, Section 6(1). The regulation requires Duke Kentucky to purchase energy and capacity from a qualifying facility except as set forth in subsections 2 and 3, both of which do not apply in the language proposed by Duke Kentucky. Therefore, the proposed language should not be approved.

In addition, Duke Kentucky is reminded that 807 KAR 5:054, Section 5, requires all electric utilities with annual retail sales greater than 500 million kWhs to provide data to the Commission from which avoided costs may be derived not less often than every two years unless otherwise determined by the Commission.

<u>Rider DCI and Targeted Underground Program.</u> Duke Kentucky requests authority to implement Rider DCI to recover the incremental capital costs, above what is to be included in base rates, for specific Commission-approved programs aimed at accelerating, improving, and enhancing the performance of Duke Kentucky's electric delivery system in terms of reliability and integrity.¹⁴⁵ Duke Kentucky states that Rider DCI is modeled after similar Commission-approved programs for its gas operations as well as similar mechanisms implemented in by its affiliates in Ohio and Indiana.¹⁴⁶ Duke Kentucky explains that it will file an annual application to set and true-up its Rider DCI for the duration of a Commission-approved program.¹⁴⁷ The annual applications will

¹⁴⁵ Henning Testimony at 24.
¹⁴⁶ Id.

147 Id.

establish new rider rates based on the actual incremental investment in the eligible plant in service as of the end of each calendar year. The revenue requirement for the rider will include a return on incremental rate base, income taxes on the equity component of the return, property taxes, and depreciation expense associated with the incremental investment. The rider will not include recovery of incremental O&M expenses. Duke Kentucky is proposing to allocate the resulting revenue requirement based on the allocation factors used for the underground distribution equipment from its COSS.

Duke Kentucky is seeking authority for a CPCN to implement a Targeted Underground program to be included in Rider DCI.¹⁴⁸ Duke Kentucky maintains that due to the advancements in consumer electronics, customer expectations are evolving and customers are requiring a higher degree of reliability, performance, and response with respect to the provision of electric service.¹⁴⁹ As part of its philosophy to evolve to meet new and growing customer demands, Duke Kentucky is proposing to implement a Targeted Underground program, which will identify specific areas of the company's distribution system that experience higher-than-acceptable frequency of outages and replace overhead wires with underground cables to harden the system, thereby increasing reliability.¹⁵⁰ The Targeted Underground program will focus on undergrounding certain small overhead distribution conductors which have been identified as having the highest likelihood of outages within Duke Kentucky's distribution

148 Id.

149 Platz Testimony at 20.

¹⁵⁰ Platz Testimony at 25.

system.¹⁵¹ The types of overhead line segments that have performed worse as compared to the remainder of Duke Kentucky's overhead facilities are remote lines that are located close to trees and certain line segments located along major thoroughfares.¹⁵² Tree-related customer interruptions and public action (i.e., cars crashing into poles) customer interruptions account for 18 percent and 9 percent, respectively, of all customer interruptions for Duke Kentucky.¹⁵³ Duke Kentucky states that it will also ultimately take ownership of those underground service lines that are replaced either as part of the Targeted Underground program or existing customer-owned underground service lines that experience a failure and are replaced by Duke Kentucky.¹⁵⁴ Duke Kentucky maintains that hardening these underperforming line segments provides broad benefits for all customers while addressing these poor performing areas.¹⁵⁵ Over the next 10 years, Duke Kentucky expects to spend approximately \$67 million as part of its Targeted Underground efforts.¹⁵⁶

The Attorney General, Kroger, and NKU recommend that Rider DCI be rejected. The Attorney General argues that automatic capital and investment adjustment clauses, such as Rider DCI, are poor policies and do not allow the requisite amount of regulatory review that is provided in a full base-rate proceeding.¹⁵⁷ The Attorney General contends

155 Id.

157 Baudino Testimony at 46.

¹⁵¹ Platz Testimony at 25-26.

¹⁵² Platz Testimony at 27.

¹⁵³ Id.

¹⁵⁴ Platz Testimony at 26.

¹⁵⁶ Platz Testimony at 28-29.

that Duke Kentucky has failed to quantify any customer benefits associated with either Rider DCI or the Targeted Underground Program.¹⁵⁸ The Attorney General also contends that the areas that have been identified by Duke Kentucky as experiencing higher than average outages should be considered a high priority and addressed by the company as part of its normal budgeting and system operations regardless of the existence of Rider DCI.¹⁵⁹ Should the Commission consider approving Rider DCI, the Attorney General recommends that the Commission take the following into consideration: 1) Rider DCI should be limited to a three-year pilot program; 2) Duke Kentucky should only be allowed to include actual investment costs after the year they are closed to plant in service; 3) the inclusion of a yearly 2.5 percent cap on rate increases associated with Rider DCI; 4) the inclusion of a cumulative cap of 5 percent on rate increases from Rider DCI between base rate cases; and 5) offsets that reflect the build-up of accumulated depreciation and ADIT associated with investments included in Rider DCI during the period that the mechanism is in effect.¹⁶⁰

NKU states that Duke Kentucky has not demonstrated that the costs to be recovered through Rider DCI are volatile, unpredictable, or outside its control.¹⁶¹ NKU argues that the risk of recovery of these costs is mitigated by Duke Kentucky's use of a forecasted test year and that, to the extent the projects that would be recovered under Rider DCI are prudent projects that are beneficial to consumers, Duke Kentucky should

- 160 Baudino Testimony at 52-54.
- ¹⁶¹ Direct Testimony of Brian C. Collins at 14.

¹⁵⁸ Baudino Testimony at 47.

¹⁵⁹ Baudino Testimony at 49.

plan the projects as part of the normal capital budgeting process and include the project costs in future rate cases.¹⁶²

Kroger argues that the proposed DCI rider amounts to single-issue ratemaking and reduces Duke Kentucky's incentive to manage its costs effectively, particularly with respect to the proposed Targeted Underground program.¹⁶³

On rebuttal, Duke Kentucky asserts that recovery of any costs associated with the proposed Targeted Underground program through Rider DCI will be subjected to greater scrutiny because those would be the only costs that would be the subject of review in any Rider DCI proceeding.¹⁶⁴ Duke Kentucky avers that in these separate rider proceedings, the company would have more detailed cost estimates for the near-term work to be performed and would not be able to recover costs until the plant was in service.¹⁶⁵ Thus, according to Duke Kentucky, the Commission would have greater transparency into how Duke Kentucky's program is impacting reliability performance for customers.¹⁶⁶ Further, Duke Kentucky maintains that it would have the burden of proof that any new program would be reasonable and performed at a reasonable cost prior to cost recovery being included in Rider DCI.¹⁶⁷

162 Id.

¹⁶³ Bieber Testimony at 4, 13–14.

¹⁶⁴ Rebuttal Testimony of Anthony J. Platz ("Platz Rebuttal") at 3.

165 Id.

166 Id.

167 Platz Rebuttal at 5.

Duke Kentucky also takes issue with the Attorney General's argument that the company has failed to quantify the benefits of the proposed Targeted Underground program, noting that the company provided those quantifications in response to the Attorney General's discovery requests, which were referenced by one of the Attorney General's witnesses in the pre-filed testimony.¹⁶⁸ Duke Kentucky argues that the Targeted Underground program would reduce major event day ("MED") outage events by 16 percent and reduce MED outage duration by 15–20 percent.¹⁶⁹

Having reviewed the record, the Commission finds that Duke Kentucky has failed to establish a need for either Rider DCI or the Targeted Underground program. Rider DCI and the Targeted Underground program are designed to improve and enhance Duke Kentucky's electric distribution system and to allow Duke Kentucky timely cost recovery of those investments. The record, however, indicates that Duke Kentucky's electric distribution system is performing well based on customer expectations and reliability metrics. As noted in the pre-filed testimony of Mr. James P. Henning and according to a J.D. Power 2017 Electric Utility Residential Customer Satisfaction Study, the overall satisfaction scores of Duke Kentucky Energy Midwest, which includes Duke Kentucky, outperformed both the Midwest Region average scores and the large utility industry average, finishing in the second quartile among large utilities nationally.¹⁷⁰ The J.D. Power 2017 Electric Utility Residential Customer Satisfaction Study calculates overall

¹⁶⁸ Platz Rebuttal at 5-6.

¹⁶⁹ Platz Rebuttal at 7.

¹⁷⁰ Henning Testimony at 13; See also, Henning Testimony, Exhibit JPH-1.

customer satisfaction based on six performance areas.¹⁷¹ One of those performance areas is power quality and reliability, which was weighted the highest at 28 percent.¹⁷²

In addition, Duke Kentucky conducts internal customer satisfaction studies, which surveys residential customers who have had a recent service interaction with the company.¹⁷³ The internal customer satisfaction surveys show that Duke Kentucky customers were highly satisfied overall with the services provided by Duke Kentucky and that the level of customer satisfaction was either steady or improving.¹⁷⁴ In particular, one of the processes measured in the internal customer satisfaction study was outage restoration and experiences.¹⁷⁵ The study indicates that 77 percent of Duke Kentucky residential customers were highly satisfied with their overall outage and restoration experience.¹⁷⁶

Lastly, Duke Kentucky witness Anthony J. Platz testified that Duke Kentucky's distribution system has performed well and that the company's reliability scores have exceeded industry average reliability scores and are among the best performing throughout Duke Energy's six-state electric service areas.¹⁷⁷

¹⁷¹ Henning Testimony at 12.

¹⁷² Henning Testimony, Exhibit JPH-1 at 2 of 17.

- ¹⁷³ Henning Testimony at 13.
- 174 Henning Testimony at 14.
- ¹⁷⁵ Henning Testimony at 14–15.
- ¹⁷⁶ Henning Testimony, Exhibit JPH-2 at 2-3 of 24.

¹⁷⁷ Platz Testimony at 13–15. Duke Kentucky's 2016 Customer Average Interruption Duration Index ("CAIDI"), which measures the average interruption duration or average time to restore service per interrupted customer was 130 minutes, excluding major event days. Duke Kentucky's 2016 System Average Interruption Duration Index ("SAIDI"), which measures the average time each customer was interrupted, 99 minutes, excluding major event days. Duke Kentucky's 2016 System Average Interruption Frequency Index ("SAIFI"), which measures the average number of interruptions that a customer would experience, was 0.76 interruptions, excluding major event days.

Duke Kentucky states that Rider DCI is modeled after its existing riders to recover costs associated with the accelerated replacements of gas pipeline mains and service lines. We note, however, that the need to have a surcharge mechanism to timely recover the substantial investments required to replace aging and bare steel gas pipelines with polyethylene pipelines was based on a public safety concern that those gas pipelines be replaced on an accelerated schedule in order to minimize the risk of a catastrophic pipeline failure. In the instant proceeding, Duke Kentucky has identified no critical system-wide need to justify the implementation of a surcharge to recover costs associated with improvements to the company's distribution system. We note that the proposed Targeted Underground program targets only discrete sections of Duke Kentucky's distribution system that have experienced higher outage occurrences as compared to the rest of the company's distribution system.¹⁷⁸ The Targeted Underground program would impact approximately 5,600 customers over the next 10 years, but at a cost of almost \$67 million.¹⁷⁹ While Duke Kentucky projects that there will be a reduction in MED outage events by 16 percent and a reduction in MED outage duration by 15-20 percent, the Targeted Underground program would have no impact on the projected frequency of system outages as measured by SAIFI and would have very little impact in the projected duration of a customer's outage as measured by SAIDI.¹⁸⁰ Given the absence of a need

¹⁷⁸ Duke Kentucky identified approximately 140 miles of overhead distribution lines that will need to be placed underground and approximately 5,600 customers impacted by the Targeted Underground program over the next 10 years. *See*, Duke Kentucky's response to the Attorney General's Second Data Request, Item 41.

¹⁷⁹ Platz Testimony at 28 - 29.

¹⁸⁰ Duke Kentucky's response to the Attorney General's First Data Request, Item 89. Duke Kentucky forecasted that system-wide SAIDI would improve by from 66 minutes to 60 minutes due to the Targeted Underground program.

and the limited impact of the proposed Targeted Underground program and Rider DCI, the Commission finds that any such distribution related improvements should be performed by Duke Kentucky as part of its normal operations and those costs should be recovered in base rates and not through a surcharge mechanism.

Rate UDP-R, Underground Residential Distribution Policy. Duke Kentucky is proposing to add language to this tariff to create the ability for the Company to pay for and own, with revenues to be recovered through Rider DCI, underground installations associated with the Targeted Underground program. Since neither Rider DCI nor the Targeted Underground program are being approved, the Commission denies this tariff change.

Rate UDP-G, General Underground Distribution Policy. Duke Kentucky is proposing to add language to this tariff to create the ability for the Company to pay for and own, with revenues to be recovered through Rider DCI, underground installations associated with the Targeted Underground program. Since neither Rider DCI nor the Targeted Underground program are being approved, the Commission denies this tariff change.

Rate RTP. Duke Kentucky is proposing to combine the energy delivery charge and ancillary services charge. Duke Kentucky is also proposing to correct the reference to the "PJM Real-Time Total Locational Marginal Price" to "PJM Day-Ahead Total Locational Marginal Price." There were no objections to this tariff change from the intervenors. The Commission finds that the proposed tariff change is reasonable and should be approved.

-64-

<u>Rider FTR, FERC Transmission Cost Reconciliation Rider.</u> Duke Kentucky is proposing to implement Rider FTR, which is intended to recover or credit specific PJM transmission costs. The specific costs include network integration transmission service, both firm and non-firm point-to-point market administration fees, and potentially other transmission costs that may be billed in the future related to serving retail load that is above or below the level included in the Company's base rates established in this proceeding. Duke Kentucky is also proposing that the rider track incremental changes in costs associated with PJM's Regional Transmission Expansion Plan costs that are incremental to what the Company is proposing to include in its base rates.¹⁸¹

On a quarterly basis, Duke Kentucky proposes to adjust Rider FTR based on the most recent actual monthly invoices received from PJM. Duke Kentucky also proposes to submit to an annual review of this rider by the Commission of the invoiced costs and the revenue collected under the rider. The rider will be filed 30 days before it is scheduled to go into effect.¹⁸²

Both the Attorney General and NKU filed testimony recommending that Rider FTR be rejected by the Commission. The Attorney General's witness, Mr. Lane Kollen, states that the rider would increase the retail revenue requirement in real time based on net expense pursuant to FERC tariffs, and would change recovery from a fixed amount based on the test-year expense revised with periodic base rate increases to a series of automatic guarterly Rider FTR rate increases. Mr. Kollen also states that Rider FTR "would change

¹⁸¹ Wathen Testimony at 18.

¹⁸² Wathen Testimony at 19.

Duke Kentucky's incentives to attempt to influence these expenses or to reduce other expenses to compensate for the increases in these expenses due to the selective single nature of these expenses."¹⁸³ NKU witness Mr. Brian Collins argues that Duke Kentucky has not demonstrated that the incremental transmission costs not included in base rates proposed to be recovered through Rider FTR would significantly impact Duke Kentucky's ability to earn its authorized rate of return.

After reviewing the evidence of record in this proceeding, the Commission finds that Duke Kentucky's proposed Rider FTR should not be approved. Although the Commission is aware that it recently approved a similar rider for Kentucky Power in Case No. 2017-00179, the decision in that proceeding was based on evidence which demonstrated that Kentucky Power's transmission costs were significant and volatile; therefore, the approval of such a rider was warranted in that proceeding. Duke Kentucky testified during the hearing in this matter that Duke Kentucky's transmission rates are significantly less than those for Kentucky Power and "the volatility has a much bigger impact" on Kentucky Power than Duke Kentucky.¹⁸⁴ The Commission finds no evidence in this proceeding to suggest that the proposed FTR is warranted for Duke Kentucky at this time.

<u>Budget Payment Plan.</u> Duke Kentucky's current and initially proposed tariff do not comply with 807 KAR 5:006, Section 14(2)(a)(3), which requires that the provisions of the budget payment plan be included in a utility's tariffed rules. Through discovery, Duke

¹⁸³ Kollen Testimony at 62.

¹⁸⁴ March 7, 2018 Hearing at 3:50:48.

Kentucky indicated that it would be willing to include the provisions of the budget payment plan in its tariff.¹⁸⁵ Duke Kentucky is directed to do so when filing its compliance tariff.

Pick Your Own Due Date and Usage Alerts and Outage Alerts with AMI. Duke Kentucky is proposing to implement a pick your own due date billing option and a Usage Alerts and Outage Alerts with AMI service; however, Duke Kentucky did not include the provisions of these items in its proposed tariff. Through discovery, Duke Kentucky indicated that it would be willing to include the provisions of these programs/services in its tariff.¹⁸⁶ Duke Kentucky is directed to do so when filing its compliance tariff.

<u>Miscellaneous Tariff Changes</u>. Duke Kentucky is proposing various minor text changes to its tariff. Unless otherwise stated in this Order, the Commission finds that the proposed changes are reasonable and should be approved.

<u>Bill and Bill Format.</u> Duke Kentucky is proposing to update its bill format to reflect the riders proposed in this case and the new company logo. The Commission approves Duke Kentucky's proposal to change its bill format to the extent that the bill reflects the riders and rates approved herein.

Duke Kentucky's tariff contains its bill format, which consists of three pages. However, when Duke Kentucky bills its customers, it does not include page 2, which contains the billing details, unless the customer checks a block that indicates he or she would like to receive page 2. The Commission finds that page 2 provides customers with the ability to check the accuracy of the bill and should be sent to every customer. With this Order, the Commission will require the entire bill be sent to every customer, thereby

-67-

¹⁸⁵ Duke Kentucky's Response to Staff's Second Request, Item 9 c.

¹⁸⁶ Duke Kentucky's Response to Commission Staff's Third Request for Information ("Staff's Third Request"), Item 6 b.

eliminating the requirement that the customer elect to receive the entire bill. This directive applies to all Duke Kentucky customers, including those that are gas customers only.

Tariff Format. Numerous tariff pages Duke Kentucky submitted in this case did not appear to comply with 807 KAR 5:006, Section 3(4), which states "[e]ach tariff sheet shall contain a blank space at its bottom right corner that measures at least three and one-half (3.5) inches from the right of the tariff sheet by two and one-half (2.5) inches from the bottom of the tariff sheet to allow space for the commission to affix the commission's stamp." This ensures that no language is obscured by the Commission's stamp. When filing its compliance tariff reflecting the rates, rules, and terms of service approved in this Order, Duke Kentucky should ensure that all of its tariff pages comply with 807 KAR 5:006, Section 3(4).

<u>Rider DSM, Demand-Side Management</u>. The Commission finds that, upon the implementation of new base rates, the Lost Revenue from Lost Sales Recovery component of Duke Kentucky's DSM cost-recovery rider should be reset to zero. Duke Kentucky's compliance tariff should reflect this revision to Rider DSM.

KSBA Recommendations. The KSBA made certain recommendations that the Commission will address herein.

1. <u>Elimination of Demand Ratchet from Rate DS</u>. KSBA witness Mr. Ron Willhite recommends that the Commission eliminate the demand ratchet from Rate DS for P–12 public and private schools or alternatively minimize the demand ratchet for said schools billed under this rate schedule. KSBA argues that Duke Kentucky is a summer peaking utility and that schools are not typically in session during the summer peak but peak during the month of September. As a result, because of the demand ratchet for

-68-

Rate DS, a school's September billing demand becomes the basis for demand billing in many of the non-summer revenue months. Mr. Willhite states that schools billed under Rate DS are subsiding other customers within the class and that the demand ratchet for schools should be eliminated or reduced. As an alternative, Mr. Willhite suggests the establishment of a new P–12 School Tariff. Duke Kentucky opposes the creation of a new P–12 School Tariff, stating that Mr. Willhite provided no information that specifically demonstrates how the energy demand requirements of schools are substantially dissimilar from other Rate DS Rate DS.

The Commission is not convinced that public school usage characteristics support special treatment compared to other customers serviced under Rate DS and will not approve KSBA's recommendation.

2. <u>Rate SP, Seasonal Sports Service</u>. KSBA recommends that the Commission allow some sports fields to move to Rate SP. Currently, Rate SP is a closed tariff and has been closed since June 25, 1981. According to KSBA, subsequent to 1981new sports fields are being served on Rate DS and must pay a demand charge and minimum payments based on off-peak night-time load in the months they are not in full operation. KSBA argues that sports fields clearly are not similar to other commercial and industrial loads served on Rate DS. KSBA states that it is aware of three sports fields that are interested in taking service under the closed tariff. Duke Kentucky is opposed to reopening the tariff, stating that KSBA has not met the burden of proof to establish the reasonableness of re-opening Rate SP.

At the hearing in this matter, Duke Kentucky could not explain why the tariff was closed or whether it had been reopened temporarily over the intervening years. In its

-69-

post-hearing brief, Duke Kentucky stated that it was closed due to lack of interest and has remained closed since 1981. The Commission finds that the load for sports fields would differ significantly from that of other customers and that Duke Kentucky should be directed to reopen Rate SP permanently. Given that there will be a revenue impact to Duke Kentucky if current customers move to Rate SP, the Commission will allow Duke Kentucky to defer the difference between what it would have billed the sports field customer under its current rate and what it will bill under Rate SP as a regulatory asset and request recovery in its next base-rate proceeding.

3. <u>Funding for SEMP, School Energy Manager Program</u>. KSBA recommends that the Commission require Duke Kentucky to fund the SEMP through shareholder funds. Mr. Willhite states that public schools must pursue energy savings pursuant to KRS 160.325 and that SEMP has significantly improved cost savings for schools in the territories of other jurisdictional utilities. Duke Kentucky opposes Mr. Willhite recommendation, stating that he does not "offer any evidence that shows the Company's choice not to fund SEMP to date has somehow prevented school districts in the Company's service territory from moving forward with meaningful energy efficiency programs."¹⁸⁷

The Commission agrees with Duke Kentucky on this issue and will not approve KSBA's recommendation to require Duke Kentucky to fund SEMP.

2018 ENVIRONMENTAL COMPLIANCE PLAN AND ENVIRONMENTAL SURCHARGE

¹⁸⁷ Duke Kentucky's Post-Hearing Brief at 119–120.

As part of this proceeding, Duke Kentucky filed an application, pursuant to KRS 278.183, for authority to establish and assess an environmental surcharge rider ("Rider ESM") and for approval of its environmental compliance plan ("2018 Plan").¹⁸⁶ KRS 278.183 provides that a utility shall be entitled to the current recovery of its costs of complying with the Federal Clean Air Act ("CAA") as amended and those federal, state, or local environmental requirements that apply to coal combustion wastes and by-products from facilities utilized for the production of energy from coal. Pursuant to KRS 278.183(2), a utility seeking to recover its environmental compliance costs through an environmental surcharge must first submit to the Commission a plan that addresses compliance with the applicable environmental requirements. The plan must also include the utility's testimony concerning a reasonable return on compliance-related capital expenditures and a tariff addition containing the terms and conditions of the proposed surcharge applied to individual rate classes. Within six months of submission, the Commission must conduct a hearing to:

(a) Consider and approve the compliance plan and rate surcharge if the plan and rate surcharge are found reasonable and cost-effective for compliance with the applicable environmental requirements;

(b) Establish a reasonable return on compliance-related capital expenditures; and

(c) Approve the application of the surcharge.

¹⁸⁸ Duke Kentucky's Application and witness testimony refers to the environmental compliance plan as the 2017 Plan. In prior compliance plan orders, the Commission has named the plan according to the year in which the order is issued. Accordingly, the Commission will refer to the subject environmental compliance plan as the 2018 Plan.

The 2018 Environmental Compliance Plan

As required by KRS 278.183, Duke Kentucky filed its 2018 Plan, consisting of five projects necessary to comply with the CAA or other environmental regulations applicable to coal combustion wastes and by-products. Duke Kentucky's 2018 Plan reflects environmental compliance costs at its only coal-fired generation facility, East Bend. The projects include:¹⁸⁹

- 1. Project EB020290 Lined Retention Basin West;
- 2. Project EB020745 Lined Retention Basin East;
- 3. Project EB020298 East Bend SW/PW Reroute;
- 4. ARO amortization for Pond Closure; and
- 5. Consumables (Reagents and emission allowances).

The 2018 Plan includes projects that were previously approved Case Nos. 2015-00187¹⁹⁰ and 2016-00398.¹⁹¹ At the time of the filing of this case, two projects at East Bend were in progress, with planned in-service dates after the test period in this proceeding.¹⁹²

¹⁹¹ Case No. 2016-00398, *Electronic Application of Duke Energy Kentucky, Inc. for a Certificate of Public Convenience and Necessity Authorizing the Company to Close the East Bend Generation Station Coal Ash Impoundment and for All Other Required Approvals and Relief (Ky. PSC June 6, 2017). Duke Kentucky received certificates of public convenience and necessity to close and repurpose its existing East Bend ash impoundment and construct new water redirection and wastewater treatment systems.*

¹⁹² Application at 17. Construction has begun for the process water system and pond repurposing projects.

¹⁸⁹ Application at 16.

¹⁹⁰ Case No. 2015-00187, Application of Duke Energy Kentucky Inc. for an Order Approving the Establishment of a Regulatory Asset for the Liabilities Associated with Ash Pond Asset Retirement Obligations (Ky. PSC Dec. 15, 2015). The Commission approved Duke Kentucky's proposed accounting treatment to classify ARO costs for the East Bend Ash Pond, including amortization and depreciation expenses, closure costs, and carrying charges on the unamortized balance as regulatory assets for 2015 and subsequent years ("East Bend Coal Ash ARO regulatory asset").

Duke Kentucky states that the pollution control projects included in the 2018 Plan amendment are necessary for Duke Kentucky to comply with the CAA and other federal, state, and local regulations, which apply to coal combustion wastes and by-products from facilities utilized for the production of energy from coal.

Environmental Requirements

<u>Clean Air Interstate Rule and Cross-State Air Pollution Rule.</u> The Clean Air Interstate Rule ("CAIR") and Cross-State Air Pollution Rule ("CSAPR") are regional rules that set state-level annual standards for the emission of sulfur dioxide ("SO₂") and nitrogen oxides ("NO_x") from electric generating units.¹⁹³ Published in the Federal Register on October 26, 2016, the CSAPR Update reduced the number of ozone season NO_x allowances for East Bend effective January 1, 2017.¹⁹⁴ The East Bend selective catalytic reduction controls and allowances from Duke Kentucky's retired Miami Fort Unit 6 station are expected to comply with the CSAPR Update, but East Bend can also buy allowances on the market if necessary.¹⁹⁵

<u>CCR Rule.</u> Coal combustion residuals ("CCRs") include fly ash, bottom ash, and flue-gas desulfurization byproducts. The Disposal of Coal Combustion Residuals from Electric Utilities Final Rule ("CCR Rule") was published as a Subtitle D, nonhazardous waste rule on April 17, 2015. The CCR Rule includes dam safety requirements for ash ponds and new requirements for the handling, disposal, and beneficial reuse of CCRs

¹⁹³ Direct Testimony of Tammy Jett ("Jett Testimony") at 5.

¹⁹⁴ Id.

¹⁹⁵ Id. at 6.

except when reused in encapsulated applications, such as concrete and wallboard.¹⁹⁶ Together with the Steam Electric Effluent Limitation Guidelines Final Rule ("ELG Rule"), the CCR Rule requires dry handling of fly and bottom ash, increased use of landfills, closure of existing wet ash storage ponds, and alternative wastewater treatment systems.¹⁹⁷

<u>ELG Rule.</u> The ELG Rule was published on November 3, 2015, and sets requirements for wastewater streams, including fly ash and bottom ash wastewaters, at steam electric generating units.¹⁹⁸ Compliance activities include converting ash handling systems from wet to dry handling and clean closure of the existing East Bend Ash Pond. The ELG Rule compliance deadline was originally set for November 1, 2018, through December 31, 2023, but has been stayed as the EPA requests reconsideration. However, East Bend's compliance projects schedules are not impacted, as the ELG Rule was not the only driver.¹⁹⁹

RIDER ESM

Duke Kentucky is proposing a new tariff to implement Rider ESM. Through discovery, Duke Kentucky was made aware of inconsistencies in the Rider ESM tariff and proposed changes through rebuttal testimony to make the tariff consistent with the proposed mechanism.²⁰⁰ The Commission finds that the tariff as discussed and modified

¹⁹⁶ Jett Testimony at 11-12.

¹⁹⁷ Id. at 12.

¹⁹⁸ Id. at 12-13.

¹⁹⁹ *Id.*

²⁰⁰ Lawler Rebuttal at 12-13.

in this order should become effective for service rendered on and after the date of this order.

Costs Associated with the 2018 Plan. Duke Kentucky proposes to recover the costs associated with the amortization of the East Bend Coal Ash ARO regulatory asset, including projected costs, on a levelized basis over ten years.²⁰¹ The Attorney General recommends that the Commission authorize recovery of current ARO-related costs in the second month after they are incurred and of amortization of only previously incurred costs.²⁰² The Attorney General explains that KRS 278.183(2) allows recovery of environmental compliance costs "in the second month following the month in which they are incurred" and, furthermore, that recovery of ARO-related costs before they are actually incurred would result in increased current income tax expense and negative deferred income tax expense, which would increase E(m).²⁰³ The Commission concurs with the Attorney General that KRS 278.183 does not allow for recovery of projected or estimated costs. Therefore, the Commission finds that Duke Kentucky should amortize only the actual balance of the East Bend Coal Ash ARO regulatory asset over 10 years and recover additional actual costs associated with the settlement of the East Bend Coal Ash ARO in the second month after they are incurred.

Duke Kentucky has identified the environmental compliance costs for the 2018 Plan projects and these are the costs that Duke Kentucky proposes to recover through

²⁰¹ Lawler Testimony at 11–12.

²⁰² Kollen Testimony at 60.

²⁰³ Id. at 59-60.

its environmental surcharge. Duke Kentucky has removed these costs from the base period and excluded these costs from its forecasted period in this proceeding to ensure that no costs are recovered through its base rates and Rider ESM.²⁰⁴ The costs identified here by Duke Kentucky, as modified above, are eligible for surcharge recovery if they are shown to be reasonable and cost-effective for complying with the environmental requirements specified in KRS 278.183. The Commission finds that the costs identified for the 2018 Plan projects have been shown to be reasonable and cost-effective for environmental compliance. Thus, they are reasonable and should be approved for recovery through Duke Kentucky's environmental surcharge.

<u>Qualifying Costs.</u> The qualifying costs included in E(m) will reflect only the Commission-approved environmental projects from the 2018 Plan. Should Duke Kentucky desire to include other environmental projects in the future, it will have to apply for an amendment to its approved compliance plan.

<u>Rate of Return.</u> As specified in this order, Duke Kentucky is authorized to use a 9.725 percent return on equity that will be utilized in Rider ESM to determine the Weighted Average Cost of Capital ("WACC").

<u>Capitalization and Gross Revenue Conversion Factor.</u> As specified in this order and proposed by Duke Kentucky, Duke Kentucky should utilize a WACC of 6.830 percent and a gross revenue conversion factor ("GRCF") of 1.337304²⁰⁵ in determining the rate of return to be used in the monthly environmental surcharge filings. Duke Kentucky

²⁰⁴ Application at 17 and Lawler Testimony at 9.

²⁰⁵ Lawler Rebuttal, Attachment SEL-Rebuttal-2(b), page 3 of 11. Duke Kentucky's proposed GRCF has been updated for the 21 percent federal income tax rate.

proposes to update the WACC and GRCF when it files a base rate case. The WACC and GRCF should remain constant until such time as the Commission sets base rates in Duke Kentucky's next base rate case proceeding.

<u>Surcharge Mechanism and Calculation.</u> As proposed by Duke Kentucky, the environmental revenue requirement ("E(m)") is comprised of a return on the environmental compliance rate base, plus specified environmental compliance operating expenses, less proceeds from emission allowance sales, plus or minus prior period adjustments as determined by the Commission during six-month and two-year review cases, plus or minus surcharge over- or under-recovery adjustments.²⁰⁶ Environmental compliance rate base is defined as electric plant in service for specified environmental compliance projects adjusted for accumulated depreciation, accumulated deferred income taxes, accumulated investment tax credits, construction work in progress, and emission allowance inventory.

To calculate the monthly Rider ESM factor, Duke Kentucky proposes to divide the E(m) by the average revenues excluding Rider ESM revenue of the preceding 12-month period ("R(m)").

<u>Surcharge Allocation.</u> Duke Kentucky proposes to allocate the E(m) to residential²⁰⁷ and nonresidential²⁰⁸ rate schedules on the basis of the percentage of total

²⁰⁶ Lawler Rebuttal, Attachment SEL-Rebuttal 1(b).

²⁰⁷ Id. Residential includes the following rate schedules: Residential Service.

²⁰⁸ *Id.* Nonresidential includes the following rate schedules: Service at Secondary Distribution Voltage, Optional Rate for Electric Space Heating, Seasonal Sports Service, Service at Primary Distribution Voltage, Time-of-Day Rate for Service at Distribution Voltage, General Service Rate for Small Fixed Loads, Time-of-Day Rate for Service at Transmission Voltage, Street Lighting Service, Traffic Lighting Service, Unmetered Outdoor Lighting, Street Lighting Service for Nonstandard Units, Street Lighting Service – Customer Owned, Street Lighting Service – Overhead Equipment, and LED Outdoor Lighting Service.

R(m) for the 12-month period ending with the current expense month. Rider ESM will be implemented as a percentage of R(m) for the Residential rate schedule and as a percentage of R(m) excluding fuel revenues for Nonresidential rate schedules.²⁰⁹

Duke Kentucky proposes to utilize a jurisdictional allocation ratio of 100 percent to allocate E(m) to native retail customers because Duke Kentucky has no firm wholesale customers and PJM Manual 15 does not allow nonvariable production costs to be included in offer cost components.²¹⁰ The Commission finds this argument unpersuasive.²¹¹ The jurisdictional allocation ratio should be calculated as total jurisdictional retail revenues excluding Rider ESM revenues, divided by total company revenues excluding Rider ESM revenues, consistent with all other electric utilities that have an environmental surcharge mechanism pursuant to KRS 278.183.

<u>Monthly Reporting Forms.</u> Duke Kentucky provided proposed monthly reporting forms to be used in the monthly environmental reports.²¹² Duke Kentucky provided revised forms to make clerical adjustments and revisions necessary to align the forms with the revised Rider ESM tariff.²¹³ The Commission finds that Duke Kentucky's proposed monthly environmental surcharge reporting forms, as revised through testimony and this order, should be approved.

²¹⁰ Lawler Testimony, Attachment SEL-2, page 2 of 10, and Duke Kentucky's response to Commission Staff's Third Request for Information ("Staff's Third Request"), Item 3.

²¹¹ See Case No. 1994-00332, The Application of Louisville Gas and Electric Company for Approval of Compliance Plan and to Assess a Surcharge Pursuant to KRS 278.183 to Recover Costs of Compliance with Environmental Requirements for Coal Combustion Wastes and By-Products (Ky. PSC Apr. 6, 1995), Order Denying Rehearing at 1–2.

- ²¹² Lawler Testimony, Attachment SEL-2.
- ²¹³ Lawler Rebuttal, Attachments SEL-Rebttual-2(a) and SEL-Rebuttal-2(b).

²⁰⁹ Lawler Rebuttal at 12.

IT IS THEREFORE ORDERED that:

1. The rates and charges proposed by Duke Kentucky are denied.

2. The rates and charges, as set forth in Appendix C to this Order, are approved as fair, just, and reasonable rates for Duke Kentucky and these rates and charges are approved for service rendered on and after April 14, 2018.

3. Duke Kentucky's depreciation rates, as modified herein, are approved.

4. Duke Kentucky's proposal for a deferral mechanism for planned outage expense is approved.

5. Duke Kentucky's request to amortize the East Bend O&M regulatory asset over a ten-year period is approved.

 Duke Kentucky's carrying charges on the East Bend O&M regulatory asset shall be based on its cost of debt.

7. Duke Kentucky request to amortize the East Bend Ash Pond ARO over a ten-year period is approved.

8. Duke Kentucky proposal for a deferral mechanism for replacement power expense is approved.

9. Duke Kentucky, in conjunction with DEBS, shall bid the next MAVMS contract for the Midwest market that includes Kentucky, Indiana, and Ohio and for a smaller geographic area limited to Duke Kentucky's service territory. The smaller geographic area shall include Duke Kentucky's service territory by itself or by county or such other discrete area(s) within its service territory that it deems to be reasonable. Duke Kentucky shall also provide an update of this process in each annual VMP filings beginning with the 2019 VMP.

-79-

10. Duke Kentucky's request to implement a Fixed Bill Program is denied.

11. Duke Kentucky's request to cancel and withdraw Rate RTP - M is approved.

12. Duke Kentucky's request to revise Rate TT as discussed herein is approved.

13. Duke Kentucky's request to revise Rate DT as discussed herein is approved.

14. Duke Kentucky's request to revise Rate LED is approved as modified herein.

15. Duke Kentucky's request to cancel and withdraw Rate OL is approved.

16. Duke Kentucky's request to cancel and withdraw Rate NSP is approved.

17. Duke Kentucky's request to revise Rate LM as discussed herein is approved.

18. Duke Kentucky's request to revise Rate MDC as discussed herein is approved.

19. Duke Kentucky's request to revise Rider GSS as discussed herein is approved.

20. Duke Kentucky's request to revise Rider FAC is approved as directed herein.

21. Duke Kentucky's request to revise and modify Rider PSM is approved as directed herein. Duke Kentucky shall notify the Commission within seven days of incurring any capacity performance assessments from PJM.

-80-

22. Duke Kentucky's request to modify its reconnection fees is approved as modified herein.

23. Duke Kentucky's request to revise Rate CATV is approved as modified herein.

24. Duke Kentucky's request to revise its Cogen Tariffs is denied in part and granted in part. Duke Kentucky's request to include language in its Cogen Tariffs limiting capacity purchases from qualifying facilities is denied. Duke Kentucky's request to revise its capacity rate is approved as modified herein. All other proposed revisions to the Cogen Tariffs are approved.

25. Duke Kentucky's request to implement Rider DCI is denied.

26. Duke Kentucky's request for a CPCN to implement the Targeted Underground program is denied.

27. Duke Kentucky's request to make revisions to Rate UDP – R and Rate UDP
 – G related to the Targeted Underground program is denied.

28. Duke Kentucky's request to revise Rate RTP as discussed herein is approved.

29. Duke Kentucky's request to implement Rider FTR is denied.

30. Duke Kentucky's 2018 Environmental Compliance Plan is approved.

31. Duke Kentucky shall file its Budget Payment Plan tariff in compliance with 807 KAR 5:006, Section 14(2)(a)(3).

32. Duke Kentucky shall provide to each of its customers, including gas only customers, the entire content of its bills as provided in its tariff.

-81-

33. Duke Kentucky shall ensure that all of its tariff pages comply with 807 KAR 5:006, Section 3(4) when filing its compliance tariff reflecting the rates, rules, and terms of service approved herein.

34. Duke Kentucky shall reopen Rate – SP to allow any sports field to receive service under this rate schedule. Duke Kentucky shall be authorized, for accounting purposes only, to defer the difference between what it would have billed the sports field customer under its current rate and what it will bill under Rate SP as a regulatory asset.

35. Duke Kentucky's Rider ESM tariff, as described in this order, is approved for service rendered on and after the date of this order.

36. The Rider ESM reporting formats described in this order shall be used for the monthly environmental surcharge filings.

37. Within 20 days of the date of this Order, Duke Kentucky shall file with the Commission, using the Commission's electronic Tariff Filing System, new tariff sheets setting forth the rates, charges, and modifications approved or as required herein and reflecting their effective date and that they were authorized by this Order.

38. This case is closed and removed from the Commission's docket.

Case No. 2017-00321

By the Commission

EN	TEF	RED
APR	13	2018
KENTU		PUBLIC MMISSION

ATTEST:

<u>Hwen R. Purso</u> Executive Director

Case No. 2017-00321

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2017-00321 DATED APR 1 3 2018

Adjustments	Amounts
Adjust Revenue from Base Period to Test Period	(\$5,133,384)
Adjust Fuel & Purchased Power	(\$1,284,619)
Adjust Other Production Expense	\$12,650,083
Adjust Transmission Expense	\$919,747
Adjust Regional Market Expense	\$79,447
Adjust Distribution Expense	(\$43,555)
Adjust Customer Account Expense	\$671,968
Adjust Customer Service and Information Expense	\$183,121
Adjust Sales Expense	(\$151,501)
Adjust A &G Expense	(\$1,497,124)
Adjust Other Operating Expense	\$2,680,605
Adjust Other Tax Expense	\$2,105,609
Amortization of Deferred Asset	\$463,931
Rate Case Expense	\$120,538
Eliminate ESM Expense from Base Rates	(\$12,398,573)
nterest Expense Adjustment (Net)	(\$107,901)
Eliminate Non-Native Revenue and Expense (Net)	(\$1,823,636)
Amortization of Deferred Depreciation	\$490,618
DSM Elimination (Net)	(\$225,378)
Eliminate Miscellaneous Expense	(\$539,892)
Eliminate Unbilled Revenue	\$3,258,473
Eliminate Merger CTA Expense	(\$237,780)
Annualize PJM Charges and Credits	\$774,947
Annualize East Bend Maintenance	\$4,777,143
Amortization of Deferred Expenses	\$6,247,623
Adjust Uncollectible Expense	(\$1,418,703)
Annualize RTEP Expense	\$1,979,833
Adjust Revenue to Reconcile Schedule M with Budget	\$4,801,375

APPENDIX B

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2017-00321 DATED APR 1 3 2018

DUKE FILED										
	Du	ke Energy KY								
		Electric			Component	Weigted Avg	Grossed		Revenue	
	C	apitalization	Adjustment	Capital Ratio	Costs	cost	Up Cost	F	Requirment	
Stort Term Debt	\$	73,522,733		10.428%	3.083%	0.321%	0.321%	\$	2,266,706	
Long Term Debt	\$	286,807,753		40.679%	4.243%	1.726%	1.726%	\$	12,169,253	
Common Equity	\$	344,720,654		48.893%	10.30%	5.036%	8.208%	\$	57,868,571	
	\$	705,051,140		100%		7.083%	10.26%	\$	72,304,530	

TAX IMPACT

	Du	ke Energy KY										lr	ncremmental
		Electric			Adjusted		Component	Weigted Avg	Grossed		Revenue		revenue
	C	apitalization	Adjustment	C	apitalization	Capital Ratio	Costs	cost	Up Cost		Requirment	t	equirement
Stort Term Debt	\$	73,522,733		\$	73,522,733	10.428%	3.083%	0.321%	0.321%	\$	2,266,706	\$	-
Long Term Debt	\$	286,807,753		\$	286,807,753	40.679%	4.243%	1.726%	1.726%	5	12, 169, 253	\$	* .
Common Equity	5	344,720,654		S	344,720,654	48.893%	10.300%	5.036%	6.753%	\$	47,613,375	\$	(10,255,196)
	S	705,051,140		\$	705,051,140	100%		7.083%	8.800%	\$	62,049,334	\$	(10,255,196)
						100 000%							

ST DEBT IMPACT

	Du	ke Energy KY											In	cremmental
		Electric				Adjusted		Component	Weigted Avg	Grossed		Revenue		revenue
	C	apitalization	A	djustment	¢	apitalization	Capital Ratio	Costs	cost	Up Cost	F	Requirment	re	equirement
Stort Term Debt	\$	73,522,733	\$	(5,125,578)	\$	68, 397, 155	9.772%	3.083%	0.301%	0.301%	\$	2,108,684	\$	(158,022)
Long Term Debt	5	286,807,753			5	286,807,753	40.977%	4.243%	1.739%	1.739%	\$	12, 169, 253	\$	
Common Equity	\$	344;720,654			\$	344,720,654	49.251%	10.300%	5.073%	6.803%	\$	47,613,375	5	-
	\$	705,051,140	\$	(5,125,578)	\$	699,925,562	100%		7.113%	8.843%	S	61,891,312	5	(158,022)
							100.000%							

EAST BEND O&M REG ASSET

	DI	uke Energy KY									۱r	ncremmental
		Electric			Adjusted		Component	Weigted Avg	Grossed	Revenue		revenue
	C	apitalization	Adjustment	¢	apitalization	Capital Ratio	Costs	cost	Up Cost	Requirment	r	equirement
Stort Term Debt	s	68,397,155	\$ (3,570,734)	\$	64,826,421	9.772%	3.083%	0.301%	0.301%	\$ 1,998,599	\$	(110,086)
Long Term Debt	\$	286,807,753	\$ (14,973,186)	5	271,834,567	40.977%	4.243%	1.739%	1.739%	\$ 11,533,941	\$	(635,312)
Common Equity	\$	344,720,654	\$ (17,996,544)	\$	326,724,110	49.251%	10.300%	5.073%	6.803%	\$ 45, 127, 663	\$	(2,485,712)
	\$	699,925,562	\$ (36,540,465)	\$	663, 385, 097	100%		7.113%	8.843%	\$ 58,660,202	5	(3,231,110)

hAR	80												
Du	ke Energy KY											ir	ncremmental
	Electric				Adjusted		Component	Weigted Avg	Grossed		Revenue		revenue
C.	apitalization	A	djustment	C	apitalization	Capital Ratio	Costs	cost	Up Cost		Requirment	t	equirement
\$	64,826,421	\$	(1,808,733)	\$	63,017,687	9.772%	3.083%	0.301%	0.301%	\$	1,942,835	\$	(55,763)
\$	271,834,567	\$	(7,584,575)	\$	264,249,992	40.977%	4.243%	1.739%	1.739%	\$	11,212,127	\$	(321,814)
\$	326,724,110	\$	(9,116,038)	s	317,608,072	49.251%	10.300%	5.073%	6.803%	\$	43,868,541	5	(1,259,122)
\$	663,385,097	\$	(18,509,346)	\$	644,875,751	100%		7.113%	8.843%	\$	57,023,504	\$	(1,636,699)
	Du C S S	Duke Energy KY Electric Capitalization \$ 64,826,421 \$ 271,834,567 \$ 326,724,110	Electric Capitalization A \$ 64,826,421 \$ \$ 271,834,567 \$ \$ 326,724,110 \$	Duke Energy KY Electric Capitalization Adjustment \$ 64,826,421 \$ (1,808,733) \$ 271,834,567 \$ (7,584,575) \$ 326,724,110 \$ (9,116,038)	Duke Energy KY Electric Capitalization Adjustment C \$ 64,826,421 \$ (1,808,733) \$ \$ 271,834,567 \$ (7,584,575) \$ \$ 326,724,110 \$ (9,116,038) \$	Duke Energy KY Electric Adjusted Capitalization Adjustment Capitalization \$ 64,826,421 \$ (1,808,733) \$ 63,017,687 \$ 271,834,567 \$ (7,584,575) \$ 264,249,992 \$ 326,724,110 \$ (9,116,038) \$ 317,608,072	Duke Energy KY Electric Adjusted Capitalization Adjustment Capitalization Capitalization \$ 64,826,421 \$ (1,808,733) \$ 63,017,687 9.772% \$ 271,834,567 \$ (7,584,575) \$ 264,249,992 40.977% \$ 326,724,110 \$ (9,116,038) \$ 317,608,072 49.251%	Duke Energy KY Component Electric Adjusted Component Capitalization Adjustment Capitalization Capitalization Costs \$ 64,826,421 \$ (1,808,733) \$ 63,017,687 9.772% 3.083% \$ 271,834,567 \$ (7,584,575) \$ 264,249,992 40.977% 4.243% \$ 326,724,110 \$ (9,116,038) \$ 317,608,072 49.251% 10.300%	Duke Energy KY Adjusted Component Weigted Avg Capitalization Adjustment Capitalization Capitalization Costs cost \$ 64,826,421 \$ (1,808,733) \$ 63,017,687 9.772% 3.083% 0.301% \$ 271,834,567 \$ (7,584,575) \$ 264,249,992 40.977% 4.243% 1.739% \$ 326,724,110 \$ (9,116,038) \$ 317,608,072 49.251% 10.300% 5.073%	Duke Energy KY Adjusted Component Weigted Avg Grossed Capitalization Adjustment Capitalization Capitalization Costs cost Up Cost \$ 64,826,421 \$ (1,808,733) \$ 63,017,687 9.772% 3.083% 0.301% 0.301% \$ 271,834,567 \$ (7,584,575) \$ 264,249,992 40.977% 4.243% 1.739% 1.739% \$ 326,724,110 \$ (9,116,038) \$ 317,608,072 49.251% 10.300% 5.073% 6.803%	Duke Energy KY Adjusted Component Weigted Avg Grossed Capitalization Adjustment Capitalization Capitalization Costs cost Up Cost \$ 64,826,421 \$ (1,808,733) \$ 63,017,687 9.772% 3.083% 0.301% 0.301% \$ \$ 271,834,567 \$ (7,584,575) \$ 264,249,992 40.977% 4.243% 1.739% 1.739% \$ \$ 326,724,110 \$ (9,116,038) \$ 317,608,072 49.251% 10.300% 5.073% 6.803% \$	Duke Energy KY Electric Adjusted Component Weigted Avg Grossed Revenue Capitalization Adjustment Capitalization Capitalization Costs cost Up Cost Requirment \$ 64,826,421 \$ (1,808,733) \$ 63,017,687 9.772% 3.083% 0.301% 0.301% \$ 1,942,835 \$ 271,834,567 \$ (7,584,575) \$ 264,249,992 40.977% 4.243% 1.739% 1.739% \$ 11,212,127 \$ 326,724,110 \$ (9,116,038) \$ 317,608,072 49.251% 10.300% 5.073% 6.803% \$ 43,868,541	Duke Energy KY Electric Adjusted Component Weigted Avg Grossed Revenue Capitalization Adjustment Capitalization Capitalization Costs cost Up Cost Requirment r \$ 64,826,421 \$ (1,808,733) \$ 63,017,687 9.772% 3.083% 0.301% 0.301% \$ 1,942,835 \$ \$ 271,834,567 \$ (7,584,575) \$ 264,249,992 40.977% 4.243% 1.739% 1.739% \$ 11,212,127 \$ \$ 326,724,110 \$ (9,116,038) \$ 317,608,072 49.251% 10.300% 5.073% 6.803% \$ 43,868,541 \$

Carbon Management Reg Asset

	Du	ke Energy KY Electric				Adjusted		Component	Weigted Avg	Grossed	Revenue	incremmental revenue
	С	apitalization	Ad	justment	С	apitalization	Capital Ratio	Component Costs	cost	Up Cost	Requirment	requirement
Stort Term Debt	\$	63,017,687	\$	19,544	\$	63,037,231	9.772%	3.083%	0.301%	0.301%	\$ 1,943,438	\$ 603
Long Term Debt	\$	264,249,992	\$	81,954	5	264,331,946	40.977%	4.243%	1.739%	1.739%	\$ 11,215,604	\$ 3,477
Common Equity	\$	317,608,072	\$	98,502	\$	317,706,574	49.251%	10.300%	5.073%	6.803%	\$ 43,882,147	\$ 13,605
	\$	644,875,751	\$	200,000	\$	645,075,751	100%		7.113%	8.843%	\$ 57,041,189	\$ 17,685

	Du	ike Energy KY											b	ncremmental
		Electric				Adjusted		Component	Weigted Avg	Grossed		Revenue		revenue
	C	apitalization	A	djustment	C	apitalization	Capital Ratio	Costs	cost	Up Cost		Requirment		requirement
Stort Term Debt	\$	63,037,231	\$	267,098	\$	63,304,329	9.772%	3.083%	0.301%	0.301%	\$	1,951,672	\$	8,235
Long Term Debt	\$	264,331,946	\$	1,120,024	\$	265,451,970	40.977%	4.243%	1.739%	1.739%	\$	11,263,127	S	47,523
Common Equity	\$	317,706,574	\$	1,346,177	\$	319,052,751	49.251%	10.300%	5.073%	6.803%	\$	44,068,083	s	185,936
	\$	645,075,751	\$	2,733,299	\$	647,809,050	100%		7.113%	8.843%	\$		\$	241,693
ROE														
	Du	ke Energy KY											Ir	ncremmental
		Electric				Adjusted		Component	Weigted Avg	Grossed		Revenue		revenue
	C	apitalization	A	djustment	C	apitalization	Capital Ratio	Costs	cost	Up Cost		Requirment	r	equirement
Stort Term Debt	5	63,304,329			\$	63,304,329	9.772%	3.083%	0.301%	0.30%		1,951,672	s	-
Long Term Debt	\$	265,451,970			\$	265,451,970	40.977%	4.243%	1.739%	1.74%	5	11,263,127	s	
Common Equity	\$	319,052,751			\$	319,052,751	49.251%	9.725%	4.790%	6.42%	1	41,607,971	5	(2,460,111)
	-	C +2 000 000					1.000			1			Š.,	(2, 100, 111)

100%

6.830%

8.46% \$

54,822,771 \$

(2,460,111)

\$ 647,809,050

ASL Methodology

\$ 647,809,050

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

APPENDIX C

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2017-00321 DATED APR 1 3 2018

The following rates and charges are prescribed for the customers in the area served by Duke Energy Kentucky, Inc. All other rates and charges not specifically mentioned herein shall remain the same as those in effect under the authority of the Commission prior to the effective date of this Order.

RATE RS RESIDENTIAL SERVICE

Customer Charge per month Energy Charge per kWh: All kWh per month \$ 11.00

\$ 0.071520

RATE DS

SERVICE AT SECONDARY DISTRIBUTION VOLTAGE

Customer Charge per month:		ť
Single Phase Service	\$ 17.14	
Three Phase Service	\$ 34.28	
Demand Charge per kW:		
First 15 kW	\$.00	
Additional kW	\$ 8.25	
Energy Charge per kWh:		
First 6,000 kWh	\$ 0.080	075
Next 300 kWh/kW	\$ 0.049	155
Additional kWh	\$ 0.040	254

The maximum monthly rate, excluding the customer charge, and all applicable riders, shall now exceed \$0.236547 per kWh

For customers receiving service under the provisions of former Rate C, Optional Rate for Churches, as of June 25, 1981, the maximum monthly rate per kWh shall not exceed \$0.145219 per kWh

RATE DT TIME-OF-DAY RATE FOR SERVICE AT DISTRIBUTION VOLTAGE

Customer Charge per month:		
Single Phase	\$	63.50
Three Phase	\$	127.00
Primary Voltage Service	\$	138.00
Demand Charge per kW:		
Summer on-peak	\$	13.78
Winter on-peak	\$	13.04
Off-peak	\$	1.24
Energy Charge per kWh:		
Summer on-peak	\$	0.043370
Winter on-peak	\$ \$ \$	0.041403
Off-peak	\$	0.035516
Primary Service Discount:		
Metering of on-peak billing demand per kW:		
First 1,000 kW	\$	(0.70)
Additional kW	\$	(0.54)
RATE EH		-
OPTIONAL RATE FOR ELECTRIC SPACE HE	AIIN	<u>2</u>
Winter Period		
Customer Charge per month:		
Single Phase Service	¢	17.14
Three Phase Service	\$ \$	34.28
Primary Voltage Service	¢ ¢	117.00
Thinkiy Voltage bervice	Ψ	117.00
Energy Charge per kWh:		
All kWh per month	\$	0.062202
	Ψ.	0.002202
RATE SP		
SEASONAL SPORTS SERVICE		
Customer Charge per month:	\$	17.14
Energy Charge per kWh:		
All kWh per month	\$	0.096130

Appendix C - Page 2 of 13

Case No. 2017-00321

RATE GS-FL

OPTIONAL UNMETERED GENERAL SERVICE RATE FOR SMALL FIXED LOADS

Base Rate per kWh:	
Load range of 540 to 720 hours per month	\$ 0.082708
Loads less than 540 hours per month	\$ 0.095240
Minimum per Fixed Load Location per month:	\$ 2.98

RATE DP SERVICE AT PRIMARY DISTRIBUTION VOLTAGE

Customer Charge per month: Primary Voltage Service (12.5 or 34.5 kV)	\$ 117.00
Demand Charge per kW:	
All kW	\$ 7.92
Energy Charge per kWh:	
First 300 kWh/kW	\$ 0.051092
Additional kWh	\$ 0.043219

The maximum monthly rate, excluding the customer charge, electric fuel component charges, and DSM charge shall not exceed \$0.241312 per kWh.

RATE TT TIME-OF-DAY RATE FOR SERVICE AT TRANSMISSION VOLTAGE

Customer Charge per month:	\$ 500.00
Demand Charge per kW:	
Summer on-peak	\$ 8.07
Winter on-peak	\$ 6.62
Off-peak	\$ 1.22
Energy Charge per kWh:	
Summer on-peak	\$ 0.048997
Winter on-peak	\$ 0.046775
Off-peak	\$ 0.040124

RIDER GSS GENERATION SUPPORT SERVICE

Administrative Charge:	\$ 50.00
Monthly Transmission and Distribution Reservation Charge:	
Rate DS – Secondary Distribution Service	\$ 0.047126
Rate DT – Distribution Service	\$ 0.058517
Rate DP – Primary Distribution Service	\$ 0.059794
Rate TT – Transmission Service	\$ 0.026391

Appendix C – Page 3 of 13

Case No. 2017-00321

RATE SL STREET LIGHTING SERVICE

Base Rate per Unit per Month:

OVERHEAD DISTRIBUTION AREA			
Standard Fixture (Cobra Head)			
Mercury Vapor:			
7,000 Lumen	\$	7.27	
7,000 Lumen (Open Refractor)	\$	6.07	
10,000 Lumen	\$ \$ \$ \$	8.39	
21,000 Lumen	\$	11.23	
Metal Halide:			
14,000 Lumen	\$	7.27	
20,500 Lumen	\$ \$ \$	8.39	
36,000 Lumen	\$	11.23	
Sodium Vapor:			
9,500 Lumen	\$	8.04	
9,500 Lumen (Open Refractor)		6.04	
16,000 Lumen	\$ \$ \$ \$ \$	8.77	
22,000 Lumen	\$	11.37	
27,500 Lumen	\$	11.37	
50,000 Lumen	\$	15.28	
Decorative Fixtures			
Sodium Vapor:			
9,500 Lumen (Rectilinear)	\$	10.00	
22,000 Lumen (Rectilinear)	\$	12.36	
50,000 Lumen (Rectilinear)	\$ \$	16.35	
50,000 Lumen (Setback)	\$	24.31	

Spans of Secondary Wiring: For each increment of 50 feet of secondary wiring beyond the first 150 feet from the pole, the following price per month shall be added to the price per month per street lighting unit: \$ 0.53

UNDERGROUND DISTRIBUTION AREAStandard Fixture (Cobra Head)
Mercury Vapor:7,000 Lumen7,000 Lumen (Open Refractor)10,000 Lumen\$ 8.5421,000 Lumen\$ 11.50

Appendix C – Page 4 of 13

Metal Halide:		
14,000 Lumen	\$	7.40
20,500 Lumen	\$ \$ \$	8.54
36,000 Lumen	\$	11.50
Sodium Vapor:		
9,500 Lumen	\$	8.04
9,500 Lumen (Open Refractor)	\$	6.12
16,000 Lumen	\$	8.74
22,000 Lumen	\$	11.37
27,500 Lumen	\$	11.37
50,000 Lumen	\$ \$ \$ \$ \$ \$	15.28
Decorative Fixture:		
Mercury Vapor:		
7,000 Lumen (Town & Country)	\$	7.65
7,000 Lumen (Holophane)	\$ \$ \$ \$ \$ \$	9.61
7,000 Lumen (Gas Replica)	\$	21.96
7,000 Lumen (Granville)	\$	7.73
7,000 Lumen (Aspen)	\$	13.91
Metal Halide:		
14,000 Lumen (Traditionaire)	\$	7.64
14,000 Lumen (Granville Acorn)	\$ \$ \$	13.91
14,000/14,500 Lumen (Gas Replica) ²¹⁴	\$	22.04
Sodium Vapor:		
9,500 Lumen (Town & Country)	\$	11.17
9,500 Lumen (Holophane)	\$	12.10
9,500 Lumen (Rectilinear)	\$	9.02
9,500 Lumen (Gas Replica)	\$	22.75
9,500 Lumen (Aspen)	\$	14.09
9,500 Lumen (Traditionaire)	••••••••••••	11.17
9,500 Lumen (Granville Acorn)	\$	14.09
22,000 Lumen (Rectilinear)	\$	12.42
50,000 Lumen (Rectilinear)	\$	16.41
50,000 Lumen (Setback)	\$	24.31

²¹⁴ Duke Kentucky's billing analysis lists both a 14,000 and 14,500 Lumen Gas Replica light at the same rate.

Appendix C – Page 5 of 13 Case No. 2017-00321

	E CHARCE	0		
	E CHARGE			
F	ole Descrip	tion:		
	Wood:			
		17 Foot (Wood Laminated) (a)	\$	4.50
		30 Foot	\$	4.44
		35 Foot	\$	4.50
		40 Foot	\$	5.39
	Aluminum	•		
	, adminut	12 Foot (Decorative)	\$	12.23
		28 Foot		7.09
		28 Foot (Heavy Duty)	\$ \$ \$	7.16
			9	
		30 Foot (Anchor Base)	\$	14.16
	Fiberglass	5:		
		17 Foot	\$	4.50
		12 Foot (Decorative)	\$	13.15
		30 Foot (Bronze)	\$	8.56
		35 Foot (Bronze)	\$	8.79
	Steel:			
	Oleen.	27 Foot (11 gauge)	\$	11.56
		27 Foot (3 gauge)	9 \$	17.43
		, , , , ,		

Spans of Secondary Wiring: For each increment of 25 feet of secondary wiring beyond the first 25 feet from the pole, the following price per month shall be added to the price per month per street lighting unit: \$ 0.77

RATE TL TRAFFIC LIGHTING SERVICE

Base Rate per kWh:	
Energy only	\$ 0.038903
Energy from separately metered source w/maintenance	\$ 0.021543
Energy w/maintenance	\$ 0.060446

RATE UOLS

UNMETERED OUTDOOR LIGHTING ELECTRIC SERVICE

Base Rate per kWh: All kWh per month

P(

\$ 0.038305

Appendix C – Page 6 of 13

RATE LED LED OUTDOOR LIGHTING ELECTRIC SERVICE

Base Rate per kWh: All kWh per month

\$ 0.038305

Monthly Maintenance and Fixture Charge Per Unit Per Month Fixtures:

/	aures.		Eixturo	Ma	intenanc	0
	FOW Standard LED Black	¢	Fixture 4.96	\$	4.24	0
	50W Standard LED-Black 70W Standard LED-Black	\$	4.90	9 \$	4.24	
	110W Standard LED-Black	\$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$ \$\$	5.62	9 \$	4.24	
	150W Standard LED-Black	9	7.44	¢	4.24	
		9	8.43	\$ \$	5.17	
	220W Standard LED-Black	¢	10.38	9	5.17	
	280 W Standard LED-Black	Ð	14.47	\$ \$ \$	4.24	
	50W Deluxe Acorn LED-Black	Φ	13.04	¢	4.24	
	50W Acorn LED-Black	Ф ¢		Ф Ф	4.24	
	50W Mini Bell LED-Black	Ð	12.30	\$		
	70W Bell LED-Black	Ð	15.66	\$ \$	4.24	
	50W Traditional LED-Black	Ð	9.45	Ð	4.24	
	50W Open Traditional LED-Black	9	9.45	9	4.24	
	50W Enterprise LED-Black	9	12.70	9	4.24	
	70W LED Open Deluxe Acorn	\$	14.11	P	4.24	
	150W LED Teardrop	\$	18.95	\$ \$ \$ \$	4.24	
	50W LED Teardrop Pedestrian	\$	15.37		4.24	
	220W LED Shoebox	\$	13.13	\$	5.17	
	LED 50W 4521 Lumens Standard	•	4.00	^	1.01	
	LED Black Type III 4000K	\$	4.96	\$	4.24	
	LED 70W 6261 Lumens Standard	•		•		
	LED Black Type III 4000K	\$	4.95	\$	4.24	
	LED 110W 9336 Lumens Standard					
	LED Black Type III 4000K	\$	5.62	\$	4.24	
	LED 150W 12642 Lumens Standard					
	LED Black Type III 4000K	\$	7.44	\$	4.24	
	LED 150W 13156 Lumens Standard					
	LED Type IV Black 4000K	\$	7.44	\$	4.24	
	LED 220W 18642 Lumens Standard					
	LED Black Type III 4000K	\$	8.43	\$	5.17	
	LED 280W 24191 Lumens Standard					
	LED Black Type III 4000K	\$	10.38	\$	5.17	
	LED 50W Deluxe Acorn Black Type III					
	4000K	\$	14.47	\$	4.24	
	LED 70W Open Deluxe Acorn Black					
	Type III 4000K	\$	14.11	\$	4.24	
	LED 50W Acorn Black Type III 4000K	\$	13.04	\$	4.24	
	LED 50W Mini Bell LED Black Type III					

Appendix C – Page 7 of 13

4000K Midwest	\$	12.30	\$	4.24	
LED 70W 5508 Lumens Sanibell Black					
Type III 4000K	\$	15.66	\$	4.24	
LED 50W Traditional Black Type III	1.25				
4000K	\$	9.45	\$	4.24	
LED 50W Open Traditional Black					
Type III 4000K	\$	9.45	\$	4.24	
LED 50W Enterprise Black Type III					
4000K	\$	12.70	\$	4.24	
LED 150W Large Teardrop Black					
Type III 4000K	\$	18.95	\$	4.24	
LED 50W Teardrop Pedestrian Black					
Type III 4000K	\$	15.37	\$	4.24	
LED 220W Shoebox Black Type IV					
4000K	\$	13.13	\$	5.17	
150W Sanibel	\$	15.66	\$	4.24	
420W LED Shoebox	\$	19.58	\$	5.17	
50W Neighborhood	\$	4.04	\$	4.24	
50W Neighborhood with Lens	\$	4.21	\$	4.24	
Monthly Pole Charges Per Unit Per Month:					
12' C-Post Top Anchor Base-Black			\$	9.39	
25' C-Davit Bracket-Anchor Base-Black			\$	24.69	
25' C-Boston Harbor Bracket-Anchor Ba	se-Bla	ack	\$	24.96	
12' E-AL – Anchor Base-Black			\$	9.38	
35' AL-Side Mounted-Direct Buried Pole			\$	15.89	
30' AL-Side Mounted-Anchor Base			\$	12.24	
35' AL-Side Mounted-Anchor Base			\$	11.91	
40' AL-Side Mounted-Anchor Base			\$	14.73	
30' Class 7 Wood Pole			\$	5.82	
35' Class 5 Wood Pole			\$	6.33	
40' Class 4 Wood Pole			\$	9.53	
45' Class 4 Wood Pole			\$	9.88	
20' Galleria Anchor Based Pole			\$	8.40	
30' Galleria Anchor Based Pole			\$	9.93	
35' Galleria Anchor Based Pole			\$	28.56	
MW-Light Pole-12' MH-Style A-Aluminur	m-And	hor Base-	•		
Top Tenon-Black		nor Succ	\$	5.69	
MW-Light Pole-Post Top-12' MH-Style A	-Alum	n-Direct	Ť	0.00	
Buried-Top Tenon-Black	. / uan	- Diroot	\$	4.87	
Light Pole-15' MH-Style A-Aluminum-An	chor I	Base-	Ŷ	1.01	
Top Tenon-Black		5400	\$	5.85	
Light Pole-15' MH-Style A-Aluminum-Dir	rect B	uried-	Ŷ	0.00	
Top Tenon-Black	001 0	uniou	\$	5.07	
Light Pole-20' MH-Style A-Aluminum-An	chor I	Base-	Ŷ	0.01	
Top Tenon-Black		-400	\$	6.14	
Appendix C – Pa	age 8	of 13	Cas	e No. 201	7-00321

Light Pole-20' MH-Style A-Aluminum-Direct Buried-	•	0.44	
Top Tenon-Black Light Pole-25' MH-Style A-Aluminum-Anchor Base-	\$	9.41	
Top Tenon-Black	\$	7.27	
Light Pole-25' MH-Style A-Aluminum-Direct Buried- Top Tenon-Black	\$	10.49	
Light Pole-30' MH-Style A-Aluminum-Anchor Base- Top Tenon-Black	\$	8.60	
Light Pole-30' MH-Style A-Aluminum-Direct Buried-			
Top Tenon-Black Light Pole-35' MH-Style A-Aluminum-Anchor Base-	\$	11.67	
Top Tenon-Black	\$	9.93	
Light Pole-35' MH-Style A-Aluminum-Direct Buried-	¢	10.01	
Top Tenon-Black	\$	12.61	
MW-Light Pole-12' MH- Style B Aluminum Anchor Base- Top Tenon Black Pri	\$	6.93	
MW-Light Pole-12' MH-Style C-Post Top-Alum-Anchor	φ	0.95	
Base-TT-Black Pri	\$	9.39	
MW-LT Pole-16' MH-Style C-Davit Bracket-Alum-Anchor	Ŷ	0.00	
Base-TT-Black	\$	12.56	
MW-Light Pole-25' MH-Style C-Davit Bracket-Alum-Anchor			
Base-TT-Black Pri	\$	24.69	
MW-LT Pole-16' MH-Style C-Boston Harbor Bracket-AL-Al	3-		
TT-Black Pri	\$	10.07	
MW-LT Pole-25' MH-Style C-Boston Harbor Bracket-AL-A			
TT-Black Pri	\$	24.96	
MW-LT Pole 12 Ft MH Style D Alum Breakaway Anchor Base TT Black Pri	\$	9.29	
MW-Light Pole-12' MH-Style E-Alum-Anchor Base-Top	Φ	9.29	
Tenon-Black	\$	9.38	
MW-Light Pole-12' MH-Style F-Alum-Anchor Base-Top	Ψ	0.00	
Tenon-Black Pri	\$	10.06	
MW-15210-Galleria Anchor Base-20FT Bronze Steel-OLE	\$	8.40	
MW-15210-Galleria Anchor Base-30FT Bronze Steel-OLE	\$	9.93	
MW-15210-Galleria Anchor Base-35FT Bronze Steel-OLE	\$	28.56	
MW-15310-35FT MH Aluminum Direct Embedded Pole-OL		15.89	
MW-15320-30FT Mounting Height Aluminum Anchor Base			
Pole-OLE	\$	12.24	
MW-15320-35FT Mounting Height Aluminum Anchor Base		11.01	
Pole-OLE	\$	11.91	
MW-15320-40FT Mounting Height Aluminum Anchor Base Pole-OLE		14.73	
MW-POLE-30-7	\$ \$	5.82	
MW-POLE-35-5		6.33	
MW-POLE-40-4	\$ \$	9.53	
MW-POLE-45-4	\$	9.88	
Appendix Q Dess Q of 10	Cas		

Appendix C – Page 9 of 13

RATE NSU STREET LIGHTING SERVICE - NONSTANDARD UNITS

Rate per Unit per Month:

Company Owned

Boulevard Units Served Underground: 2,500 Lumen Incandescent - Series	\$ 9.42	
2,500 Lumen Incandescent - Multiple	\$ 7.32	
Holophane Decorative Served Underground:		
10,000 Lumen Mercury Vapor on Fiberglass Pole	\$ 17.16	
The cable span charge of \$0.77 per each increment of 25 feet of		

The cable span charge of \$0.77 per each increment of 25 feet of secondary wiring shall be added to the rate/unit charge for each increment of secondary wiring beyond the first 25 feet from the pole base.

Street Lighting Served Overhead:	
2,500 Lumen Incandescent	\$ 7.26
2,500 Lumen Mercury Vapor	\$ 6.87
21,000 Lumen Mercury Vapor	\$ 10.89
Customer Owned	
Steel Boulevard Units Served Underground:	
2,500 Lumen Incandescent - Series	\$ 5.56
2,500 Lumens Incandescent - Multiple	\$ 7.07
RATE SC STREET LIGHTING SERVICE – CUSTOMER	h
	2
Base Rate per Unit per Month:	
Standard Fixture (Cobra Head):	
Mercury Vapor:	
7,000 Lumen	\$ 4.28
10,000 Lumen	\$ 5.45
21,000 Lumen	\$ 7.56
Metal Halide:	
14,000 Lumen	\$ 4.28
20,500 Lumen	\$ 5.45
36,000 Lumen	\$ 7.56

Appendix C - Page 10 of 13

Sodium Vapor: 9,500 Lumen 16,000 Lumen 22,000 Lumen 27,500 Lumen 50,000 Lumen	\$\$ \$\$ \$\$ \$\$	5.15 5.74 6.31 6.31 8.54
Decorative Fixture:		
Mercury Vapor:		
7,000 Lumen (Holophane)	\$	5.44
7,000 Lumen (Town & Country)	\$	5.39
7,000 Lumen (Gas Replica)	\$	5.44
7,000 Lumen (Aspen)	\$	5.44
Metal Halide:		
14,000 Lumen (Traditionaire)	\$	5.39
14,000 Lumen (Granville Acorn)	\$ \$	5.44
14,000 Lumen (Gas Replica)	\$	5.44
Sodium Vonor		
Sodium Vapor: 9,500 Lumen (Town & Country)	¢	5.07
9,500 Lumen (Traditionaire)	\$	5.07
9,500 Lumen (Granville Acorn)	\$ \$ \$ \$	5.29
9,500 Lumen (Rectilinear)	÷ S	5.07
9,500 Lumen (Aspen)	ŝ	5.29
9,500 Lumen (Holophane)	\$	5.29
9,500 Lumen (Gas Replica)	\$	5.29
22,000 Lumen (Rectilinear)	\$ \$ \$	6.68
50,000 Lumen (Rectilinear)	\$	8.84
Pole Description: Wood:		
30 Foot	¢	4.44
35 Foot	\$ \$	4.44
40 Foot	\$	5.39
401001	Ψ	0.00
Customer Owned and Maintained Units per kWh	\$	0.038305
RATE SE		

STREET LIGHTING SERVICE – OVERHEAD EQUIVALENT

Base Rate per Unit per Month:			
Decorative Fixtures:			
Mercury Vapor:			
7,000 Lumen (Town & Country)	\$	7.45	
7,000 Lumen (Holophane)	\$	7.48	

Appendix C – Page 11 of 13 Case No. 2017-00321

	the second se		1000	
	7,000 Lumen (Gas Replica)	\$	7.48	
	7,000 Lumen (Aspen)	\$	7.48	
Meta	al Halide:			
	14,000 Lumen (Traditionaire)	\$	7.45	
	14,000 Lumen (Granville Acorn)	\$	7.48	
	14,000 Lumen (Gas Replica)	\$	7.48	
Sod	ium Vapor:			
	9,500 Lumen (Town & Country)	\$	8.12	
	9,500 Lumen (Holophane)	\$	8.23	
	9,500 Lumen (Rectilinear)	\$	8.12	
	9,500 Lumen (Gas Replica)	\$	8.22	
	9,500 Lumen (Aspen)	\$	8.22	
	9,500 Lumen (Traditionaire)	\$	8.12	
	9,500 Lumen (Granville Acorn)	\$	8.22	
	22,000 Lumen (Rectilinear)	\$	11.67	
	50,000 Lumen (Rectilinear)	\$	15.44	
	50,000 Lumen (Setback)	\$	15.44	
		· ·		

RATE DPA DISTRIBUTION POLE ATTACHMENTS

Annual rental per pole per foot:				
Two-User pole			\$ 5.92	
Three-User pole			\$ 4.95	

COGENERATION AND SMALL POWER PRODUCTION SALE AND PURCHASE TARIFF-100 kW OR LESS

Rates for Purchases from Qualifying Facilities	
Energy Purchase Rate per kWh	\$ 0.027645
Capacity Purchase Rate per kW-month	\$ 3.61

COGENERATION AND SMALL POWER PRODUCTION SALE AND PURCHASE TARIFF-GREATER THAN 100 kW

Rates for Purchases from Qualifying Facilities

The Energy Purchase Rate for all kWh delivered shall be the PJM Real-Time Locational Marginal Price for power at the DEK Aggregate price node, inclusive of the energy, congestion and losses charges, for each hour of the billing month. \$

Capacity Purchase Rate per kW-month

3.61

Appendix C – Page 12 of 13

SCHEDULE RTP REAL-TIME PRICING PROGRAM

Energy Delivery Charge (Credit) per kW per hour from CBL Secondary Service Primary Service Transmission Service	\$\$\$	0.009104 0.007850 0.003576
NON-RECURRING CHARGES		
Remote Reconnection	\$	3.45
Reconnection – Non-remote (Electric Only)	\$	75.00
Reconnection - Non-remote (Electric and Gas)	\$	88.00
Reconnection at pole (Electric Only)	\$	125.00
Reconnection at pole (Electric and Gas)	\$	150.00
Collection Charge	\$	50.00

RIDER LM LOAD MANAGEMENT RIDER

When a customer elects the off-peak provision, the monthly customer charge of the applicable Rate DS or DP will be increased by an additional monthly charge of \$5.00 for each installed time-of-use or interval data recorder meter.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

Appendix C – Page 13 of 13

*Adele Frisch Duke Energy Kentucky, Inc. 139 East Fourth Street Cincinnati, OH 45201

*L Allyson Honaker Goss Samford, PLLC 2365 Harrodsburg Road, Suite B325 Lexington, KENTUCKY 40504

*Amy B Spiller Associate General Counsel Duke Energy Kentucky, Inc. 139 East Fourth Street Cincinnati, OH 45201

*William H May, III Hurt, Deckard & May The Equus Building 127 West Main Street Lexington, KENTUCKY 40507

*David S Samford Goss Samford, PLLC 2365 Harrodsburg Road, Suite B325 Lexington, KENTUCKY 40504

*Dennis G Howard, II Howard Law PLLC 740 Emmett Creek Lane Lexington, KENTUCKY 40515

*William Don Wathern, Jr. Director Rates & Reg. Strategy Duke Energy Kentucky, Inc. 139 East Fourth Street Cincinnati, OH 45201 *Joan M Gates VP for Legal Affairs & General Counsel NKU Administrative Center, Room 824 Highland Heights, KENTUCKY 41099

*James P Henning President Duke Energy Kentucky, Inc. 139 East Fourth Street Cincinnati, OH 45201

*Jody Kyler Cohn Boehm, Kurtz & Lowry 36 East Seventh Street Suite 1510 Cincinnati, OHIO 45202

*Justin M. McNeil Office of the Attorney General Office of Rate 700 Capitol Avenue Suite 20 Frankfort, KENTUCKY 40601-8204

*Honorable Kurt J Boehm Attorney at Law Boehm, Kurtz & Lowry 36 East Seventh Street Suite 1510 Cincinnati, OHIO 45202

*Kent Chandler Assistant Attorney General Office of the Attorney General Office of Rate 700 Capitol Avenue Suite 20 Frankfort, KENTUCKY 40601-8204

*Duke Energy Kentucky, Inc. 139 East Fourth Street Cincinnati, OH 45202 *Duke Energy Kentucky, Inc. 139 East Fourth Street Cincinnati, OH 45202

*Larry Cook Assistant Attorney General Office of the Attorney General Office of Rate 700 Capitol Avenue Suite 20 Frankfort, KENTUCKY 40601-8204

*E. Minna Rolfes-Adkins Paralegal Duke Energy Kentucky, Inc. 139 East Fourth Street Cincinnati, OH 45201

*Honorable Michael L Kurtz Attorney at Law Boehm, Kurtz & Lowry 36 East Seventh Street Suite 1510 Cincinnati, OHIO 45202

*Honorable Matthew R Malone Attorney at Law Hurt, Deckard & May The Equus Building 127 West Main Street Lexington, KENTUCKY 40507

*Rebecca W Goodman Assistant Attorney General Office of the Attorney General Office of Rate 700 Capitol Avenue Suite 20 Frankfort, KENTUCKY 40601-8204

*Rocco O D'Ascenzo Duke Energy Kentucky, Inc. 139 East Fourth Street Cincinnati, OH 45201

AG Exhibit #4

COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

Kentucky Industrial Utility Customers, Inc.

Complainant

v.

Kentucky Power Company

Defendant

) Case No. 2018-00035

)

TESTIMONY OF

MATTHEW A. HORELED

ON BEHALF OF KENTUCKY POWER COMPANY

IN SUPPORT OF THE SETTLEMENT AGREEMENT

SETTLEMENT TESTIMONY OF MATTHEW A. HORELED ON BEHALF OF KENTUCKY POWER COMPANY BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

CASE NO. 2018-00035

TABLE OF CONTENTS

I.	Introduction	1
II.	The Proceedings	3
III.	The Settlement Agreement	5
IV.	The Terms of the Settlement Agreement	5
V.	Reasonableness of the Settlement Agreement	15

SETTLEMENT TESTIMONY OF MATTHEW A. HORELED ON BEHALF OF KENTUCKY POWER COMPANY BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

I. INTRODUCTION

1Q.PLEASE STATE YOUR NAME AND POSITION WITH KENTUCKY POWER2COMPANY.

A. My name is Matthew A. Horeled. My position is Director of Regulatory Services,
Kentucky Power Company. My business address is 855 Central Avenue, Suite 200,
Ashland, Kentucky 41101.

6 Q. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND 7 BUSINESS EXPERIENCE.

A: I received a Bachelor of Arts, Honors degree in History from Loyola University Chicago in May 2001, a Master of Business Administration degree with a concentration in Finance from Loyola University Chicago in August 2004, and a Juris Doctorate from Valparaiso University School of Law in May 2005.

I began my utility industry career with American Electric Power Service 12 Corporation in September 2007 as a Risk & Insurance Management Analyst with 13 responsibilities for managing numerous insurance programs. I transferred to the 14 Corporate Planning and Budgeting Department in April 2010 as a Financial Analyst with 15 16 emphasis on operating company forecasts. In that role, I prepared and reviewed shortand long-term forecasts for Kentucky Power and Indiana Michigan Power ("I&M") as 17 well as monthly analyses of budget to actual variances. In April 2014, I was promoted to 18 19 Financial Analyst Principal. In March 2015, I transferred to I&M as Regulatory Analysis

1 and Case Manager for I&M. In that role, I was responsible for the supervision. 2 preparation, and filing of rate and regulatory matters in Indiana and Michigan. In 3 February 2017, I transferred and was promoted to Director of Business Operations 4 Support for Kentucky Power with responsibility for all corporate budgeting, financial 5 management, and continuous improvement for the company. In April 2018, I assumed my current position as Director of Regulatory Services for Kentucky Power. I am 6 7 responsible for the supervision and direction of Kentucky Power's Regulatory Services Department, which has responsibility for all rate and regulatory matters. 8

9

10

О.

PROCEEDINGS?

A. Yes, I have submitted testimony before the Indiana Utility Regulatory Commission in
 Cause No. 38702-FAC72; Cause No. 38702-FAC73; Cause No. 38702-FAC74; Cause
 No. 43775 OSS-6; and Cause No. 44511-SPR1.

HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY IN ANY REGULATORY

Q. DID YOU PARTICIPATE IN THE NEGOTIATIONS WHICH LED TO THE SETTLEMENT AGREEMENT THAT IS BEING SUBMITTED FOR CONSIDERATION AND APPROVAL BY THE COMMISSION?

A. Yes. I participated in the April 10, 2018 informal conference at which settlement was
discussed and an agreement in principle with the complainant, Kentucky Industrial Utility
Customers, Inc., was reached. In addition, I have been involved through counsel in the
subsequent discussions regarding documentation of the settlement. The Settlement
Agreement is attached as <u>EXHIBIT MAH-S1</u>.

1

2

3

4

5

6

7

8

Q.

WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. My testimony summarizes the settlement process leading to the agreement. I explain and support the terms of the Settlement Agreement as well as demonstrate why the terms of the Settlement Agreement will produce fair, just, and reasonable rates in connection with the issues before the Commission in this case. In this regard, I discuss the importance of amortizing the Company's excess unprotected accumulated deferred income taxes ("ADIT") over an 18-year period. I also identify the settlement issues addressed by Company Witnesses Kelly and Vaughan in testimony filed today in this case.

II. <u>THE PROCEEDINGS</u>

9 Q. PLEASE DESCRIBE THE EVENTS LEADING TO THE SETTLEMENT 10 AGREEMENT.

A. President Trump signed the Tax Cut and Jobs Act ("Tax Act") on December 22, 2017.
The Tax Act reduced the maximum federal corporate income tax rate from 35 percent to
21 percent effective January 1, 2018. Among its effects on Kentucky Power Company
was to reduce the Company's current federal income tax expense. It also resulted in the
creation of excess ADIT.

On December 21, 2017, Kentucky Industrial Utility Customers, Inc. filed a complaint with the Commission against the four Kentucky investor-owned electric utilities. The complaint asked the Commission to reduce the rates of the four defendants to reflect the reduction of the utilities' current federal income tax expense and the amortization of any excess ADIT. In its January 18, 2018 order in the Company's base rate case, Case No. 2017-00179, the Commission reduced the Company's Commissionadjusted annual revenue requirement, and the rates based on that revenue requirement, to

1 reflect the reduction in the Company's current federal corporate income tax expense as a result of the Tax Act. The Commission reserved for what eventually became this case 2 any further reduction of the Company's revenue requirement (and rates) as a result of the 3 amortization of the excess ADIT resulting from the Tax Act. By orders entered January 4 25, 2018, the Commission severed the claims against the individual utilities. This case 5 was established to resolve KIUC's claims against Kentucky Power regarding the 6 7 amortization of the excess ADIT and resulting rate reduction flowing from the Tax Act. ARE THERE ANY INTERVENORS IN THIS CASE? 8 0. Yes. In addition to the Company and KIUC, the Attorney General is a party to this case. 9 Α. HAS DISCOVERY BEEN TAKEN IN THIS CASE? 10 Q. Yes. Data requests were served on Kentucky Power by Staff, KIUC, and the Attorney 11 A. 12 General. The Company filed its responses on April 12, 2018. **ARE FURTHER PROCEEDINGS SCHEDULED IN THIS CASE?** 13 Q. The current procedural schedule provides for the filing of simultaneous testimony on 14 Α. April 27, 2018. Kentucky Power is filing this testimony in support of the Settlement 15 Agreement with KIUC in fulfillment of that requirement. The schedule also provides for 16 another round of discovery to be filed on May 8, 2018. Responses to that second round 17 of discovery are due May 18, 2018. 18 HAVE KENTUCKY POWER, KIUC, AND THE ATTORNEY GENERAL MET 19 Q. TO CONSIDER SETTLEMENT IN THIS CASE? 20 Yes, the parties, along with Staff, met at the Commission offices on April 10, 2018 to 21 A. address settlement of KIUC's claims against Kentucky Power. Subsequently, KIUC and 22 Kentucky Power executed the Settlement Agreement. The Attorney General, who is the 23

only other party to this case, was offered the opportunity to join the settlement but is not joining at this time.

III. THE SETTLEMENT AGREEMENT

Q. DOES THE SETTLEMENT AGREEMENT REPRESENT THE COMPLETE SETTLEMENT BETWEEN THE COMPANY AND KIUC OF THE REMAINING ISSUES RAISED BY KIUC IN ITS COMPLAINT?

1

2

A. Yes. There are no agreements or understandings regarding the issues pending on
rehearing that are not reflected in the Settlement Agreement. The agreements and terms
in the Settlement Agreement represent the sum total of the give and take of the KIUC and
Kentucky Power. Further, there are no agreements nor understandings with the Attorney
General or any other non-party relating to the subject matter of the issues pending on
rehearing.

12 Q. IS THE COMMISSION STAFF A PARTY TO THE SETTLEMENT 13 AGREEMENT?

A. No. Commission Staff attended the April 10, 2018 informal conference but made clear that it could not be a party to any agreement, that it was not speaking for the Commission, and that its participation in no way would bind the Commission to the agreement.

IV. THE TERMS OF THE SETTLEMENT AGREEMENT

18 Q. PLEASE DESCRIBE THE PRINCIPAL TERMS OF THE SETTLEMENT
 19 AGREEMENT.

20 A. The Settlement Agreement contains the following substantive provisions:

• The Settlement Agreement provides for the return to Kentucky Power's customers 22 of the estimated \$175,272,905 in retail excess ADIT for the Company's

1 2 3		generation and distribution functions. The estimated excess ADIT will be amortized over specified periods and the resulting credit will appear on customers' bills as a billing line item. The \$175,272,905 is the Company's
4		current estimate of the total ADIT to be credited through this proceeding.
5 6 7 8 9 10		• Kentucky Power currently estimates that the total retail excess "protected" ADIT for the Company's generation and distribution functions is \$82,226,674. The Settlement Agreement, in conformity with the requirements of federal law, provides that the Company's excess "protected" excess ADIT will be amortized over the remaining life of the assets using the Average Rate Assumption Method ("ARAM") beginning January 1, 2018.
11 12 13 14		• Kentucky Power currently estimates that the total retail excess "unprotected" ADIT for the Company's generation and distribution functions is \$93,046,231. The Settlement Agreement provides that the Company's excess "protected" ADIT will be amortized over an 18-year period beginning January 1, 2018.
15 16		• The excess ADIT will be flowed back to customers through a Federal Tax Cut Credit that will appear as a billing line item.
17 18		A. <u>The Allocation Of Total Excess Generation And Distribution Function</u> <u>ADIT Between Protected And Unprotected ADIT</u> .
19	Q.	WHAT ARE PROTECTED AND UNPROTECTED EXCESS ADIT, AND WHY IS
20		THE ALLOCATION OF THE TOTAL EXCESS ADIT BETWEEN THE TWO
20 21		THE ALLOCATION OF THE TOTAL EXCESS ADIT BETWEEN THE TWO CLASSES IMPORTANT?
	А.	
21	А.	CLASSES IMPORTANT?
21 22	Α.	CLASSES IMPORTANT? Company Witness Kelly addresses the differences between the two types of excess ADIT
21 22 23	А.	CLASSES IMPORTANT? Company Witness Kelly addresses the differences between the two types of excess ADIT in his testimony. For purpose of the Settlement Agreement, the important differences are
21 22 23 24	Α.	CLASSES IMPORTANT? Company Witness Kelly addresses the differences between the two types of excess ADIT in his testimony. For purpose of the Settlement Agreement, the important differences are those resulting from the differing rules for flowing back excess protected ADIT and
 21 22 23 24 25 	A.	CLASSES IMPORTANT? Company Witness Kelly addresses the differences between the two types of excess ADIT in his testimony. For purpose of the Settlement Agreement, the important differences are those resulting from the differing rules for flowing back excess protected ADIT and excess unprotected ADIT to customers. Under federal law, excess protected ADIT is
 21 22 23 24 25 26 	Α.	CLASSES IMPORTANT? Company Witness Kelly addresses the differences between the two types of excess ADIT in his testimony. For purpose of the Settlement Agreement, the important differences are those resulting from the differing rules for flowing back excess protected ADIT and excess unprotected ADIT to customers. Under federal law, excess protected ADIT is required to be flowed back to customers over the estimated remaining book life of the
 21 22 23 24 25 26 27 	A.	CLASSES IMPORTANT? Company Witness Kelly addresses the differences between the two types of excess ADIT in his testimony. For purpose of the Settlement Agreement, the important differences are those resulting from the differing rules for flowing back excess protected ADIT and excess unprotected ADIT to customers. Under federal law, excess protected ADIT is required to be flowed back to customers over the estimated remaining book life of the related assets as calculated in accordance with ARAM. Because the amortization is tied

unprotected ADIT, by contrast, may be flowed back to customers ratably over a period determined by the Commission.

Q. ARE THERE ADVERSE CONSEQUENCES TO FAILING TO FLOW BACK
PROTECTED EXCESS ADIT IN ACCORDANCE WITH ARAM?

5 A. Yes. Company Witness Kelly addresses those consequences, and the resulting higher 6 costs to customers, resulting from failing to flow back excess protected ADIT in 7 accordance with federal law.

B. The Calculation Of The Federal Tax Cut Credit

8 Q. HAS THE COMPANY CALCULATED THE FEDERAL TAX CUT CREDIT TO
9 BE PROVIDED TO CUSTOMERS?

10 A. Yes. The calculation for 2018, 2019, and 2020 is provided as Attachment 2 to the 11 Settlement Agreement. Company Witness Vaughan describes in his testimony the 12 methodology used to calculate the federal tax rate credit to be provided to customers 13 through the amortization of excess ADIT resulting from the Tax Act. By way of 14 summary:

15

16

1

2

(a) A separate per kWh federal tax cut rate credit is calculated for the Company's residential and non-residential customers;

17

18

19

(b) If approved by the Commission, the federal tax cut rate credits will beginJuly 1, 2018. The twelve months of rate credit for 2018 will be provided over the final six months of 2018.

(c) Beginning in 2019, the residential class federal tax cut credit will be
"shaped" to provide a higher credit to residential customers during the winter heating
months (the billing months of January, February, March, and December).

1 (d) The federal tax cut credit will appear as a billing line item on the 2 customers' bills.

3 Q. WHY IS THE COMPANY PROPOSING TO "SHAPE" THE FEDERAL TAX 4 CUT RATE CREDIT FOR ITS RESIDENTIAL CUSTOMERS?

- 5 A. Kentucky Power's service territory includes a higher than average incidence of 6 residential customers who employ electric resistance heating. Many of these customers 7 face high electric bills during the winter heating season. By shaping the credit to provide 8 approximately 75 percent of the credit during the winter heating season the Settlement 9 Agreement aids these customers when their need for a rate credit is greatest. Many non-10 residential customers, by contrast, do not face the same sort of elevated electric bills 11 during the winter heating season.
- 12

Q. WHEN DOES THE FEDERAL TAX CUT RATE CREDIT TERMINATE?

A. The credit will continue until the effective date of rates established in the Company's next general rate case. Absent the extraordinary circumstances identified in paragraph
5(c) of the Settlement Agreement in Case No. 2017-00179, this means the credit will continue until at least the first cycle of the January 2021 billing cycle.

17 Q. HAS THE COMPANY PREPARED THE FEDERAL TAX CUT RATE CREDIT 18 TARIFF?

- 19 A. Yes. It is attached as Exhibit 1 to **EXHIBIT MAH-S1** (the Settlement Agreement).
- 20

21

C. <u>The Reasonableness Of The 18-Year Period To Amortize Kentucky</u> Power's Excess Unprotected ADIT.

Q. EXPLAIN WHY THE SETTLEMENT AGREEMENT PROPOSES TO
AMORTIZE THE COMPANY'S EXCESS UNPROTECTED ADIT OVER AN 18YEAR PERIOD?

Each dollar of the federal tax cut credit reduces the Company's cash flow by a dollar 1 A. without a compensating reduction in the Company's expenses. For example, as 2 illustrated in Attachment 2 to EXHIBIT MAH-S1, the Company estimates, assuming 3 unprotected ADIT is amortized over an 18-year period, its cash flow will be reduced in 4 2018 by \$10.2 million, in 2019 by \$10.3 million, and in 2020 by \$10.5 million. A shorter 5 amortization period would only increase the amount of these annual reductions in 6 Kentucky Power's cash flow. But even at 18 years, this reduction in Kentucky Power's 7 cash flow places significant pressure on the Company's credit metrics and ultimately the 8 9 cost of the Company's capital.

10 Q. HOW DOES THE REDUCTION OF THE COMPANY'S CASH FLOW AFFECT 11 ITS CREDIT METRICS?

12 Moody's Investors Service evaluates Kentucky Power's credit on a stand-alone company A. 13 basis. Moody's reviews multiple financial metrics and factors when evaluating 14 companies such as Kentucky Power. These include the company's regulatory framework 15 and environment, the company's ability to recover costs and earn returns, the Company's diversification and financial strength, liquidity, and certain key financial metrics. Among 16 17 the more important financial metrics Moody's uses in assigning a credit rating to Kentucky Power is the Company's ratio of cash flow from operations (excluding changes 18 19 in working capital) to the Company's debt.

Q. WHAT IS THE RATIO OF CASH FLOW FROM OPERATIONS (EXCLUDING CHANGES IN WORKING CAPITAL) TO DEBT AND WHAT IS IT INTENDED TO MEASURE?

A. It provides a measure of cash flow generated by the Company's operations that is
available to service a company's debt. As cash flow decreases, as will occur with the
amortization of the Company's excess ADIT, Kentucky Power has less cash "available"
to service debt payments. At some point, a decrease in the ratio may cause Moody's to
lower its credit rating for Kentucky Power.

Q. WHY IS THE COMPANY'S CREDIT RATING OF IMPORTANCE AT THIS TIME?

8 There are two reasons. The first has arisen recently: the second is of importance over the Α. 9 longer term. The first reason is that although Moody's on March 21, 2018 maintained the 10 Company's Baa2 credit rating, it revised its credit outlook for the Company from stable 11 to negative. The Moody's website indicates that a negative outlook indicates a higher likelihood of a credit rating change over the medium term.¹ Moody's website also 12 13 indicates that historically, approximately one-third of issuers assigned a negative outlook 14 have been downgraded within 18 months of the assignment of a negative outlook. As a result, the recent assignment of a negative outlook by Moody's underscores the 15 importance of maintaining, or preferably improving, Kentucky Power's credit metrics, 16 particularly its ratio of cash flow from operations (excluding changes in working capital) 17 to the Company's debt. The amortization of the Company's excess unprotected ADIT 18 over a period of 18 years will help Kentucky Power maintain its credit rating while 19 providing meaningful rate relief to the Company's customers. Conversely, the use of a 20 21 shorter period will increase the stress on the Company's credit metrics and ultimately its 22 credit rating.

¹ See <u>https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBC_79004</u>

1 Q. WHAT IS THE SECOND REASON THE COMPANY'S CREDIT RATING IS 2 IMPORTANT?

Kentucky Power's credit rating can affect its cost of capital – both debt and equity. The 3 A. Company's cost of debt tends to be directly related to its credit rating. All other things 4 being equal, a company with a lower credit rating many times will have a higher cost of 5 debt than a company with a higher credit rating. In addition, a company's cost of equity 6 bears a relationship - albeit perhaps less direct - to its credit rating. Again, all other 7 things being equal, a company with a lower credit rating many times will have a higher 8 cost of equity than a company with a higher credit rating. A utility's cost of capital -9 10 both in terms of its cost of debt and its cost of equity – in turn affects the rates customers 11 pay.

12 Q. WHAT IS KENTUCKY POWER'S CURRENT MOODY'S CREDIT RATING?

A. Moody's currently assigns a Baa2 credit rating to Kentucky Power. That is the second to lowest investment grade rating. Stated otherwise, it is two steps above non-investment grade rating.

THAT ACCELERATED HAVE REASON TO BELIEVE 16 Q. DO YOU AMORTIZATION (AN AMORTIZATION PERIOD OF LESS THAN 18 YEARS) 17 OF EXCESS UNPROTECTED ADIT COULD LEAD TO A CREDIT RATING 18 **DOWNGRADE?** 19

A. Although I participated in discussions with Moody's as recently as March 15, 2018 concerning the Company's credit rating, I am not, of course, privy to all of its deliberations. Nevertheless, an amortization period of less than 18 years could stress the Company's credit metrics and consequent credit rating. In this regard, Moody's March

HORELED - S12

21, 2018 press release in connection with its downgrade of the outlook for Kentucky
Power, attached as <u>EXHIBIT MAH-S2</u>, provides insight into Moody's decision to assign
Kentucky Power a negative credit outlook. In particular, in describing the shift from a
stable to a negative outlook for Kentucky Power, Moody's explained:

"The negative outlook reflects the combination of the utility's economically weak service territory, its latest rate case outcome, *and recently enacted tax reform policy*, which will put pressure on credit metrics over the next twelve to eighteen months" added Schumacher. Although we anticipate that the company will seek to compensate for these adverse developments through cost containment and *financial policy*, including the ability to retain cash flow for investment, we also expect the utility's increasing capital program will add to its debt burden....

The health of KPCo's service territory in eastern Kentucky, which has high exposure to the energy and mining sectors, has impacted the utility's revenue and load growth as well as recent rate case outcomes. The area continues to lag the state in terms of economic trends, and KPCo's retail load has declined in each of the past three years, putting downward pressure on earnings and cash flow.

(emphasis supplied). Significantly, among the factors cited for the downgrade, only cost
containment and management of financial policy is subject to the Company's control
within the next few years. The Company's rates are "frozen" until January 2021, while
the fruits of the Kentucky Power's economic development efforts to improve the
economics of its service territory and stem customer loss are several years out. It thus is
critical that the Company, and the Commission, use the one tool available – a reasonable
amortization period for the excess unprotected ADIT – to avoid a credit downgrade.

Q. THE 18-YEAR AMORTIZATION PERIOD FOR KENTUCKY POWER'S UNPROTECTED ADIT IS AT THE LONG END OF THE AMORTIZATION PERIODS EITHER PRESENTED TO OR APPROVED BY THE COMMISSION. CAN YOU JUSTIFY THE DIFFERENT AMORTIZATION PERIODS?

1	A.	Most certainly. Although uniformity in treatment can be important, the Commission's
2		decisions are based upon the record developed in each case and must address the specific
3		circumstances of each utility. A one-size-fits-all approach is not appropriate given the
4		differences among the size and finances of the four investor-owned electric utilities in the
5		Commonwealth, their very disparate service territories, and the amount of their excess
6		unprotected ADIT. As paragraph 2(b) of the Settlement Agreement expressly
7		acknowledges, the 18-year amortization period was agreed upon by KIUC and Kentucky
8		Power with these differences in mind:
9 10 11 12		The Settling Parties' conclusion regarding the reasonableness of an 18- year period to amortize Kentucky Power's excess unprotected ADIT is informed by the Company's specific financial and operating characteristics, including, but not limited to, the following:
13 14		(a) the amount of Kentucky Power's excess unprotected ADIT as a percentage of Kentucky Power's total equity (14.2 percent);
15 16		(b) the percentage of Kentucky Power's total debt as a percentage of total capitalization (56.75 percent);
17		(c) the Company's Moody's Investor Service credit rating (Baa2);
18		(d) the recent negative outlook assigned the Company by Moody's; and
19 20		(e) the decrease in Kentucky Power Company's load and customer base over the past ten years.
21	Q.	HOW DOES KENTUCKY POWER COMPARE TO THE OTHER THREE
22		INVESTOR-OWNED UTILITIES IN KENTUCKY IN THESE RESPECTS?
23	А.	Counsel for KIUC on April 17, 2018 provided staff and the parties with the following
24		chart comparing as of December 31, 2017 the four investor-owned electric utilities with
25		respect to many of these metrics:

	KU	LG&E	Duke	Kentucky Power
Unprotected Excess ADIT (12/31/2017)	\$12,762,150	\$24,282,660	\$33,032,786	\$95,282,425
Commission- Approved/Proposed Amortization Period	15 years	15 years	10 years	18 years
Total Equity (12/31/2017) (\$000)	\$3,357,000	\$2,527,000	\$319,052 ²	\$670,263
Unprotected Excess ADIT as Percent of Equity	0.38%	0.96%	10.35%	14.2%
Moody's Credit Rating	A3 Stable	A3 Stable	Baa1 Stable	Baa2 Negative
Total Debt/Total Capitalization (12/31/2017)	41.41%	43.02%	46.87%	56.75%
Retail Sales (12/31/2016)	18,881,364 MWH	11,947,052 MWH	4,099,199 MWH	5,862,697 MWH

Based on the information provided by KIUC, Kentucky Power's excess unprotected ADIT is almost seven and one-half times larger than that of the much larger (as measured by retail sales and total equity) Kentucky Utilities Company. Louisville Gas and Electric Company, which has MWh sales nearly twice those of Kentucky, has excess unprotected ADIT approximately one-quarter the size of Kentucky Power' excess unprotected ADIT. The Company's excess unprotected ADIT is nearly three times larger than the excess

² Per Case 2017-00321, electric common equity.

1

2

3

4

5

6

unprotected ADIT of Duke Energy Kentucky, which is closest in size to Kentucky Power.

1

2

3

4

5

6

7

8

9

10

The service territories of Duke, Kentucky Utilities, and Louisville Gas and Electric have not experienced the serious economic downturn or loss of customers endured by Kentucky Power. Indeed, the service territories, or substantial portions of the service territories, of all three lie within the "Golden Triangle." Also supporting the Company's request is that the credit ratings of all three of the other investor-owned electric utilities in Kentucky are stronger than Kentucky Power's Baa2 rating. Particularly significant is the fact that unlike Kentucky Power none are facing a negative credit outlook.

In sum, Kentucky Power lacks the financial and operational wherewithal to amortize its excess unprotected ADIT over the periods the other three investor-owned electric utilities may be required to use.

V. REASONABLENESS OF THE SETTLEMENT AGREEMENT

14Q.DOES THE SETTLEMENT AGREEMENT FAIRLY BALANCE THE15INTERESTS OF THE COMPANY AND ITS CUSTOMERS?

16 A. Yes. The Settlement Agreement provides meaningful rate relief to the Company's 17 customers in the form of a rate credit equal to more than \$10 million a year. It does so 18 while helping to minimize the risk of a credit downgrade and the resulting increased 19 capital costs that ultimately would be borne by Kentucky Power's customers. This is a 20 win-win for the Company and its customers.

1 Q. DO YOU HAVE A RECOMMENDATION FOR THE COMMISSION?

A. Yes. The Settlement Agreement should be approved by the Commission without
modification. In addition, the Commission should establish rates and charges in
conformity with the agreement.

5 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

6 A. Yes.

COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

Kentucky Industrial Utility Customers, Inc.

Complainant

v.

Kentucky Power Company

Defendant

SETTLEMENT AGREEMENT

Case No. 2018-00035

This Settlement Agreement is made and entered into this 25th day of April, 2018, by and among Kentucky Power Company ("Kentucky Power" or "Company") and Kentucky Industrial Utility Customers, Inc. ("KIUC") (collectively Kentucky Power and KIUC are "Settling Parties").

RECITALS

1. On December 21, 2017, KIUC filed with the Public Service Commission of Kentucky ("Commission") its Complaint and Petition for the Establishment of a Regulatory Liability to Provide Customers a Rate Reduction Because of Tax Expense Savings ("Complaint").

On December 22, 2017, the legislation known as the Tax Cuts and Jobs Act, H.R.
 1, Public Law 115-97, 131 Stat. 2054 (Dec. 22, 2017) ("Tax Act") was signed into law. The Tax
 Act reduced the maximum federal corporate income tax rate from 35 percent to 21 percent effective January 1, 2018.

3. On December 27, 2017, the Commission issued an order finding that KIUC's Complaint established a *prima facie* case and opened Case No. 2017-00477.

4. The Attorney General of the Commonwealth of Kentucky ("Attorney General") filed a motion to intervene in Case No. 2017-00477. The Attorney General, who is not a party to this agreement, was granted leave to intervene.

On January 25, 2018, the Commission issued an order severing Case No. 2017 00477 into three separate, utility-specific complaint proceedings.

6. By separate order entered January 25, 2018, the Commission established Case No. 2018-00035 for the review and adjudication of KIUC's claims against Kentucky Power. In the order establishing the Case No. 2018-00035, the Commission noted that the effects of the Tax Act on the Company's tax expense were addressed in the Commission's January 18, 2018 Order in Case No. 2017-00179, leaving only the effect of the Tax Act on the Company's excess accumulated deferred federal income tax ("ADIT") for adjudication in Case No. 2018-00035.

7. On March 21, 2018, Moody's Investor Service announced that it maintained Kentucky Power's rating at Baa2 but revised the Company's outlook from stable to negative. According to Moody's "[t]he negative outlook reflects the combination of the utility's economically weak service territory, its latest rate case outcome, and recently enacted tax reform policy, which will put pressure on credit metrics over the next twelve to eighteen months."

8. On April 11, 2018, an informal conference was held at the Commission to review the issues presented in this case and to discuss settlement. Representatives of all of the parties to this case, Kentucky Power, KIUC, and the Attorney General, along with Commission Staff attended the informal conference.

2

9. The Settling Parties execute this Settlement Agreement for purposes of submitting it to the Kentucky Public Service Commission for approval pursuant to KRS 278.040 and KRS 278.260, and for further approval by the Commission of the rate structure and tariffs as described herein.

10. This Settlement Agreement provides for fair, just, and reasonable rates.

NOW, THEREFORE, for and in consideration of the premises set forth above, and the agreements and covenants set forth herein, Kentucky Power and the Settling Parties hereby agree as follows:

AGREEMENT

1. Excess ADIT Totals

The Settling Parties agree that as a result of the change in maximum federal corporate income tax rate Kentucky Power's estimated retail excess ADIT for its generation and distribution functions totals \$175,272,905. Of this total, Kentucky Power currently estimates that \$82,226,674 is excess "protected" ADIT and \$93,046,231 is excess "unprotected" ADIT. The estimated allocations between excess protected and excess unprotected ADIT are preliminary. The final allocations will not be determined until the fourth quarter of 2018 when the Company files its federal corporate income tax return.¹ Excess ADIT amounts relating to the Company's transmission function have been accounted for in revised PJM OATT annual revenue requirements filed at FERC on April 6, 2018 in Docket Nos. EL 17-13, ER17-405, and ER17-406 and will be reflected in the annual purchase power adjustment factor under Tariff P.P.A.

¹ Amounts in the protected and unprotected categories may be revised to align with final accounting values and to avoid any normalization violations.

2. Excess ADIT Amortization

The Company will amortize and credit to customers the retail generation and distribution excess ADIT arising from the Tax Act as follows:

(a) <u>Protected ADIT</u>: The Company will amortize the excess protected ADIT amount over the remaining life of the assets using the Average Rate Assumption Method ("ARAM") prescribed by the Tax Act.

(b) <u>Unprotected ADIT</u>: The Settling Parties agree that a reasonable period for the Company to amortize its excess unprotected ADIT is 18 years. The Company shall be authorized to amortize its excess unprotected ADIT over an 18-year period beginning January 1, 2018. The Settling Parties' conclusion regarding the reasonableness of an 18-year period to amortize Kentucky Power's excess unprotected ADIT is informed by the Company's specific financial and operating characteristics, including, but not limited to, the following:

(a) the amount of Kentucky Power's excess unprotected ADIT as a percentage of Kentucky Power's total equity (14.2 percent);

(b) the percentage of Kentucky Power's total debt as a percentage of total capitalization(56.75 percent);

(c) the Company's Moody's Investor Service credit rating (Baa2);

(d) the recent negative outlook assigned the Company by Moody's; and,

(e) the decrease in Kentucky Power Company's load and customer base over the past ten years.

The 18-year amortization period will help mitigate against potential additional negative impacts of the Tax Act on the Company's credit metrics during the three-year base rate case stay out agreed to in Case No. 2017-00179 and thereafter, while still providing meaningful rate relief to customers.

3. Tax Cut Tariff

The Company will credit the excess ADIT to customers on bills beginning July 1, 2018 through the new Federal Tax Cut Tariff (Tariff FTC). A copy of Tariff FTC is attached as **EXHIBIT 1** to this Settlement Agreement. Tariff FTC shall remain in effect until rates are effective in the Company's next base rate case. The amounts credited to customers through Tariff FTC will be displayed as a billing line item. Tariff FTC shall operate as follows:

(a) Tariff FTC provides a per-kilowatt hour rate credit for 2018, 2019, and 2020. The rate credit is designed to credit Kentucky Power's customers over each twelve -month period an amount equal to the sum of the excess protected ADIT (calculated in accordance with ARAM) for the corresponding twelve-month period and the excess unprotected ADIT amortized over a period of 18 years beginning January 1, 2018 (collectively the Annual Total Rate Credit).

(b) Tariff FTC provides for separate per-kilowatt hour rate credits for residential and non-residential customer classes. To develop the class specific rate credits, the Annual Total Rate Credit is allocated between residential and non-residential customer classes based on the two classes' percentages of the Company's total revenue for the twelve-month period ended March 31, 2018. The per-kilowatt hour rate credit is calculated for residential and non-residential customer classes by dividing each class' share of Annual Total Rate Credit by that customer class' kilowatt hours usage for the twelve-month period ended March 31, 2018. The derivation of the estimated per-kilowatt hour credit rate under the Tax Cut Tariff is illustrated on **EXHIBIT 2** to this Settlement Agreement.

(c) To the extent that the actual annual amount credited through Tariff FTC varies from the Annual Total Rate Credit Amount, the amortization of the excess unprotected ADIT will be increased or decreased which will ensure that the annual amount of excess protected ADIT required to be amortized in accordance with ARAM is credited to customers to avoid a normalization violation. The actual remaining unamortized excess unprotected ADIT balance will be reflected in the calculation of rates proposed by Kentucky Power in its next base rate case.

(d) The per-kilowatt hour credit rate under the Tax Cut Tariff for 2018 will be effective for service billed on or after July 1, 2018. The per-kilowatt hour credit rates for 2018 only are calculated by dividing the residential and non-residential classes apportioned shares of the Total Rate Credit for 2018 for the twelve months ended December 31, 2018 by the 2017 July to December actual kilowatt hour usage for the residential and non-residential customer classes respectively.

(e) For the residential customer classes only, and beginning on January 1, 2019, the per-kilowatt hour credit rate will be shaped seasonally such that approximately seventy-five percent of the residential annual excess ADIT credit amount will be credited to customers during the billing months of January, February, March, and December. The intent of this provision is to provide the maximum benefit to residential customers during the high-usage winter heating season. The derivation of the seasonal, estimated per-kilowatt hour residential credit rate under the Tax Cut Tariff is provided on **EXHIBIT 2** to this Settlement Agreement.

4. Filing Of Settlement Agreement With The Commission And Request For Approval

Following the execution of this Settlement Agreement, Kentucky Power and the Settling Parties shall file this Settlement Agreement with the Commission along with a joint request to the Commission for consideration and approval of this Settlement Agreement so that Kentucky Power may begin crediting customers under the Tax Cut Tariff beginning on July 1, 2018.

5. Good Faith And Best Efforts To Seek Approval

(a) This Settlement Agreement is subject to approval by the Public Service Commission.

6

(b) Kentucky Power and the Settling Parties shall act in good faith and use their best efforts to recommend to the Commission that this Settlement Agreement be approved in its entirety and without modification and that the rates and charges set forth herein be implemented.

(c) For purposes of any hearing, the Settling Parties and Kentucky Power waive all cross-examination of the other Settling Parties' witnesses except for purposes of supporting this Settlement Agreement unless the Commission disapproves this Settlement Agreement. Each of the Settling Parties further stipulates that the filings made in this case be admitted into the record.

(d) The Settling Parties further agree to support the reasonableness of this Settlement Agreement before the Commission, and to cause their counsel to do the same, including in connection with any appeal from the Commission's adoption or enforcement of this Settlement Agreement.

(e) No party to this Settlement Agreement shall challenge any Order of the Commission approving the Settlement Agreement in its entirety and without modification.

6. Failure Of Commission To Approve Settlement Agreement

This Settlement Agreement, in conjunction with the Commission's January 18, 2018 Order in Case No. 2017-00179, as amended by the Commission's final order in the pending rehearing in Case 2017-00179, as finally determined upon appeal if any, shall resolve all issues regarding the effect of the Tax Act on the Company's federal income tax expense and excess ADIT as reflected in the Company's rates. If the Commission does not accept and approve this Settlement Agreement in its entirety, then any adversely affected party may withdraw from the Stipulation within the statutory periods provided for rehearing and appeal of the Commission's order by (1) giving notice of withdrawal to all other parties and (2) timely filing for rehearing or appeal. Upon the latter of (1) the expiration of the statutory periods provided for rehearing and appeal of the Commission's order and (2) the conclusion of all rehearings and appeals, all parties that have not withdrawn will continue to be bound by the terms of the Stipulation as modified by the Commission's order.

7. Continuing Commission Jurisdiction

This Settlement Agreement shall in no way be deemed to divest the Commission of jurisdiction under Chapter 278 of the Kentucky Revised Statutes.

8. Effect of Settlement Agreement

This Settlement Agreement shall inure to the benefit of, and be binding upon, the parties to this Settlement Agreement, their successors, and assigns.

9. Complete Agreement

This Settlement Agreement constitutes the complete agreement and understanding among the parties to this Settlement Agreement, and any and all oral statements, representations, or agreements. Any and all such oral statements, representations, or agreements made prior hereto or contained contemporaneously herewith shall be null and void and shall be deemed to have been merged into this Settlement Agreement.

10. Independent Analysis

The terms of this Settlement Agreement are based upon the independent analysis of the parties to this Settlement Agreement, are the product of compromise and negotiation, and reflect a fair, just, and reasonable resolution of the issues herein. Notwithstanding anything contained in this Settlement Agreement, Kentucky Power and the Settling Parties recognize and agree that the effects, if any, of any future events upon the income of Kentucky Power are unknown and this Settlement Agreement shall be implemented as written.

11. Settlement Agreement And Negotiations Are Not An Admission

(a) This Settlement Agreement shall not be deemed to constitute an admission by any party to this Settlement Agreement that any computation, formula, allegation, assertion, or

contention made by any other party in these proceedings is true or valid. Nothing in this Settlement Agreement shall be used or construed for any purpose to imply, suggest or otherwise indicate that the results produced through the compromise reflected herein represent fully the objectives of the Settling Parties.

(b) Neither the terms of this Settlement Agreement nor any statements made or matters raised during the settlement negotiations shall be admissible in any proceeding, or binding on any of the parties to this Settlement Agreement, or be construed against any of the parties to this Settlement Agreement, **except that** in the event of litigation or proceedings involving the approval, implementation or enforcement of this Agreement, the terms of this Settlement Agreement shall be admissible. This Settlement Agreement shall not have any precedential value in this or any other jurisdiction.

12. Consultation With Counsel

The parties to this Settlement Agreement warrant that they have informed, advised, and consulted with their respective counsel with regard to the contents and significance of this Settlement Agreement and are relying upon such advice in entering into this agreement.

13. Authority To Bind

Each of the signatories to this Settlement Agreement hereby warrant they are authorized to sign this agreement upon behalf of, and bind, their respective parties.

14. Construction Of Agreement

This Settlement Agreement is a product of negotiation among all parties to this Settlement Agreement, and no provision of this Settlement Agreement shall be construed in favor of or against any party hereto. This Settlement Agreement is submitted for purposes of this case only and is not to be deemed binding upon the parties hereto in any other proceeding, nor is

9

it to be offered or relied upon in any other proceeding involving Kentucky Power or any other utility.

15. Counterparts

This Settlement Agreement may be executed in multiple counterparts.

16. Future Rate Proceedings

Nothing in this Settlement Agreement shall preclude, prevent, or prejudice any party to this Settlement Agreement from raising any argument or issue, or challenging any adjustment, in any future rate proceeding of Kentucky Power.

IN WITNESS WHEREOF, this Settlement Agreement has been agreed to as of this 25th day of April 2018.

KENTUCKY POWER COMPANY

By; CONSEC Its:

KENTUCKY INDUSTRIAL UTILITY CUSTOMERS, INC.

By: MPL. Kunt Its: Attornay

Exhibit_MAH-S1 Page 13 of 19

EXHIBIT 1

FEDERAL TAX CUT TARIFF (F.T.C.)

APPLICABLE.

To Tariffs R.S., R.S.D., R.S.-L.M.-T.O.D., R.S.-T.O.D., Experimental R.S.-T.O.D.2, G.S., S.G.S.-T.O.D., M.G.S.-T.O.D., L.G.S., L.G.S.-T.O.D., I.G.S., C.S.- I.R.P., M.W., O.L., and S.L.,

RATE.

1.	Pursuant to the final order of the Kentucky Public Service Commission in Case No. 2018-00035 and the
	Stipulation and Settlement Agreement dated as filed and approved by the Commission, Kentucky
	Power Company is to credit to retail ratepayers the approved annual amount of excess accumulated deferred
	federal income taxes (ADIT) beginning July1, 2018 and continue to do so until the Company's base rates are
	re-set in a future base rate proceeding.

2. The Annual Total Rate Credit Amount (AC) was calculated as follows:

AC = the sum of (1/18th of estimated retail Generation and Distribution related Unprotected Excess ADIT) + calendar year estimated retail Generation and Distribution related ARAM of Protected Excess ADIT

3. The allocation of the actual Annual Tax Credit Amount between residential and all other customers shall be based upon their respective contribution to total retail revenues, according to the following formula:

Residential Allocation RA(y)	=	AC(y)	x <u>KY Residential Retail Revenue RR</u> KY Retail Revenue R
All Other Allocation OA(y)	-	AC(y)	x <u>KY All Other Classes Retail Revenue OR</u> KY Retail Revenue R
nere:			

Whe

(y) = the credit year; RR = \$236,006,728; OR = \$316,554,577; and R = \$552,561,305.

4. The Residential Allocation and All Other Allocation shall be credited to customers on a kWh basis as follows: All Other

	Residential	All Other
	(\$/kWh)	(\$/kWh)
July – December 2018	\$0.004803	\$0.003188
January – March and December 2019	\$0.003593	\$0.001604
April – November 2019	\$0.001000	\$0.001604
January - March and December 2020*	\$0.003686	\$0.001635
April – November 2020*	\$0.001000	\$0.001635

* And continuing thereafter for the applicable months until the Company's rates are changed as part of a base rate proceeding, but not to exceed a period longer than 18 years total from January 1, 2018.

DATE EFFECTIVE: Service Rendered On And After July 1, 2018

ISSUED BY: Ranie K Wohnhas

TITLE: Managing Director Regulatory/Finance

By Authority Of An Order By The Public Service Commission

In Case No. 2018-00035 Dated XXXX

EXHIBIT 2

Case No. 2018-00035 Exhibit 2

Total KY Retail Unprotected G&D Excess ADIT	\$	(93,046,231)		~				
Applicable GRCF	-	1.34482						
Revenue Credit	\$	(125,130,480)						
18 Year Amortization of Unprotected	\$	(6,951,693)						
				2018		2019		2020
KY Retail G&D Protected ARAM			\$	(2,420,293) 1.34482	\$	(2,512,545) 1.34482	\$	(2,662,693 1.34482
Revenue Credit			\$	(3,254,859)	\$	(3,378,922)	\$	(3,580,845
Annual Revenue Credit			\$	(10,206,553)	\$	(10,330,615)	\$	(10,532,538
		urrent Revenue						
Residential Class	\$	236,006,728						
All Other	\$	316,554,577						
Total	\$	552,561,305						
		Annual kWh	Tax (Credit Allocation	Tax (Credit Allocation	Tax	Credit Allocation
Residential Class		2,005,106,410	\$	(4,359,363)	\$	(4,412,352)	\$	(4,498,596
All Other		3,690,272,791	\$	(5,847,190)	\$	(5,918,264)	\$	(6,033,942
Total		5,695,379,201	\$	(10,206,553)	\$	(10,330,615)	\$	(10,532,538
			0	ver 6 Months		Annual		Annual
		Jul - Dec kWh		dit Rates \$/kWh	Surcra	dit Rates \$/kWh	Surcra	dit Rates \$/kWh
Residential Class kWh		907,686,624	Surcier	(0.004803)	JUICIE	(0.002201)	Juicie	(0.002244)
All Other kWh		1,834,203,478		(0.003188)		(0.001604)		(0.001635
Total		1,00 ,1200,110		(0.005100)		(0.00100 1)		(0.001035)
			00100		-			
Residential Class kWh - Winter (Dec-Mar)		028 262 865	2019 Se	easonal Collection		easonal Rate		
Residential Class kWh - All Other (Apr-Nov)		928,363,965		(3,335,609)	\$	(0.003593)		
Residential class kwn - All Other (Apr-Nov)	-	1,076,742,445	\$	(1,076,742) (4,412,352)	\$	(0.001000) (0.002201)		
		-,000,200,110	Y	(-)-+22,002)	*	(0.002201)		
			2020 Se	easonal Collection	2020 S	easonal Rate		
Residential Class kWh - Winter (Dec-Mar)		928,363,965		(3,421,853)	\$	(0.003686)		
Residential Class kWh - All Other (Apr-Nov)		1,076,742,445		(1,076,742)	\$	(0.001000)		

ESTIMATED EXCES AS OF DECEMBER		Ì						
AS OF BEGEMBER	51, 2017							
								Sec. 14
	TO	TAL COMPANY K	PCO - FUNCTIONAL	EXCESS ADIT		Kentucky Retai	I-FUNCTIONAL EXCES	S ADIT
		al Functional Estimated Protected	Total Functional Estimated Unprotected	Total Functional Estimated Total	E	l Functional stimated protected	Total Functional Estimated Unprotected	Total Function Estimated Total
110 Kentucky Power - Distribution		(38,033,924)	(17,091,853)	(55,125,777)		(37,463,415.14)	(16,835,475.21)	(54,298,890.)
117 Kentucky Power - Generation		(45,444,933)	(77,371,326)	(122,816,259)		(44,763,259.01)	(76,210,756.11)	(120,974,015.
180 Kentucky Power - Transmission		(31,750,728)	(2,270,247)	(34,020,975)		(31,274,457.08)	(2,236,193.30)	(33,510,660.
		(115,229,585)	(96,733,426)	(211,963,011)		(113,501,141)	(95,282,425)	(208,783,5
200000000000000000000000000000000000000	To	tal Company				tucky Retail		
		018 ARAM				18 ARAM		
110 Kentucky Power - Distribution	Protec \$	ted Amortization 1,173,618			S	ad Amortization 1,155,014		
110 Kentucky Power - Distribution	\$	1,1/3,010			7	*1=201-21		
117 Kentucky Power - Generation	\$	1,283,532			\$	1,264,279	×	
180 Kentucky Power - Transmission	\$	534,467			\$	526,450		
	20010000000	2,991,617			-	2,946,743		
	То	tal Company			Ken	tucky Retail		
		ated 2019 ARAM				19 ARAM		
ALC MALL DOWN DIAL DAY		ted Amortization			S	ed Amortization 1,223,152		
110 Kentucky Power - Distribution	\$	1,241,779	· · ·		4	1,220,232		
117 Kentucky Power - Generation	\$	1,309,028			\$	1,289,393		
180 Kentucky Power - Transmission	\$	616,793			\$	607,541		
		3,167,600				3,120,086		
		tal Company ated 2020 ARAM				tucky Retail 020 ARAM		
	Protec	ted Amortization				ed Amortization		
110 Kentucky Power - Distribution	\$	1,357,129			\$	1,336,772		
117 Kentucky Power - Generation	\$	1,346,113			\$	1,325,921		
180 Kentucky Power - Transmission	\$	704,109			\$	693,547		

KENTUCKY POWER COMPANY

Allocation Factor

0.985 GP Total - ADFIT allocated on this in rate case

.

	KENTUCKY POWER COMPANY COMPUTATION OF THE GROSS REVENU CONVERSION FACTOR TEST YEAR ENDED FEBRUARY 28,2017		WC	SECTION V DRKPAPER S-2 PAGE 2 OF 3
Line No. (1)	Description (2)		Inc	ercent of cremental s Revenues (3)
1	Operating Revenues			100.00%
2 3	Less: Uncollectible Accounts Expense 1/ KPSC Maintenance Fee			0.0000% 0.0000%
4	Income Before income Taxes			100.0000%
5	Less: State Income Taxes (L4 X 5.8742%) 2/	5.87%		5.874%
6	Income Before Federal Income Taxes			94.1258%
7	Less: Federal income Taxes (L6 X 35.00%)	21.00%		19.7664%
8	Operating Income Percentage			74.3594%
9	Gross Revenue Conversion Factor (100% / L8)			1.3448205

<u>Residential Monthly kWh</u> Tariff Summary	Apr 139,611,685	May 110,133,894	Jun 126,633,141	Jul 157,470,184	Aug 160,846,868	Sep 137,341,704	Oct 116,319,001	Nov 128,385,968	Dec 207,322,899	Jan 306,295,049
All Other Classes Tariff Summary	297,714,277	283,482,942	310,052,531	311,095,107	314,801,758	295,499,900	297,105,404	287,344,289	328,357,010	348,377,100
Total kWh	437,325,962	393,616,836	436,585,672	468,565,291	475,648,636	432,841,604	413,424,405	415,730,257	535,679,909	654,672,149
RES Rev	17,112,497	13,738,866	15,682,580	18,312,050	18,837,040	16,441,857	13,908,912	15,522,872	23,463,906	33,493,389
C&I Rev	26,212,181	25,562,607	26,986,830	26,249,944	26,490,964	25,685,253	24,865,507	24,469,977	26,298,008	27,885,444
Total Rev	 43,324,678	39,301,473	42,669,410	44,561,994	45,328,004	42,127,110	38,774,419	39,992,849	49,761,914	61,378,833

MOODY'S INVESTORS SERVICE

Rating Action: Moody's affirms Kentucky Power at Baa2, outlook revised to negative

Global Credit Research - 21 Mar 2018

Approximately \$870 million of debt outstanding

New York, March 21, 2018 -- Moody's Investors Service, ("Moody's") affirmed the ratings of Kentucky Power Company (KPCo, Baa2), a subsidiary of American Electric Power Company, Inc. (AEP, Baa1 stable), and revised the outlook to negative from stable.

RATINGS RATIONALE

"The rating affirmation recognizes KPCo's credit risk profile as a vertically integrated electric utility subsidiary within the large multi-utility system AEP family, operating in eastern Kentucky", said Laura Schumacher, Senior Credit Officer. "The negative outlook reflects the combination of the utility's economically weak service territory, its latest rate case outcome, and recently enacted tax reform policy, which will put pressure on credit metrics over the next twelve to eighteen months" added Schumacher. Although we anticipate that the company will seek to compensate for these adverse developments through cost containment and financial policy, including the ability to retain cash flow for investment, we also expect the utility's increasing capital program will add to its debt burden. Longer term, KPCo remains exposed to climate change risks because a sizeable portion of its rate base is represented by coal-fired generating assets.

The health of KPCo's service territory in eastern Kentucky, which has high exposure to the energy and mining sectors, has impacted the utility's revenue and load growth as well as recent rate case outcomes. The area continues to lag the state in terms of economic trends, and KPCo's retail load has declined in each of the past three years, putting downward pressure on earnings and cash flow. In its most recent rate case, the Kentucky Public Service Commission (KPSC) cited the area's economic challenges as a rationale for its decision to award a lower return on equity than was agreed to with intervenors, or initially requested by the utility. In addition, KPCo agreed to defer recovery of \$50 million of costs associated with a power purchase agreement over five years, which will also limit the impact of rate increases to customers. Ultimately, the base rate increase approved by the KPSC was approximately \$12.4 million (2%) versus a request of approximately \$60 million. KPCo also agreed that it would not request another rate increase to become effective prior to January 2021.

KPCo has been actively involved in efforts to stimulate economic growth in its service territory, and to help displaced workers transfer their skills to alternative industries; however, the full benefit of these investments is still a few years out. In the interim, we expect the combination of modest load growth, deferred revenue, and increasing capital expenditures to assure system reliability and attract investment, will maintain pressure on cash flow credit metrics. For example, we anticipate KPCo's ratio of cash flow from operations excluding changes in working capital (CFO pre-WC) to debt may move to the low teens from the mid-to-high teens historically.

As a subsidiary of AEP, one of the largest utility companies in the U.S., KPCo continues to benefit from the operational expertise of a larger organization. The company also has ready access to capital from its parent, and the ability to retain capital for investment. Going forward, in light of the economic and financial challenges facing the company, we anticipate KPCo will make limited distributions to AEP parent.

Rating outlook

KPCo's negative rating outlook reflects our view that the combination of recent rate actions, a weak service territory, and increasing capital expenditures will impact the utility's cash flow generating ability and its cash flow based credit metrics. For example, we believe KPCo's ratio of CFO pre-WC to debt will likely decline to the low teens.

Factors that could lead to an upgrade

Given the negative outlook, a rating upgrade is unlikely over the near to intermediate term. The outlook could

be revised to stable if there were to be an improvement in economic conditions, or a reduction in operating or capital expenses such that we could expect the company would be able to demonstrate cash flow based credit metrics that are supportive of the current ratings. If, for example, the company were able to maintain a ratio of CFO pre-WC to debt above 13% while the ratio of CFO pre-WC less dividends to debt remained above 11%.

Factors that could lead to a downgrade

The rating could move downward if current trends continue and economic conditions do not improve in its service territory or, if as a result of higher capital expenditures, increased operating expenses or additional cash deferrals hindering KPCo's ability to recover its costs on a timely basis, the ratio of CFO pre-WC to debt were to fall below 13% for a sustained period of time.

Outlook Actions:

.. Issuer: Kentucky Power Company

....Outlook, Changed To Negative From Stable

Affirmations:

.. Issuer: Kentucky Power Company

.... Issuer Rating, Affirmed Baa2

....Senior Unsecured Regular Bond/Debenture, Affirmed Baa2

KPCo, a vertically integrated electric utility company headquartered in Ashland, Kentucky, is a wholly owned subsidiary of AEP, with about \$1.6 billion in rate base (5% of AEP's total) and 2017 revenue of about \$643 million (about 4% of AEP total revenue).

The principal methodology used in these ratings was Regulated Electric and Gas Utilities published in June 2017. Please see the Rating Methodologies page on www.moodys.com for a copy of this methodology.

REGULATORY DISCLOSURES

For ratings issued on a program, series or category/class of debt, this announcement provides certain regulatory disclosures in relation to each rating of a subsequently issued bond or note of the same series or category/class of debt or pursuant to a program for which the ratings are derived exclusively from existing ratings in accordance with Moody's rating practices. For ratings issued on a support provider, this announcement provides certain regulatory disclosures in relation to the credit rating action on the support provider and in relation to each particular credit rating action for securities that derive their credit ratings from the support provider's credit rating. For provisional ratings, this announcement provides certain regulatory disclosures in relation to a definitive rating that may be assigned subsequent to the final issuance of the debt, in each case where the transaction structure and terms have not changed prior to the assignment of the definitive rating in a manner that would have affected the rating. For further information please see the ratings tab on the issuer/entity page for the respective issuer on www.moodys.com.

For any affected securities or rated entities receiving direct credit support from the primary entity(ies) of this credit rating action, and whose ratings may change as a result of this credit rating action, the associated regulatory disclosures will be those of the guarantor entity. Exceptions to this approach exist for the following disclosures, if applicable to jurisdiction: Ancillary Services, Disclosure to rated entity, Disclosure from rated entity.

Regulatory disclosures contained in this press release apply to the credit rating and, if applicable, the related rating outlook or rating review.

Please see www.moodys.com for any updates on changes to the lead rating analyst and to the Moody's legal entity that has issued the rating.

Please see the ratings tab on the issuer/entity page on www.moodys.com for additional regulatory disclosures for each credit rating.

Laura Schumacher

Exhibit_MAH-S2 Page 3 of 5

VP - Senior Credit Officer Infrastructure Finance Group Moody's Investors Service, Inc. 250 Greenwich Street New York, NY 10007 U.S.A. JOURNALISTS: 1 212 553 0376 Client Service: 1 212 553 1653

Jim Hempstead MD - Utilities Infrastructure Finance Group JOURNALISTS: 1 212 553 0376 Client Service: 1 212 553 1653

Releasing Office: Moody's Investors Service, Inc. 250 Greenwich Street New York, NY 10007 U.S.A. JOURNALISTS: 1 212 553 0376 Client Service: 1 212 553 1653



© 2018 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S INVESTORS SERVICE, INC. AND ITS RATINGS AFFILIATES ("MIS") ARE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MOODY'S PUBLICATIONS MAY INCLUDE MOODY'S CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL, FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS AND MOODY'S OPINIONS INCLUDED IN MOODY'S PUBLICATIONS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S PUBLICATIONS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. CREDIT RATINGS AND MOODY'S PUBLICATIONS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. NEITHER CREDIT RATINGS NOR MOODY'S PUBLICATIONS COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS AND PUBLISHES MOODY'S PUBLICATIONS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL. WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

MOODY'S CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS OR MOODY'S PUBLICATIONS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE

REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT.

CREDIT RATINGS AND MOODY'S PUBLICATIONS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the rating process or in preparing the Moody's publications.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY SUCH RATING OR OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any rating, agreed to pay to Moody's Investors Service, Inc. for appraisal and rating services rendered by it fees ranging from \$1,500 to approximately \$2,500,000. MCO and MIS also maintain policies and procedures to address the independence of MIS's ratings and rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold ratings from MIS and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at <u>www.moodys.com</u> under the heading "Investor Relations — Corporate Governance — Director and Shareholder Affiliation Policy."

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors. It would be reckless and inappropriate for retail investors to use MOODY'S credit ratings or publications when making an investment decision. If in doubt you should

contact your financial or other professional adviser.

Additional terms for Japan only: Moody's Japan K.K. ("MJKK") is a wholly-owned credit rating agency subsidiary of Moody's Group Japan G.K., which is wholly-owned by Moody's Overseas Holdings Inc., a wholly-owned subsidiary of MCO. Moody's SF Japan K.K. ("MSFJ") is a wholly-owned credit rating agency subsidiary of MJKK. MSFJ is not a Nationally Recognized Statistical Rating Organization ("NRSRO"). Therefore, credit ratings assigned by MSFJ are Non-NRSRO Credit Ratings. Non-NRSRO Credit Ratings are assigned by an entity that is not a NRSRO and, consequently, the rated obligation will not qualify for certain types of treatment under U.S. laws. MJKK and MSFJ are credit rating agencies registered with the Japan Financial Services Agency and their registration numbers are FSA Commissioner (Ratings) No. 2 and 3 respectively.

MJKK or MSFJ (as applicable) hereby disclose that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by MJKK or MSFJ (as applicable) have, prior to assignment of any rating, agreed to pay to MJKK or MSFJ (as applicable) for appraisal and rating services rendered by it fees ranging from JPY200,000 to approximately JPY350,000,000.

MJKK and MSFJ also maintain policies and procedures to address Japanese regulatory requirements.

VERIFICATION

The undersigned, Matthew A. Horeled, being duly sworn, deposes and says he is the Director of Regulatory Services for Kentucky Power, that he has personal knowledge of the matters set forth in the foregoing testimony and the information contained therein is true and correct to the best of his information, knowledge, and belief.

Matthe 6. Horeles

Matthew A. Horeled

Commonwealth of Kentucky)

County of Boyd

Case No. 2018-00035

Subscribed and sworn before me, a Notary Public, by Matthew A. Horeled this ______ day of April, 2018.

Notary Public Joung Blum

)

)

My Commission Expires 3-18-19

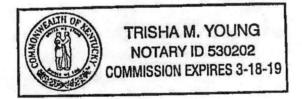


EXHIBIT KWB-4 PAGE 1 OF 7

KENTUCKY UTILITIES COMPANY

CASE NO. 2018-00034

OVERALL FINANCIAL SUMMARY

LINE NO.	DESCRIPTION	SUPPORTING SCHEDULE REFERENCE	CASE NO. 2016-00370 FINAL ORDER (7/1/2017 - 6/30/2018)	FORECASTED PERIOD (1/1/2018 - 4/30/2019) REFLECTING CHANGES TO FEDERAL INCOME TAXES	REVENUE REQUIREMENT IMPACT	RESIDENTIAL TARIFF (39% OF TOTAL REVENUES)	OTHER TARIFFS (61% OF TOTAL REVENUES)
			\$	\$	\$	\$	\$
1	CAPITALIZATION ALLOCATED TO KENTUCKY JURISDICTION	PAGE 2	3,607,984,536	3,696,723,410	88,738,875		
2	REQUIRED RATE OF RETURN ADJUSTED FOR INCOME TAXES	PAGE 2	10.25%	8.92%	-1.33%		
3	REQUIRED ANNUAL OPERATING INCOME BEFORE TAXES (1 x 2)		369,897,726	329,696,019	(40,201,708)		
4	YEARS EQUIVALENT TO 16 MONTHS (16/12)				1.33		
5	TOTAL REDUCTION IN INCOME TAX EXPENSE (3 x 4)				(53,602,277)		
6	AMORTIZATION OF EXCESS ADIT (PROTECTED) - (\$309,333,049 USING ARAM)			(11,459,997)			
7	AMORTIZATION OF EXCESS ADIT (UNPROTECTED) - (SL OVER 15 YEARS)			(850,810)			
8	TOTAL AMORTIZATION OF EXCESS ADIT (6 + 7)			(12,310,807)			
9	GROSS-UP FACTOR USING 25.74% EFFECTIVE TAX RATE			1.35			
10	TOTAL REDUCTION IN DEFERRED INCOME TAX EXPENSE (8 × 9)				(16,577,978)		
11	TOTAL REDUCTION IN REVENUE REQUIREMENTS (5 + 10)				(70,180,255)	(27,370,299)	(42,809,956)
12	ENERGY BILLING UNITS (TY KWH / 12 MO x 13 MO)				19,857,410,575	6,599,267,393	13,258,143,182
13	ENERGY CREDIT PER KWH (APRIL 1, 2018 - APRIL 30, 2019) (11 / 12)					(0.00415)	(0.00323)

EXHIBIT KWB-4 PAGE 2 OF 7

KENTUCKY UTILITIES COMPANY CASE NO. 2018-00034 COST OF CAPITAL SUMMARY SEVENTEEN MONTH AVERAGE FROM JANUARY 1, 2018 TO APRIL 30, 2019

LINE NO.	CLASS OF CAPITAL	REFERENCE	17 MONTH AVERAGE AMOUNT	ADJUSTMENT AMOUNT	ADJUSTED CAPITAL	JURISDICTIONAL RATE BASE PERCENTAGE	JURISDICTIONAL CAPITAL	JURISDICTIONAL ADJUSTMENTS	JURISDICTIONAL ADJUSTED CAPITAL	PERCENT OF	COST RATE	17 MONTH AVERAGE WEIGHTED COST	TAX GROSS-UP	WEIGHTED COST ADJUSTED FOR INCOME TAXES
	(A)	(B)	(C)	(D)	(E=C+D)	(F)	(G=ExF)	(H)	(I=G+H)	(J)	(K)	(L=JxK)	(M) AT 25.74%	(L+M)
			s	s	s		s	\$	S		%	%	%	%
1	SHORT-TERM DEBT		132,679,494	(10,583)	132,668,910	89.28%		(27,179,689) (487,240,099)			2.94% 4.26%	0.07%		0.07%
2	LONG-TERM DEBT		2,378,493,003	(103,724)	2,070,000,001	00.2010								
3	COMMON EQUITY		2,863,437,659	(732,473)	2,862,705,187	89.28%	2,555,823,191	(586,478,287)	1,969,344,904	53.27%	9.70% _	5.17%	1.79%	6.96%
4	TOTAL CAPITAL		5,374,612,758	(932,780)	5,373,679,978		4,797,621,484	(1,100,898,074)	3,696,723,410	100.00%		7.13%	1.79%	8.92%

NOTES:

(D) "ADJUSTMENT AMOUNTS" REMOVE NON-UTILITY PROPERTY, CONSISTENT WITH CASE NO. 2016-00370. SEE PAGE 3.

(F) "JURISDICTIONAL RATE BASE PERCENTAGE IS PER CASE NO. 2016-00370.

(H) "JURISDICTIONAL ADJUSTMENTS" REMOVE RATE BASE OF OTHER RATE MECHANISMS, MAINLY ECR. SEE PAGE 4.

(K) SEE CALCULATION OF DEBT COST RATES, PAGES 5 AND 6.

(M) SEE CALCULATION OF EFFECTIVE TAX RATE, PAGE 7.

KIUC Exhibit #2

APPENDIX C

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2018-00034 DATED MAR 2 0 2018

KENTUCKY UTILITES COMPANY CASE NO 2018-00034 OVERALL FINANCIAL SUMMARY

		CASE NO 2016-00370 Final Order									
		F	Rate of Return	F	tate of Return		Revenue	R	esidential Tariff	Residential Tanff	
Line			djusted for the		ljusted for the	Re	equirement		39% of	61% of	
110	DESCRIPTION		Federal Tax Rate		Federal Tax Rate		impact	T	otal Revenues	Total Revenues	
1	Capitalization Allocated to Kentucky Jurisdiction	5	3 607 984 536	5	3,607,984,536						
2	Required Rate of Return Adjusted for Income Taxes		10 25%		8 79%						
3											
-1	Required Annual Operating income Before Taxes (Line 1 x Line 2)	5	369 897 726	5	317 145 824	\$	(52 751 902)				
5	Years Equivalent To 16 Months (16/12)						1 33				
6											
7	Total Reduction in Income Tax Expense (Line 4 x Line 5)						(70 335 870)				
8											
9	Amortization of Excess ADIT (Protected) - (Using ARAM)				(11 459 997)						
10	Amortization of Excess ADIT (Unprotected) - (SI Over 15 Years)				(850 810)						
11											
12	Total Amortization of Excess ADIT (Line 9 + Line 10)				(12 310 807)						
13	Gross-Up Factor Using 25.64% Effective Tax Rate				1 34						
14											
15	Total Reduction in Deferred Income Tax Expense (Line 12 x Line 13)					-	(16 555,354)				
16											
17	Total Reduction in Revenue Requirements (Line 4 + Line 15)						(86,891 224)	5	(33.887.577)	5 (53 003 646)	
18	Energy Billing Units (TY kWh / 12 Mo X 13 M0)					15	9.857 410 575		6,599,267,393	13 258 143 182	
19											
20	Energy Credit Per kWh (April 1: 2018 - April 30: 2019) (Line 17 / Line 18)							5	(0.00514)	\$ (0.00400)	
21										Companyed the astronomy of the second	
22	Rate per Month Calculations										
23	Total Monthly Reduction In Revenue Requirements (Line 17 / 16 Mo)						(5.430,701)		(2,117,974)	(3.312.728)	
24	Energy Billing Units per Month (TY kWh / 12 Mo)					1	1 527 493 121		507 635 953	1 019 857 168	
25											
26	Monthly Energy Credit per kWh. (Line 22 / Line 23)					5	(0.00356)	5	(0 00417)	\$ (0.00325)	

The Rate of Return Adjusted for the 21 percent Federal Income Tax rate reflects the impact PSC Assessment rate of 0.320 percent and the Uncollectible rate of 0.1941 percent

APPENDIX C

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2018-00034 DATED MAR 2 0 2018

KENTUCKY UTILITES COMPANY CASE NO 2018-00034 OVERALL FINANCIAL SUMMARY

		CASE NO 2016-00370 Final Order								
			ate of Return		te of Return		Revenue	Residential Tarifi		Residential Tariff
Line	DESCRIPTION		Adjusted for the 35% Federal Tax Rate		usted for the ederal Tax Rate	Re	quirement	39% of Total Revenues		61% of
110	Capitalization Allocated to Kentucky Jurisdiction		successive statements and statements which we are statements	And a state of the second of the second s			Impact	total Revenues		Total Revenues
1		5	3 607 984 536	5	3,607,984,536					
2	Required Rate of Return Adjusted for Income Taxes		10 25%	****	8 79%					
4	Required Annual Operating income Before Taxes (Line 1 x Line 2)	5	369 897 726	\$	317,145,824	\$	(52,751,902)			
5	Years Equivalent To 16 Months (16/12)	MURINE	CARGO PROFESSION AND A CONTROL OF THE PARTY	DUAL BASIC MOUNT			1 33			
6										
7	Total Reduction in Income Tax Expense (Line 4 × Line 5)						(70 336 870)			
9	Amortization of Excess ADIT (Protected) - (Using ARAM)				(11 459 997)					
	Amortization of Excess ADIT (Unprotected) - (SI Over 15 Years)				(850 810)					
10 11	Amontzation of Excess Abir (only/wellied) - (or over 10 reast				(000 0 10)					
12	Total Amortization of Excess ADIT (Line 9 + Line 10)				(12 310 \$07)					
13 14	Gross-Up Factor Using 25.64% Effective Tar Rate				1 34					
15	Total Reduction in Deferred income Tax Expense (Line 12 x Line 13)						(16 555,354)			
16										
17	Total Reduction in Revenue Requirements (Line 4 + Line 15)						(86.891 224)	\$ (33.887.577	5	(53 003 646)
18	Energy Billing Units (TY kWh / 12 Mo X 13 M0)					19	857 410 575	6,599,267,39	3	13 258 143 182
19										
20	Energy Credit Per kWh (April 1: 2018 - April 30: 2019) (Line 17 / Line 18)							\$ (0.00514) 5	(0.00400)
21									-	
22	Rate per Month Calculations									
23	Total Monthly Reduction In Revenue Requirements (Line 17 / 16 Mo)						(5.430,701)	(2.117 974)	(3,312,728)
24	Energy Billing Units per Month (TY KWh / 12 Mo)					1	527,493 121	507 636 95	3	1 019 857 168
25							1		-	
26	Monthly Energy Credit per kWh. (Line 22 / Line 23)					S	(0.00356)	\$ (0.00417	5	(0.00325)

The Rate of Return Adjusted for the 21 percent Federal Income Tax rate reflects the impact PSC Assessment rate of 0.320 percent and the Uncollectible rate of 0.1941 percent

PSC EXHIBIT

PSC Exhibit #1

EXHIBIT KWB-3

PAGE 2 OF 5

KENTUCKY UTILITIES COMPANY CASE NO. 2018-00034 COMPUTATION OF COMPOSITE FEDERAL AND STATE INCOME TAX RATE

BASED ON LAW AS OF JANUARY 1, 2018

LINE NO.	DESCRIPTION		STATE	FEDERAL
1	OPERATING REVENUE		100.000000%	100.000000%
2	LESS: UNCOLLECTIBLE ACCOUNTS EXPENSE		0.320000%	0.320000%
3	LESS: PSC FEES	-	0.194100%	0.194100%
4	INCOME BEFORE STATE INCOME TAX (LINES 1 - 2 - 3)		99.485900%	99.485900%
5	STATE INCOME TAX (LINE 4 X 6.00%)	6.00%	5.969154%	5.969154%
6	INCOME BEFORE FEDERAL INCOME TAX (LINES 4 - 5)			93.516746%
7	FEDERAL INCOME TAX (LINE 6 X 21.00%)	21.00%	-	19.638517%
8	TOTAL STATE AND FEDERAL INCOME TAXES (LINES 5 + 7)		-	25.607671%

		EXHIBIT KWB-4	PSC
		PAGE 7 OF 7	REVISED
KENTUCKY UTILITIES COMPANY Calculation of Composite Federal and Kentucky Income Tax Rate (Based on Law in Effect January 1, 2018)			
Lased on Law in Linest bandary 1, 2010		Column F	Column G
1. Assume pre-tax income of		100.0000%	
Less Uncollectible accounts expense		0.320%	
Less PSC fees		0.1941%	
		99.4859%	
2. State income tax (see SIT calc below)		6.0000%	5.9692%
3. Taxable income for Federal income tax before production activities deduction		93.5167%	
a. Production Rate	9%		
b. Allocation to Production Income	66.87%		
c. Allocated Production Rate	0.0000%		
4. Less: Production tax deduction (0.0000% of Line 3)		0.0000%	
5. Taxable income for Federal income tax (Line 3 - Line 4)		93.5167%	
6. Federal income tax at 21% (Line 5 x 21%)		19.6385%	
7. Total State and Federal income taxes (Line 2 + Line 6)		25.6385%	25.607671%
State Income Tax Calculation			
1. Assume pre-tax income of		100.0000%	
2. Less: Production activities deduction @ 0% X 66.87% (1)		0.0000%	
3. Taxable income for State income tax		100.0000%	
4. State Tax Rate		6.0000%	
5. State Income Tax		6.0000%	

•

KENTUCKY UTILITIES COMPANY CASE NO. 2016-00370 COST OF CAPITAL SUMMARY THIRTEEN MONTH AVERAGE FROM JULY 1, 2017 TO JUNE 30, 2018

DATA: ____BASE PERIOD_X_FORECASTED PERIOD DATE OF CAPITAL STRUCTURE: 13 MO AVG FOR FORECASTED PERIOD TYPE OF FILING: _____ ORIGINAL _____ UPDATED __X_ REVISED WORKPAPER REFERENCE NO(S) .:

SCHEDULE J-1.1/J-1.2 PAGE 1 OF 3 WITNESS: D. K. ARBOUGH

LINE NO.	CLASS OF CAPITAL	WORKPAPER REFERENCE	13 MONTH AVERAGE AMOUNT	ADJUSTMENT AMOUNT	ADJUSTED CAPITAL	JURISDICTIONAL RATE BASE PERCENTAGE	JURISDICTIONAL CAPITAL	JURISDICTIONAL ADJUSTMENTS	JURISDICTIONAL ADJUSTED CAPITAL	PERCENT OF TOTAL	COST RATE	13 MONTH AVERAGE WEIGHTED COST
	(A)	(B)	(C)	(D)	(E=C+D)	(F)	(G=ExF)	(H)	(I=G+H)	(J)	(K)	(L=JxK)
			\$	\$	\$		\$	\$	\$		%	%
1	SHORT-TERM DEBT	J-2	129,187,211	(30,147)	129,157,064	89.28%	115,311,427	(26,243,510)	89,067,917	2.47%	0.74%	0.02%
2	LONG-TERM DEBT	J-3	2,315,890,751	(540,431)	2,315,350,320	89.28%	2,067,144,766	(470,457,572)	1,596,687,194	44.25%	4.12%	1.82%
3	COMMON EQUITY	-	2,788,572,734	(1,154,801)	2,787,417,932	89.28%	2,488,606,730	(566,377,305)	1,922,229,425	53.28%	9.70%	5.17%
4	TOTAL CAPITAL	-	5,233,650,696	(1,725,379)	5,231,925,316		4,671,062,922	(1,063,078,387)	3,607,984,536	100.00%	-	7.01%

REVISED PSC

KENTUCKY UTILITIES COMPANY CASE NO. 2016-00370 COST OF CAPITAL SUMMARY THIRTEEN MONTH AVERAGE FROM JULY 1, 2017 TO JUNE 30, 2018

DATA:____BASE_PERIOD__X_FORECASTED_PERIOD DATE OF CAPITAL STRUCTURE: 13 MO AVG FOR FORECASTED_PERIOD TYPE OF FILING: ____ORIGINAL ____UPDATED__X_REVISED WORKPAPER REFERENCE NO(S).:

SCHEDULE J-1.1/J-1.2 PAGE 1 OF 3 WITNESS: D. K. ARBOUGH

LINE NO.	CLASS OF CAPITAL	WORKPAPER REFERENCE	13 MONTH AVERAGE AMOUNT	ADJUSTMENT AMOUNT	ADJUSTED CAPITAL	JURISDICTIONAL RATE BASE PERCENTAGE	JURISDICTIONAL CAPITAL	JURISDICTIONAL ADJUSTMENTS	JURISDICTIONAL ADJUSTED CAPITAL	PERCENT OF TOTAL	COST RATE	13 MONTH AVERAGE WEIGHTED COST	TAX GROSS-UP	WEIGHTED COST ADJUSTED FOR INCOME TAXES	TAX GROSS-UP	COST ADJUSTED FOR INCOME TAXES
	(A)	(B)	(C)	(D)	(E=C+D)	(F)	(G=ExF)	(H)	(I=G+H)	(J)	(K)	(L=JxK)	38.56%	(L+M)	25.61%	(L+M)
			\$	\$	\$		\$	\$	\$		%	%	%	%	%	%
,	SHORT-TERM DEBT	J-2	129,187,211	(30,147)	129,157,064	89.28%	115,311,427	(26,243,510)	89,067,917	2.47%	0.74%	0.02%		0.02%		0.02%
2	LONG-TERM DEBT	J-3	2,315,890,751	(540,431)	2,315,350,320	89.28%	2,067,144,766	(470,457,572)	1,596,687,194	44.25%	4.12%	1.82%		1.82%		1.82%
3	COMMON EQUITY	-	2,788,572,734	(1,154,801)	2,787,417,932	89.28%	2,488,606,730	(566,377,305)	1,922,229,425	53.28%	9.70%	5.17%	3.24%	8.41%	1.78%	6.95%
4	TOTAL CAPITAL	_	5,233,650,696	(1,725,379)	5,231,925,316		4,671,062,922	(1,063,078,387)	3,607,984,536	100.00%		7.01%	3.24%	10.25%		8.7872%

APPENDIX C, Page 1

KENTUCKY UTILITIES COMPANY CASE NO. 2018-00034

ENERGY CREDIT CALCULATIONS

LINE NO.	DESCRIPTION	SUPPORTING SCHEDULE REFERENCE	CASE NO. 2016-00370 FINAL ORDER (7/1/2017 - 6/30/2018)	CASE NO. 2018-00370 FINAL ORDER (7/1/2017 - 6/30/2018) REFLECTING CHANGES TO FEDERAL INCOME TAX RATE	REVENUE REQUIREMENT IMPACT	RESIDENTIAL TARIFF (39% OF TOTAL REVENUES)	OTHER TARIFFS (61% OF TOTAL REVENUES)
			\$	\$	\$	\$	\$
1	CAPITALIZATION ALLOCATED TO KENTUCKY JURISDICTION	PAGE 2	3,607,984,536	3,607,984,536			
2	REQUIRED RATE OF RETURN ADJUSTED FOR INCOME TAXES	PAGE 2	10.25%	8.7872%	-1.46%		
3	REQUIRED HATE OF RETURN AUJUSTED FOR INCOME TAKES	PAGE 2	10.25%	8.7872%	-1.40%		
4	REQUIRED ANNUAL OPERATING INCOME BEFORE TAXES (Line 1 x Line 2)		369,897,726	317,041,856	(52,855,870)		
5	YEARS EQUIVALENT TO 16 MONTHS (16/12)		Contraction of the Contraction of the Contraction		1.33		
6							
7	TOTAL REDUCTION IN INCOME TAX EXPENSE (Line 4 x Line 5)				(70,474,494)		
8							
9	AMORTIZATION OF EXCESS ADIT (PROTECTED) - (\$309,333,049 USING ARAM)			(11,459,997)			
10	AMORTIZATION OF EXCESS ADIT (UNPROTECTED) - (SL OVER 15 YEARS)			(850,810)			
11							
12	TOTAL AMORTIZATION OF EXCESS ADIT (Line 9 + Line 10)			(12,310,807)			
13	GROSS-UP FACTOR USING 25.61% EFFECTIVE TAX RATE			1.34			
14							
15	TOTAL REDUCTION IN DEFERRED INCOME TAX EXPENSE (Line 12 x Line 13)				(16,548,489)		
16							
17	TOTAL REDUCTION IN REVENUE REQUIREMENTS (Line 7 + Line 15)				(87,022,983)	(33,938,963)	(53,084,020)
18	ENERGY BILLING UNITS (TY KWH / 12 MO x 13 MO)				19,857,410,575	6,599,267,393	13,258,143,182
19							
20	ENERGY CREDIT PER KWH (APRIL 1, 2018 - APRIL 30, 2019) (Line 17 / Line 18)					(0.0051428)	(0.0040039)
21							
22	RATE PER MONTH CALCULATIONS:						
23	TOTAL MONTHLY REDUCTION IN REVENUE REQUIREMENTS (Line 17 / 16 MO)				(5,438,936)	(2,121,185)	
24	ENERGY BILLING UNITS PER MONTH (TY KWH / 12 MO)				1,527,493,121	507,635,953	1,019,857,168
25							
26	MONTHLY ENERGY CREDIT PER KWH (Line 23 / Line 24)				(0.00356)	(0.0041786)	(0.0032532)

PSC Exhibit #2

REVISED PSC

APPENDIX C

KENTUCKY UTILITIES COMPANY CASE NO. 2018-00034

ENERGY CREDIT CALCULATIONS

LINE SCHEDULE SCHEDULE RELORATION PEDERAL INCOME TAX RELORATION (INTRACTION) REVENUES) (Intraction) NO DESCRIPTION REFERENCE (7/1/2017-6/3020) RATE INTRACTION ALLOCATED TO KENTUCKY JURISDICTION REVENUES) REVENUES) REVENUES) REVENUES) REVENUES) 1 CAPITALIZATION ALLOCATED TO KENTUCKY JURISDICTION PAGE 2 3.607,984,536 -<					CASE NO. 2010-00370 FINAL			
1 CAPITALIZATION ALLOCATED TO KENTUCKY JURISDICTION PAGE 2 3,607,984,536 3,607,984,536 -1,46% 2 REQUIRED RATE OF RETURN ADJUSTED FOR INCOME TAXES PAGE 2 10,25% 8,7872% -1,46% 4 REQUIRED ANNUAL OPERATING INCOME TAXES (Line 1 x Line 2) 369,897,726 317,041,866 (s2,855,870) 1,33 5 YEARS EQUIVALENT TO 16 MONTHS (16/12) 1,33 1,33 1,33 7 TOTAL REDUCTION IN INCOME TAX EXPENSE (Line 4 x Line 5) (70,474,494) 1,34 8 AMORTIZATION OF EXCESS ADIT (INPROTECTED) - (\$309,333,049 USING ARAM) (11,459,997) (850,810) 10 TOTAL REDUCTION IN INCOME TAX EXPENSE (Line 4 x Line 5) (12,310,807) 1,34 10 (12,310,807) 1,34 1,34 11 TOTAL REDUCTION IN DEPENDED (Line 1 x Line 13) (16,548,489) (16,548,489) 12 TOTAL REDUCTION IN DEPENDED (Line 7 + Line 13) (16,548,489) (12,57,693,212) (3,358,663) (32,358,663) (32,358,663) (32,358,663) (32,358,663) (32,358,663) (32,358,663) (32,358,663) (32,358,663) (32,358,663) (32,358,663) (32,358,663) (32,358,663) (32,358,663) <th></th> <th></th> <th>SCHEDULE</th> <th>FINAL ORDER</th> <th>(7/1/2017 - 6/30/2018) REFLECTING CHANGES TO FEDERAL INCOME TAX</th> <th>REQUIREMENT</th> <th>(39% OF TOTAL</th> <th>OTHER TARIFFS (61% OF TOTAL REVENUES)</th>			SCHEDULE	FINAL ORDER	(7/1/2017 - 6/30/2018) REFLECTING CHANGES TO FEDERAL INCOME TAX	REQUIREMENT	(39% OF TOTAL	OTHER TARIFFS (61% OF TOTAL REVENUES)
2 REQUIRED RATE OF RETURN ADJUSTED FOR INCOME TAXES PAGE 2 10.25% 8.7872% 1.46% 4 REQUIRED ANNUAL OPERATING INCOME BEFORE TAXES (Line 1 x Line 2) 369,897.726 317,041,856 (52,855,870) 1.33 5 YEARS EQUIVALENT TO 16 MONTHS (16/12) 1.33 1.33 1.33 6 TOTAL REDUCTION IN INCOME TAX EXPENSE (Line 4 x Line 5) (70,474,494) 1.33 7 TOTAL REDUCTION IN INCOME TAX EXPENSE (Line 4 x Line 5) (70,474,494) 1.33 8 AMORTIZATION OF EXCESS ADIT (PROTECTED) - (\$309,333,049 USING ARAM) (11,459,997) 1.34 9 AMORTIZATION OF EXCESS ADIT (Line 9 + Line 10) (12,310,807) 1.34 10 TOTAL AMORTIZATION OF EXCESS ADIT (Line 9 + Line 10) (12,310,807) 1.34 11 TOTAL REDUCTION IN DEFERRED INCOME TAX EXPENSE (Line 12 x Line 13) (16,548,489) 1.33 12 TOTAL REDUCTION IN REVENUE REQUIREMENTS (Line 7 + Line 15) (67,022,983) (33,938,983) (53,938,733) 13 ENERGY BILLING UNITS (TY KWH / 12 MO X 13 MO) (16,548,489) 1.38,7410,575 6,599,827,333 13,25 14 1				\$	\$	\$	\$	\$
PAGE 2 10.25% 8.7672% 1.46% REQUIRED ANTUAL OPERATING INCOME BEFORE TAXES (Line 1 x Line 2) 369,897,726 317,041,856 (s2.855,870) YEARS EQUIVALENT TO 16 MONTHS (16/12) 1.33 1.33 1.33 TOTAL REDUCTION IN INCOME TAX EXPENSE (Line 4 x Line 5) (70.474,494) 1.33 MORTIZATION OF EXCESS ADIT (PROTECTED) - (S309,333,049 USING ARAM) (11.459,997) (850,810) AMORTIZATION OF EXCESS ADIT (Line 9 + Line 10) (12.310,807) (850,810) TOTAL REDUCTION IN DEFERTED INCOME TAX EXPENSE (Line 12 x Line 13) (16.548,489) 1.34 TOTAL REDUCTION IN DEFERRED INCOME TAX EXPENSE (Line 12 x Line 13) (16.548,489) 1.38 TOTAL REDUCTION IN DEFERRED INCOME TAX EXPENSE (Line 12 x Line 13) (16.548,489) 1.38 TOTAL REDUCTION IN DEFERRED INCOME TAX EXPENSE (Line 12 x Line 13) (16.548,489) 1.38 TOTAL REDUCTION IN REVENUE REQUIREMENTS (Line 7 + Line 15) (60.0051428) (60.0051428) ENERGY CREDIT PER KWH (APRIL 1, 2018 - APRIL 30, 2019) (Line 17 / Line 18) (6.548,936) (2.121,185) (7.121,185) RATE PER MONTH CALCULATIONS: 1.527,493,121 507,635,953,101 1.527,493,121 507,635,953,101	1	CAPITALIZATION ALLOCATED TO KENTLICKY JURISDICTION	PAGE 2	2 607 084 626	2 507 004 525			
A REQUIRED ANNUAL OPERATING INCOME BEFORE TAXES (Line 1 x Line 2) 369,897,726 317,041,856 (52,855,870) YEARS EQUIVALENT TO 16 MONTHS (16/12) 1.33 1.33 TOTAL REDUCTION IN INCOME TAX EXPENSE (Line 4 x Line 5) (70,474,494) 1.33 AMORTIZATION OF EXCESS ADIT (PROTECTED) - (\$209,333,049 USING ARAM) (11,459,997) (80,010) AMORTIZATION OF EXCESS ADIT (UNPROTECTED) - (\$209,333,049 USING ARAM) (11,459,097) (80,010) TOTAL AMORTIZATION OF EXCESS ADIT (UNPROTECTED) - (\$200,833,049 USING ARAM) (11,459,097) (80,010) GROSS-UP FACTOR USING 25,61% EFFECTIVE TAX RATE 1.34	2					-		
5 YEARS EQUIVALENT TO 16 MONTHS (16/12) 1.33 7 TOTAL REDUCTION IN INCOME TAX EXPENSE (Line 4 x Line 5) (70, 474, 494) 9 AMORTIZATION OF EXCESS ADIT (PROTECTED) - (\$309, 333, 049 USING ARAM) (11, 459, 997) 10 AMORTIZATION OF EXCESS ADIT (UNPROTECTED) - (\$LO VER 15 YEARS) (850, 810) 11 TOTAL AMORTIZATION OF EXCESS ADIT (UNPROTECTED) - (\$LO VER 15 YEARS) (850, 810) 12 TOTAL AMORTIZATION OF EXCESS ADIT (UNPROTECTED) - (\$LO VER 15 YEARS) (850, 810) 13 GROSS-UP FACTOR USING 25.61% EFFECTIVE TAX RATE 1.34 14 1.34 15 TOTAL REDUCTION IN DEFERRED INCOME TAX EXPENSE (Line 12 x Line 13) (16, 548, 489) 16 19,857.410,575 6,599,267,393 13,25 18 ENERGY CREDIT PER KWH (APRIL 1, 2018 - APRIL 30, 2019) (Line 17 / Line 18) (0.0051428) (0.0051428) 21 RATE PER MONTH CALCULATIONS: 1,527,493,121 507,635,653 1,01 22 RATE PER MONTH CALCULATION IN REVENUE REQUIREMENTS (Line 17 / 16 MO) (5,438,936) (2,121,165) (0.0051428) 23 TOTAL MONTH REVENUE REQUIREMENTS (Line 17 / 16 MO) (5,438,936) (2,121,165) (0.0053,953 1,01		HEROTHED HATE OF HETOTIN ADJUSTED FOR INCOME TAKES	PAGE 2	10.25%	8.7872%	-1.46%		
5 YEARS EQUIVALENT TO 16 MONTHS (18/12) 1.3 6 (70,474,494) 7 TOTAL REDUCTION IN INCOME TAX EXPENSE (Line 4 x Line 5) (70,474,494) 9 AMORTIZATION OF EXCESS ADIT (PROTECTED) - (\$309,333,049 USING ARAM) (11,459,997) 10 AMORTIZATION OF EXCESS ADIT (UNPROTECTED) - (\$209,333,049 USING ARAM) (11,459,997) 11 MORTIZATION OF EXCESS ADIT (UNPROTECTED) - (\$209,333,049 USING ARAM) (12,310,807) 12 TOTAL AMORTIZATION OF EXCESS ADIT (UNPROTECTED) - (\$209,333,049 USING ARAME 1.34 13 TOTAL ARDUCTION IN PEXCESS ADIT (UNPROTECTED) - (\$1,0 VER 15 YEARS) (850,810) 14 TOTAL REDUCTION IN DEFERRED INCOME TAX EXPENSE (Line 12 x Line 13) (12,310,807) 15 TOTAL REDUCTION IN REVENUE REQUIREMENTS (Line 12 x Line 13) (16,548,489) 16 Instruments (Y KWH / 12 MO X 13 MO) 19,857,410,575 6,599,267,393 13,25 18 ENERGY CREDIT PER KWH (APRIL 1, 2018 - APRIL 30, 2019) (Line 17 / Line 18) (0.0051428) (0 21 RATE PER MONTH CALCULATIONS: 1,527,493,121 507,635,653 1,57 22 RATE PER MONTH CALCULATIONS: 1,527,493,121 507,635,65	4	REQUIRED ANNUAL OPERATING INCOME BEFORE TAXES (Line 1 x Line 2)		369,897,726	317.041.856	(52,855,870)		
6 (7) TOTAL REDUCTION IN INCOME TAX EXPENSE (Line 4 x Line 5) (70, 474, 494) 7 TOTAL REDUCTION IN INCOME TAX EXPENSE (Line 4 x Line 5) (11, 459, 977) 8 (11, 459, 977) (11, 459, 977) 9 AMORTIZATION OF EXCESS ADIT (UNPROTECTED) - (\$10, 0VER 15 YEARS) (11, 459, 977) 10 AMORTIZATION OF EXCESS ADIT (UNPROTECTED) - (\$10, 0VER 15 YEARS) (12, 310, 807) 11 TOTAL AMORTIZATION OF EXCESS ADIT (LINE 9 + Line 10) (12, 310, 807) 12 TOTAL REDUCTION IN DEFERRED INCOME TAX EXPENSE (Line 12 x Line 13) (16, 548, 489) 16 TOTAL REDUCTION IN REVENUE REQUIREMENTS (Line 7 + Line 15) (67, 022, 983) (33, 938, 963) (15, 12, 12, 12, 12, 12, 12, 12, 12, 12, 12	5	YEARS EQUIVALENT TO 16 MONTHS (16/12)				1.33		
Intervention of the control of the	6							
AMORTIZATION OF EXCESS ADIT (PROTECTED) - (\$309,333,049 USING ARAM) (11,459,997) AMORTIZATION OF EXCESS ADIT (UNPROTECTED) - (\$10 OVER 15 YEARS) (850,810) Image: Comparison of Excess ADIT (UNPROTECTED) - (\$10 OVER 15 YEARS) (12,310,807) Image: Comparison of Excess ADIT (Line 9 + Line 10) (12,310,807) Image: Comparison of Excess ADIT (Line 9 + Line 10) (12,310,807) Image: Comparison of Excess ADIT (Line 9 + Line 10) (12,310,807) Image: Comparison of Excess ADIT (Line 9 + Line 10) (12,310,807) Image: Comparison of Excess ADIT (Line 9 + Line 10) (12,310,807) Image: Comparison of Excess ADIT (Line 9 + Line 10) (12,310,807) Image: Comparison of Excess ADIT (Line 9 + Line 10) (12,310,807) Image: Comparison of Excess ADIT (Line 9 + Line 10) (16,548,489) Image: Comparison of Excess ADIT (Line 12 x Line 13) (16,548,489) Image: Comparison of Excess ADIT (Tr KWH / 12 MO x 13 MO) (9,857,410,575 6,599,267,393 13,257 Image: Comparison of Excess ADIT (Excess ADIT (Line 17 / Line 18) (0,00051428) (0 (0,00051428) (0,00051428) (0,00051428) (0,00051428) (0,00051428) (0,00051428) (0,00051428) (0,00051428) (0,00051428) (0,00051428) (0,00051428)	7	TOTAL REDUCTION IN INCOME TAX EXPENSE (Line 4 x Line 5)				(70,474,494)		
AMORTIZATION OF EXCESS ADIT (UNPROTECTED) - (SL OVER 15 YEARS) (850,810) 12 TOTAL AMORTIZATION OF EXCESS ADIT (Line 9 + Line 10) (12,310,807) 13 (12,310,807) 13 (12,310,807) 13 (16,548,489) 14 (16,548,489) 15 TOTAL REDUCTION IN DEFERRED INCOME TAX EXPENSE (Line 12 x Line 13) (16,548,489) 16 (16,548,489) 17 TOTAL REDUCTION IN REVENUE REQUIREMENTS (Line 7 + Line 15) (16,548,489) 18 ENERGY BILLING UNITS (TY KWH / 12 MO x 13 MO) 19,857,410,575 6,599,267,393 13,25 19 ENERGY CREDIT PER KWH (APRIL 1, 2018 - APRIL 30, 2019) (Line 17 / Line 18) (0.0051428) (0 20 ENERGY CREDIT PER KWH (APRIL 1, 2018 - APRIL 30, 2019) (Line 17 / Line 18) (10,0051428) (10,0051428) 21 RATE PER MONTH CALCULATIONS: 1,527,493,121 507,635,953 1,01 22 RATE PER MONTH CALCULATIONS: 1,527,493,121 507,635,953 1,01 23 TOTAL MONTHLY REDUCTION IN REVENUE REQUIREMENTS (Line 17 / 16 MO) 1,527,493,121 507,635,953 1,01 24 ENERGY BILLING UNITS PER MONTH (TY KWH / 12 MO) 1,527,493,121 <t< td=""><td>8</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	8							
11 (500,810) 12 TOTAL AMORTIZATION OF EXCESS ADIT (Line 9 + Line 10) (12,310,807) 13 GROSS-UP FACTOR USING 25.61% EFFECTIVE TAX RATE 1.34 14 1.34 15 TOTAL REDUCTION IN DEFERRED INCOME TAX EXPENSE (Line 12 x Line 13) (16,548,489) 16 (16,548,489) 17 TOTAL REDUCTION IN REVENUE REQUIREMENTS (Line 7 + Line 15) (67,022,983) (33,938,963) (55,099,267,393) 18 ENERGY BILLING UNITS (TY KWH / 12 MO x 13 MO) 19,857,410,575 6,599,267,393 13,255 19 ENERGY CREDIT PER KWH (APRIL 1, 2018 - APRIL 30, 2019) (Line 17 / Line 18) (0.0051428) (0 21 RATE PER MONTH CALCULATIONS: (5,438,936) (2,121,185) (1 22 RATE PER MONTH CALCULATIONS: (5,438,936) (2,121,185) (1 24 ENERGY BILLING UNITS PER MONTH (TY KWH / 12 MO) 1,527,493,121 507,635,953 1,01 25 HORTUNATION PER MONTH (TY KWH / 12 MO) 1,527,493,121 507,635,953 1,01	9	AMORTIZATION OF EXCESS ADIT (PROTECTED) - (\$309,333,049 USING ARAM)			(11,459,997)			
12 TOTAL AMORTIZATION OF EXCESS ADIT (Line 9 + Line 10) (12,310,807) 13 GROSS-UP FACTOR USING 25.61% EFFECTIVE TAX RATE 1.34 14 1.34 15 TOTAL REDUCTION IN DEFERRED INCOME TAX EXPENSE (Line 12 x Line 13) (16,548,489) 16 (16,548,489) 17 TOTAL REDUCTION IN REVENUE REQUIREMENTS (Line 7 + Line 15) (87,022,983) (33,938,963) (55,138) 18 ENERGY BILLING UNITS (TY KWH / 12 MO x 13 MO) 19,857,410,575 6,599,267,393 13,25 19 ENERGY CREDIT PER KWH (APRIL 1, 2018 - APRIL 30, 2019) (Line 17 / Line 18) (0,0051428) (0,0051428) 12 RATE PER MONTH CALCULATIONS: (5,438,936) (2,121,165) (2,2121,165) 12 TOTAL MONTHLY REDUCTION IN REVENUE REQUIREMENTS (Line 17 / 16 MO) (5,438,936) (2,121,165) (2,121,165) 14 ENERGY BILLING UNITS PER MONTH (TY KWH / 12 MO) 1,527,493,121 507,635,953 1,01	10	AMORTIZATION OF EXCESS ADIT (UNPROTECTED) - (SL OVER 15 YEARS)			(850,810)			
13 GROSS-UP FACTOR USING 25.61% EFFECTIVE TAX RATE 1.34 14 1.34 15 TOTAL REDUCTION IN DEFERRED INCOME TAX EXPENSE (Line 12 x Line 13) (16,548,489) 16 (16,548,489) 17 TOTAL REDUCTION IN REVENUE REQUIREMENTS (Line 7 + Line 15) (87,022,983) (33,938,963) (53,038,963) 18 ENERGY BILLING UNITS (TY KWH / 12 MO x 13 MO) 19,857,410,575 6,599,267,393 13,25 19 ENERGY CREDIT PER KWH (APRIL 1, 2018 - APRIL 30, 2019) (Line 17 / Line 18) (0.0051428) (0 20 ENERGY CREDIT PER KWH (APRIL 1, 2018 - APRIL 30, 2019) (Line 17 / Line 18) (0.0051428) (0 21 RATE PER MONTH CALCULATIONS: (5,438,936) (2,121,185) (0 24 ENERGY BILLING UNITS PER MONTH (TY KWH / 12 MO) 1,527,493,121 507,635,953 1,01 25 HONTH CALCULATIONS IN REVENUE REQUIREMENTS (Line 17 / 16 MO) 1,527,493,121 507,635,953 1,01 26 HONTH CALCULATION IN REVENUE REQUIREMENTS (Line 17 / 16 MO) 1,527,493,121 507,635,953 1,01	11							
14 1.54 15 TOTAL REDUCTION IN DEFERRED INCOME TAX EXPENSE (Line 12 x Line 13) (16,548,489) 16 (16,548,489) 17 TOTAL REDUCTION IN REVENUE REQUIREMENTS (Line 7 + Line 15) (67,022,983) (33,938,963) (53) 18 ENERGY BILLING UNITS (TY KWH / 12 MO x 13 MO) 19,857,410,575 6,599,267,393 13,255 19 ENERGY CREDIT PER KWH (APRIL 1, 2018 - APRIL 30, 2019) (Line 17 / Line 18) (0.0051428) (0 20 ENERGY CREDIT PER KWH (APRIL 1, 2018 - APRIL 30, 2019) (Line 17 / Line 18) (0.0051428) (0 21 RATE PER MONTH CALCULATIONS: 1 1 1 21 ENERGY BILLING UNITS PER MONTH (TY KWH / 12 MO) 1,527,493,121 507,635,953 1,01 22 RATE PER MONTH (TY KWH / 12 MO) 1,527,493,121 507,635,953 1,01 23 TOTAL MONTHLY REDUCTION IN REVENUE REQUIREMENTS (Line 17 / 16 MO) 1,527,493,121 507,635,953 1,01 24 ENERGY BILLING UNITS PER MONTH (TY KWH / 12 MO) 1,527,493,121 507,635,953 1,01	12	TOTAL AMORTIZATION OF EXCESS ADIT (Line 9 + Line 10)			(12,310,807)			
15 TOTAL REDUCTION IN DEFERRED INCOME TAX EXPENSE (Line 12 x Line 13) (16,548,489) 16 16 17 TOTAL REDUCTION IN REVENUE REQUIREMENTS (Line 7 + Line 15) (87,022,983) (33,938,963) (53 18 ENERGY BILLING UNITS (TY KWH / 12 MO x 13 MO) 19,857,410,575 6,599,267,393 13,25 19 ENERGY CREDIT PER KWH (APRIL 1, 2018 - APRIL 30, 2019) (Line 17 / Line 18) (0.0051428) (0 20 ENERGY CREDIT PER KWH (APRIL 1, 2018 - APRIL 30, 2019) (Line 17 / Line 18) (0.0051428) (0 21 RATE PER MONTH CALCULATIONS: 1,527,433,121 507,635,953 1,01 22 RATE PER MONTH CALCULATIONS: 1,527,493,121 507,635,953 1,01 24 ENERGY BILLING UNITS PER MONTH (TY KWH / 12 MO) 1,527,493,121 507,635,953 1,01	13	GROSS-UP FACTOR USING 25.61% EFFECTIVE TAX RATE			1.34			
16 (87,022,983) (33,938,963) (53 17 TOTAL REDUCTION IN REVENUE REQUIREMENTS (Line 7 + Line 15) (87,022,983) (33,938,963) (53 18 ENERGY BILLING UNITS (TY KWH / 12 MO x 13 MO) 19,857,410,575 6,599,267,393 13,25 19 ENERGY CREDIT PER KWH (APRIL 1, 2018 - APRIL 30, 2019) (Line 17 / Line 18) (0.0051428) (0 20 ENERGY CREDIT PER KWH (APRIL 1, 2018 - APRIL 30, 2019) (Line 17 / Line 18) (2,121,185) (0 21 FATE PER MONTH CALCULATIONS: 1,527,493,69 (2,121,185) (0 24 ENERGY BILLING UNITS PER MONTH (TY KWH / 12 MO) 1,527,493,121 507,635,953 1,01 25 UOUTUUT DEFENDENCEMENTS (Line 17 / 16 MO) 1,527,493,121 507,635,953 1,01	14							
17 TOTAL REDUCTION IN REVENUE REQUIREMENTS (Line 7 + Line 15) (87,022,983) (33,938,963) (53 18 ENERGY BILLING UNITS (TY KWH / 12 MO x 13 MO) 19,857,410,575 6,599,267,393 13,25 19 Image: Comparison of the compar	15	TOTAL REDUCTION IN DEFERRED INCOME TAX EXPENSE (Line 12 x Line 13)				(16,548,489)		
18 ENERGY BILLING UNITS (TY KWH / 12 MO x 13 MO) 19,857,410,575 6,599,267,393 13,255 19 ENERGY CREDIT PER KWH (APRIL 1, 2018 - APRIL 30, 2019) (Line 17 / Line 18) (0.0051428) (0 20 ENERGY CREDIT PER KWH (APRIL 1, 2018 - APRIL 30, 2019) (Line 17 / Line 18) (2,121,185) (0 21 707AL MONTH CALCULATIONS: 2 2 FORTAL MONTHLY REDUCTION IN REVENUE REQUIREMENTS (Line 17 / 16 MO) (2,121,185) (3 24 ENERGY BILLING UNITS PER MONTH (TY KWH / 12 MO) 1,527,493,121 507,635,953 1,01 25 HOUTUNE DEFENSION OF DEFENSION O	16							
19 19 20 ENERGY CREDIT PER KWH (APRIL 1, 2018 - APRIL 30, 2019) (Line 17 / Line 18) (0.0051428) (0 21 21 21 23 TOTAL MONTHLY REDUCTION IN REVENUE REQUIREMENTS (Line 17 / 16 MO) (5,438,936) (2,121,185) (3 24 ENERGY BILLING UNITS PER MONTH (TY KWH / 12 MO) 1,527,493,121 507,635,953 1,01	17	TOTAL REDUCTION IN REVENUE REQUIREMENTS (Line 7 + Line 15)				(87,022,983)	(33,938,963)	(53,084,020)
20 ENERGY CREDIT PER KWH (APRIL 1, 2018 - APRIL 30, 2019) (Line 17 / Line 18) (0.0051428) (0 21 21 22 RATE PER MONTH CALCULATIONS: (5,438,936) (2,121,185) (2 23 TOTAL MONTHLY REDUCTION IN REVENUE REQUIREMENTS (Line 17 / 16 MO) (5,438,936) (2,121,185) (3 24 ENERGY BILLING UNITS PER MONTH (TY KWH / 12 MO) 1,527,493,121 507,635,953 1,01 25 400171111111111111111111111111111111111	18	ENERGY BILLING UNITS (TY KWH / 12 MO x 13 MO)				19,857,410,575	6,599,267,393	13,258,143,182
21 21 22 RATE PER MONTH CALCULATIONS: 23 TOTAL MONTHLY REDUCTION IN REVENUE REQUIREMENTS (Line 17 / 16 MO) 24 ENERGY BILLING UNITS PER MONTH (TY KWH / 12 MO) 25 1,527,493,121 26 MONTHLY EDUCTION IN REVENUE REQUIREMENTS (Line 17 / 16 MO) 27 ENERGY BILLING UNITS PER MONTH (TY KWH / 12 MO) 28 MONTHLY EDUCTION IN REVENUE REQUIREMENTS (Line 17 / 16 MO)	19							
22 RATE PER MONTH CALCULATIONS: 23 TOTAL MONTHLY REDUCTION IN REVENUE REQUIREMENTS (Line 17 / 16 MO) (5,438,936) (2,121,185) (3 24 ENERGY BILLING UNITS PER MONTH (TY KWH / 12 MO) 1,527,493,121 507,635,953 1,01 25 INDUCTION IN REVENUE REQUIREMENTS (Line 17 / 16 MO) 1,527,493,121 507,635,953 1,01	20	ENERGY CREDIT PER KWH (APRIL 1, 2018 - APRIL 30, 2019) (Line 17 / Line 18)					(0.0051428)	(0.0040039)
23 TOTAL MONTHLY REDUCTION IN REVENUE REQUIREMENTS (Line 17 / 16 MO) (2,121,185) (3 24 ENERGY BILLING UNITS PER MONTH (TY KWH / 12 MO) 1,527,493,121 507,635,953 1,01 25 MONTHLY EDUCTION IN REVENUE REQUIREMENTS (Line 17 / 16 MO) 1,527,493,121 507,635,953 1,01	21							
24 ENERGY BILLING UNITS PER MONTH (TY KWH / 12 MO) 1,527,493,121 507,635,953 1,01 25 0 NONTHLY ENERGY ENERGY ENERGY ENERGY 1,527,493,121 507,635,953 1,01	22	RATE PER MONTH CALCULATIONS:						
	23	TOTAL MONTHLY REDUCTION IN REVENUE REQUIREMENTS (Line 17 / 16 MO)				(5,438,936)	(2,121,185)	(3,317,751)
	24	ENERGY BILLING UNITS PER MONTH (TY KWH / 12 MO)				1,527,493,121	507,635,953	1,019,857,168
26 MONTHLY ENERGY CREDIT PER KWH (Line 34)	25							
(0.0041786) (0.004	26	MONTHLY ENERGY CREDIT PER KWH (Line 23 / Line 24)				(0.00356)	(0.0041786)	(0.0032532)

PSC Exhibit #3

Louisvie Gas and Electric Company Gas Operations Energy Credit Calculations

		Case No. 2016-00371 Final Order									
		Ra	ite of Return	Rat	e of Return	F	levenue	Re	sidential Tanti	Res	identiai Tanff
Line		Adj	usted for the	Adju	sted for the	Re	quirement		65.4% 01		34.6% 01
No	DESCRIPTION	35% F	ederal Tax Rate	21% Fe	derai Tax Rate		impact	To	tai Revenues	Tota	al Revenues
1	Capitalization Allocated to Kentucky Jurisdiction	5	695 552 077	\$	695, 552, 077						
2 3	Required Rate of Return Adjusted for income Taxes		10 22%		8.75%						
4	Required Annual Operating income Before Taxes (Line 1 x Line 2)	S	71 058 758	S	60,876,875	\$	(10.181.882)				
5	Years Equivalent To 16 Months (16/12)	1000000002230		and a movie of second			1 33				
7	Total Reduction in Income Tax Expense (Line 4 x Line 5)						(13.575.843)				
9	Amortization of Excess ADIT (Protected) - (Using ARAM)				(1,950.880)						
10 11	Amortization of Excess ADIT (Unprotected) - (SI Over 15 Years)				(223,585)						
12	Total Amortization of Excess ADIT (Line 9 + Line 10)				(2.174.466)						
13 14	Gross-Up Factor Using 25.64% Effective Tax Rate				1 35						
15 16	Total Reduction in Deferred income Tax. Expense (Line 12 x Line 13)						(2.928.434)				
17	Total Reduction in Revenue Requirements (Line 4 + Line 15)						(16 504 277)	S	(10 793 797)	5	(5 7 10 480)
18	Energy Billing Units (TY KWh / 12 Mo X 13 MO)								211 426 821		270 175 003
19											
20 21	Energy Credit Per KWh (April 1, 2018 - April 30, 2019) (Line 17 / Line 18)							5	(0.05105)	5	(0.02114)
22	Rate per Month Calculations										
23	Total Monthly Reduction In Revenue Requirements (Line 17 / 16 Mo)						(1 031 517)		(674 612)		(356 905)
24	Energy Billing Units per Month (TY kWh / 12 Mo)						37.046.294		16 263 602		20 782 693
25											
26	Monthly Energy Credit per kWh. (Line 22 / Line 23)					S secondaria	(0 02784)	\$	(0.04148)	S	(0 0 17 17)

The Rate of Return Adjusted for the 21 percent Federal Income Tax rate reflects the impact PSC Assessment rate of 0.320 percent and the Uncollectible rate of 0.1941 percent

Appendix C Case No. 2018-00034

EXHIBIT KWB-3 PAGE 5 OF 5

LOUISVILLE GAS AND ELECTRIC COMPANY CASE NO. 2018-00034 COMPUTATION OF COMPOSITE FEDERAL AND STATE INCOME TAX RATE BASED ON LAW AS OF JANUARY 1, 2018

LINE NO.	DESCRIPTION		STATE	FEDERAL
1	OPERATING REVENUE		100.000000%	100.000000%
2	LESS: UNCOLLECTIBLE ACCOUNTS EXPENSE		0.194000%	0.194000%
3	LESS: PSC FEES	-	0.194100%	0.194100%
4	INCOME BEFORE STATE INCOME TAX (LINES 1 - 2 - 3)		99.611900%	99.611900%
5	STATE INCOME TAX (LINE 4 X 6.00%)	6.00%	5.976714%	5.976714%
6	INCOME BEFORE FEDERAL INCOME TAX (LINES 4 - 5)			93.635186%
7	FEDERAL INCOME TAX (LINE 6 X 21.00%)	21.00%	-	19.663389%
8	TOTAL STATE AND FEDERAL INCOME TAXES (LINES 5 + 7)		-	25.640103%

EXHIBIT KWB-5 PSC PAGE 6 OF 6 REVISED

LOUISVILLE GAS AND ELECTRIC COMPANY Calculation of Composite Federal and Kentucky Income Tax Rate

(Based on Law in Effect January 1, 2018)

1. Assume pre-tax income of Less Uncollectible accounts expense Less PSC fees		100.0000% 0.320% 0.1941% 99.4859%		0.194% 0.1941% 99.6119%
2. State income tax (see SIT calc below)	-	6.0000%	5.969%	5.976714%
 3. Taxable income for Federal income tax before production activities deduction a. Production Rate b. Allocation to Production Income c. Allocated Production Rate 	9% 54.92% 0.0000%	94.0308%		93.6352%
4. Less: Production tax deduction (0.0000% of Line 3)	0.000078	0.0000%		
5. Taxable income for Federal income tax (Line 3 - Line 4)		94.0308%		93.63519%
6. Federal income tax at 21% (Line 5 x 21%)	-	19.7465%	-	19.6634%
7. Total State and Federal income taxes (Line 2 + Line 6)	-	25.7465%	25.715632%	25.64010%
State Income Tax Calculation 1. Assume pre-tax income of		100.0000%		
2. Less: Production activities deduction @ 0% X 54.92% (1)	-	0.0000%		
3. Taxable income for State income tax		100.0000%		
4. State Tax Rate	-	6.0000%		
5. State Income Tax	-	6.0000%		

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2016-00371

COST OF CAPITAL SUMMARY

THIRTEEN MONTH AVERAGE

FROM JULY 1, 2017 TO JUNE 30, 2018

DATA:____BASE PERIOD__X_FORECASTED PERIOD DATE OF CAPITAL STRUCTURE: 13 MO AVG FOR FORECASTED PERIOD TYPE OF FILING: _____ORIGINAL _____UPDATED __X_ REVISED WORKPAPER REFERENCE NO(S).:

SCHEDULE J-1.1/J-1.2

PAGE 1 OF 4

WITNESS: D. K. ARBOUGH

LINE NO.	CLASS OF CAPITAL	WORKPAPER REFERENCE	13 MONTH AVERAGE AMOUNT	JURISDICTIONAL RATE BASE PERCENTAGE	JURISDICTIONAL CAPITAL	ADJUSTMENT AMOUNT	JURISDICTIONAL ADJUSTED CAPITAL	PERCENT OF TOTAL	COST RATE	13 MONTH AVERAGE WEIGHTED COST
	(A)	(B)	(C)	(D)	(E=CxD)	(F)	(G=E+F)	(H)	(I)	(J=HxI)
			\$	%	\$	\$	\$		%	%
	ELECTRIC:									
1	SHORT-TERM DEBT	J-2	159,467,796	82.68%	131,847,974	(40,566,630)	91,281,343	3.82%	0.72%	0.03%
2	LONG-TERM DEBT	J-3	1,790,485,621	82.68%	1,480,373,511	(455,477,345)	1,024,896,166	42.91%	4.12%	1.77%
3	COMMON EQUITY	-	2,222,485,866	82.68%	1,837,551,314	(565,372,852)	1,272,178,462	53.27%	9.70%	5.17%
4	TOTAL CAPITAL	=	4,172,439,283	:	3,449,772,799	(1,061,416,828)	2,388,355,971	100.00%	-	6.96%

. 1967 . 46

LOUISVILLE GAS AND ELECTRIC COMPANY CASE NO. 2016-00371 COST OF CAPITAL SUMMARY THIRTEEN MONTH AVERAGE FROM JULY 1, 2017 TO JUNE 30, 2018

DATA: ____BASE PERIOD_X_FORECASTED PERIOD DATE OF CAPITAL STRUCTURE: 13 MO AVG FOR FORECASTED PERIOD TYPE OF FILING: _____ ORIGINAL _____ UPDATED __X_ REVISED WORKPAPER REFERENCE NO(S).:

SCHEDULE J-1.1/J-1.2

PAGE 1 OF 4

WITNESS: D. K. ARBOUGH

CLASS OF CAPITAL	WORKPAPER REFERENCE	13 MONTH AVERAGE AMOUNT	JURISDICTIONAL RATE BASE PERCENTAGE	JURISDICTIONAL CAPITAL	ADJUSTMENT AMOUNT	JURISDICTIONAL ADJUSTED CAPITAL	PERCENT	COST	13 MONTH AVERAGE WEIGHTED COST	TAX GROSS-UP	WEIGHTED COST ADJUSTED FOR INCOME TAXES	TAX GROSS-UP	WEIGHTED COST ADJUSTED FOR INCOME TAXES
(A)	(B)	(C)	(D)	(E=CxD)	(F)	(G=E+F)	(H)	(1)	(J=HxI)	38.65%		25.64%	
		\$	%	\$	\$	\$		%	%	%	%	%	
ELECTRIC:													
SHORT-TERM DEBT	J-2	159,467,796	82.68%	131,847,974	(40,566,630)	91,281,343	3.82%	0.72%	0.03%		0.03%		0.03%
LONG-TERM DEBT	J-3	1,790,485,621	82.68%	1,480,373,511	(455,477,345)	1,024,896,166	42.91%	4.12%	1.77%		1.77%		1.77%
COMMON EQUITY	-	2,222,485,866	82.68%	1,837,551,314	(565,372,852)	1,272,178,462	53.27%	9.70%	5.17%	3.26%	8.42%	1.78%	6.95%
TOTAL CAPITAL		4,172,439,283		3,449,772,799	(1,061,416,828)	2,388,355,971	100.00%		6.96%	3.26%	10.22%	1.78%	8.7424%
	CLASS OF CAPITAL (A) ELECTRIC: SHORT-TERM DEBT LONG-TERM DEBT COMMON EQUITY	CLASS OF CAPITAL REFERENCE (A) (B) ELECTRIC: SHORT-TERM DEBT J-2 LONG-TERM DEBT J-3 COMMON EQUITY	WORKPAPER REFERENCE AVERAGE AMOUNT (A) (B) (C) S S S ELECTRIC: J-2 159,467,796 LONG-TERM DEBT J-3 1,790,485,621 COMMON EQUITY 2,222,485,866	CLASS OF CAPITAL WORKPAPER REFERENCE AVERAGE AMOUNT PATE BASE PERCENTAGE (A) (B) (C) (D) \$ % \$ ELECTRIC: \$ % SHORT-TERM DEBT J-2 159,467,796 82.68% LONG-TERM DEBT J-3 1,790,485,621 82.68% COMMON EQUITY 2,222,485,866 82.68%	WORKPAPER REFERENCE AVERAGE AMOUNT RATE BASE PERCENTAGE JURISDICTIONAL CAPITAL (A) (B) (C) (D) (E=CxD) \$ % \$ ELECTRIC: \$ % \$ SHORT-TERM DEBT J-2 159,467,796 82.68% 131,847,974 LONG-TERM DEBT J-3 1,790,485,621 82.68% 1,480,373,511 COMMON EQUITY 2,222,485,866 82.68% 1,837,551,314	WORKPAPER REFERENCE AVERAGE AMOUNT RATE BASE PERCENTAGE JURISDICTIONAL CAPITAL ADJUSTMENT AMOUNT (A) (B) (C) (D) (E=CxD) (F) \$ % \$ \$ \$ ELECTRIC:	WORKPAPER CLASS OF CAPITAL AVERAGE REFERENCE (A) AVERAGE AMOUNT PATE BASE PERCENTAGE JURISDICTIONAL CAPITAL ADJUSTMENT AMOUNT JURISDICTIONAL ADJUSTED CAPITAL (A) (B) (C) (D) (E=CXD) (F) (G=E+F) \$ % \$ \$ \$ \$ \$ \$ ELECTRIC: SHORT-TERM DEBT J-2 159,467,796 82.68% 131,847,974 (40,566,630) 91,281,343 LONG-TERM DEBT J-3 1,790,485,621 82.68% 1,480,373,511 (455,477,345) 1,024,896,166 COMMON EQUITY 2,222,485,866 82.68% 1,837,551,314 (565,372,852) 1,272,178,462	WORKPAPER CLASS OF CAPITAL AVERAGE REFERENCE AVERAGE AMOUNT RATE BASE PERCENTAGE JURISDICTIONAL CAPITAL ADJUSTMENT AMOUNT JURISDICTIONAL ADJUSTED CAPITAL PERCENT OF TOTAL (A) (B) (C) (D) (E=CxD) (F) (G=E+F) (H) \$ % \$ \$ \$ \$ \$ \$ ELECTRIC: SHORT-TERM DEBT J-2 159,467,796 82.68% 131,847,974 (40,566,630) 91,281,343 3.82% LONG-TERM DEBT J-3 1,790,485,621 82.68% 1,480,373,511 (455,477,345) 1,024,896,166 42.91% COMMON EQUITY 2,222,485,866 82.68% 1,837,551,314 (565,372,852) 1,272,178,462 53.27%	WORKPAPER CLASS OF CAPITAL AVERAGE REFERENCE AVERAGE AMOUNT PATE BASE PERCENTAGE JURISDICTIONAL CAPITAL ADJUSTMENT AMOUNT JURISDICTIONAL ADJUSTED CAPITAL PERCENT OF TOTAL COST RATE (A) (B) (C) (D) (E=CxD) (F) (G=E+F) (H) (I) S % \$ \$ \$ \$ \$ % \$ \$ \$ % % \$ \$ \$ % % \$ \$ \$ %	WORKPAPER REFERENCE NONTH AVERAGE AMOUNT JURISDICTIONAL RATE BASE AMOUNT ADJUSTMENT AVERAGE CAPITAL JURISDICTIONAL ADJUSTED CAPITAL OF TOTAL OF TOTAL ADJUSTED CAPITAL AVERAGE COST AVERAGE WEIGHTED COST (A) (B) (C) (D) (E=CXD) (F) (G=E+F) (H) (I) (J=Hxl) (A) (B) (C) (D) (E=CXD) (F) (G=E+F) (H) (I) (J=Hxl) S % \$ \$ \$ \$ % % ELECTRIC: SHORT-TERM DEBT J-2 159,467,796 82.68% 131,847,974 (40,566,630) 91,281,343 3.82% 0.72% 0.03% LONG-TERM DEBT J-3 1,790,485,621 82.68% 1,480,373,511 (455,477,345) 1,024,896,166 42.91% 4.12% 1.77% COMMON EQUITY 2,222,485,866 82.68% 1,837,551,314 (565,372,852) 1,272,178,462 53.27% 9.70% 5.17%	WORKPAPER REFERENCE NONTH AVERAGE REFERENCE JURISDICTIONAL RATE BASE PERCENTAGE JURISDICTIONAL CAPITAL ADJUSTMENT ADJUSTED CAPITAL JURISDICTIONAL OF TOTAL AVERAGE CRAFT VORKPAPER RATE AVERAGE WEIGHTED RATE AVERAGE WEIGHTED RATE AVERAGE COST AVERAGE WEIGHTED RATE AVERAGE COST AVERAGE WEIGHTED RATE AVERAGE COST AVERAGE WEIGHTED RATE AVERAGE COST AVERAGE WEIGHTED RATE AVERAGE RATE AVERAGE AVERAGE RATE AVERAGE AVERAGE <	WORKPAPER REFERENCE NONTH AVERAGE JURISDICTIONAL RATE BASE PERCENTAGE JURISDICTIONAL CAPITAL ADJUSTED CAPITAL ADJUSTED CAPITAL PERCENT OF TOTAL ADJUSTED CAPITAL AVERAGE CRE ADJUSTED FOR INCOME TAX GROSS-UP FOR INCOME (A) (B) (C) (D) (E=CxD) (F) (G=E+F) (H) (I) (J=HxI) 38.65% (A) (B) (C) (D) (E=CxD) (F) (G=E+F) (H) (I) (J=HxI) 38.65% S %	UNDERFORMNORKPAPER AVERAGE AMOUNTJURISDICTIONAL RATE BASE PERCENTAGEJURISDICTIONAL CAPITALADJUSTED ADJUSTED CAPITALJURISDICTIONAL ADJUSTED CAPITALPERCENT OF TOTALCOST AVERAGE PERCENT COSTCOST ADJUSTED TAX GROSS-UPCOST ADJUSTED TAX GROSS-UPCOST TAX GROSS-UPCOST ADJUSTED TAX GROSS-UPCOST ADJUSTED TAX GROSS-UPCOST ADJUSTED TAX GROSS-UPCOST ADJUSTED TAX GROSS-UPCOST TAX GR

PSC Exhibit #4

REVISED APPENDIX C

APPENDIX C, Page 3 LOUISVILLE GAS AND ELECTRIC COMPANY CASE NO. 2018-00034 - GAS OPERATIONS ENERGY CREDIT CALCULATIONS

LINE NO.	DESCRIPTION	SUPPORTING SCHEDULE REFERENCE	CASE NO. 2016-00371 FINAL ORDER (7/1/2017 - 6/30/2018)	CASE NO. 2016-00371 FINAL ORDER (7/1/2017 - 6/30/2018) REFLECTING INCOME TAX CHANGE	REVENUE REQUIREMENT IMPACT	RESIDENTIAL TARIFF (65.4% OF TOTAL REVENUES)	NON- RESIDENTIAL TARIFFS (34.6% OF TOTAL REVENUES)
			\$	\$	\$	\$	\$
1	CAPITALIZATION ALLOCATED TO GAS OPERATIONS	PAGE 2	695,552,077				
2	REQUIRED RATE OF RETURN ADJUSTED FOR INCOME TAXES	PAGE 2	10.22%	8.7424%	-1.47%	2	
3							
4	REQUIRED ANNUAL OPERATING INCOME BEFORE TAXES (Line 1 x Line 2)		71,058,758	60,807,639	(10,251,118)		
5	YEARS EQUIVALENT TO 16 MONTHS (16/12)				1.33	3	
6							
7 8	TOTAL REDUCTION IN INCOME TAX EXPENSE (Line 4 x Line 5)				(13,668,158)		
9	AMORTIZATION OF EXCESS ADIT (PROTECTED) - (\$75,168,977 USING ARAM)			(1,950,880)			
10	AMORTIZATION OF EXCESS ADIT (UNPROTECTED) - (SL OVER 15 YEARS)			(223,585)			
11							
12	TOTAL AMORTIZATION OF EXCESS ADIT (Line 9 + Line 10)			(2,174,466)			
13	GROSS-UP FACTOR USING 25.64% EFFECTIVE TAX RATE			1.34			
14							
15	TOTAL REDUCTION IN DEFERRED INCOME TAX EXPENSE (Line 12 x Line 13)				(2,924,245))	
16							
17	TOTAL REDUCTION IN REVENUE REQUIREMENTS (Line 7 + Line 15)				(16,592,403)	(10,851,431.27)	(5,740,971)
18	GAS BILLING UNITS (TY CCF / 12 MO x 13 MO)				481,601,824	211,426,821	270,175,003
19							
20	GAS CREDIT PER CCF (APRIL 1, 2018 - APRIL 30, 2019) (11 / 12)				(0.0344525)	(0.0513248)	(0.0212491)
21							
22	RATE PER MONTH CALCULATIONS:						
23	TOTAL MONTHLY REDUCTION IN REVENUE REQUIREMENTS (Line 17 / 16 MO)				(1,037,025)	(678,214)	(358,811)
24	GAS BILLING UNITS PER MONTH (TY CCF / 12 MO)				37,046,294	16,263,602	20,782,693
25							
26	MONTHLY GAS CREDIT PER CCF (Line 23 / Line 24)				(0.0279927)	(0.0417014)	(0.0172649)

PSC Exhibit #5

Louisvile Gas and Electric Company Electric Operations Energy Credit Calculations

· · · · ·

		Case No 2016-00371 Final Order									
		R	ate of Return	Ra	ate of Return		Revenue	Re	sidential Tarif	Res	sidential Tanff
Line		Ađ	usted for the	Adj	usted for the	F	lequirement		41% of		59% of
No	DESCRIPTION	35% F	ederal Tax Rate	21% F	ederal Tax Rate		impact	To	ital Revenues	Tot	ai Revenues
1	Capitalization Allocated to Kentucky Jurisdiction	S	2.388.355.971	S	2,388,355,971						
2 3	Required Rate of Return Adjusted for income Taxes		10 22%		8.75%						
4	Required Annual Operating Income Before Taxes (Line 1 x Line 2)	s	243 998 420	s	209.036.324	\$	(34 962 097)				
5	Years Equivalent To 16 Months (16/12)	Alternative Take and Taked	the state of the s	And Anna Anna Anna Anna Anna Anna Anna A	and the second dense back the second dense		1 33				
6											
7	Total Reduction in income Tax Expense (Line 4 x Line 5)						(46.616 129)				
9	Amortization of Excess ADIT (Protected) - (Using ARAM)				(7.552.799)						
10 11	Amortization of Excess ADIT (Unprotected) - (SI Over 15 Years)				(1.615,844)						
12	Total Amortization of Excess ADLT (Line 9 + Line 10)				(9 171 643)						
13 14	Gross-Up Factor Using 25.64% Effective Tax. Rate				1 35						
15 16	Total Reduction in Deferred Income Tax, Expense (Line 12 x, Une 13)						(12.351 795)				
17	Total Reduction in Revenue Requirements (Line 4 + Line 15)						(58 967 924)	s	(24 176 849)	\$	(34.791.075)
18 19	Energy Billing Units (TY kWh / 12 Mo X 13 M0)						12 919 919 682		4 528 429 567		8 391 490 115
20 21	Energy Credit Per kWh (April 1: 2018 - April 30: 2019) (Line 17 / Line 18)							\$	(0.00534)	5	(0.00415)
22	Rate per Month Calculations										
23	Total Monthly Reduction In Revenue Requirements (Line 17 / 16 Mo)						(3 685 495)		(1,511 053)		(2,174,442)
24	Energy Billing Units per Manth (TY kWh / 12 Mo)						993.839.976		348 340 736		645 499 240
25											
26	Monthly Energy Credit per kWh. (Line 22 / Line 23)					S	(0 00371)	5	(0 00434)	S	(0 00337)

The Rate of Return Adjusted for the 21 percent Federal income Tax rate reflects the impact PSC Assessment rate of 0.320 percent and the Uncollectible rate of 0.1941 percent

EXHIBIT KWB-3 PAGE 5 OF 5

4

LOUISVILLE GAS AND ELECTRIC COMPANY CASE NO. 2018-00034 COMPUTATION OF COMPOSITE FEDERAL AND STATE INCOME TAX RATE BASED ON LAW AS OF JANUARY 1, 2018

LINE NO.	DESCRIPTION		STATE	FEDERAL
1	OPERATING REVENUE		100.000000%	100.000000%
2	LESS: UNCOLLECTIBLE ACCOUNTS EXPENSE		0.194000%	0.194000%
3	LESS: PSC FEES		0.194100%	0.194100%
4	INCOME BEFORE STATE INCOME TAX (LINES 1 - 2 - 3)		99.611900%	99.611900%
5	STATE INCOME TAX (LINE 4 X 6.00%)	6.00%	5.976714%	5.976714%
6	INCOME BEFORE FEDERAL INCOME TAX (LINES 4 - 5)			93.635186%
7	FEDERAL INCOME TAX (LINE 6 X 21.00%)	21.00%	-	19.663389%
8	TOTAL STATE AND FEDERAL INCOME TAXES (LINES 5 + 7)			25.640103%

EXHIBIT KWB-5 PSC PAGE 6 OF 6 REVISED

LOUISVILLE GAS AND ELECTRIC COMPANY Calculation of Composite Federal and Kentucky Income Tax Rate (Based on Law in Effect January 1, 2018)

1. Assume pre-tax income of Less Uncollectible accounts expense Less PSC fees		100.0000% 0.320% 0.1941%		0.194% 0.1941%
2. State income tax (see SIT calc below)	-	99.4859%	5.969%	99.6119% 5.976714%
 Taxable income for Federal income tax before production activities deduction a. Production Rate b. Allocation to Production Income 	9% 54.92%	94.0308%		93.6352%
c. Allocated Production Rate4. Less: Production tax deduction (0.0000% of Line 3)	0.0000%	0.0000%		
5. Taxable income for Federal income tax (Line 3 - Line 4)		94.0308%		93.63519%
6. Federal income tax at 21% (Line 5 x 21%)		19.7465%	-	19.6634%
7. Total State and Federal income taxes (Line 2 + Line 6)		25.7465%	25.715632%	25.64010%
State Income Tax Calculation 1. Assume pre-tax income of		100.0000%		
2. Less: Production activities deduction @ 0% X 54.92% (1)		0.0000%		
3. Taxable income for State income tax		100.0000%		
4. State Tax Rate	-	6.0000%		
5. State Income Tax		6.0000%		

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2016-00371

COST OF CAPITAL SUMMARY

THIRTEEN MONTH AVERAGE

FROM JULY 1, 2017 TO JUNE 30, 2018

DATA: ____BASE PERIOD__X_FORECASTED PERIOD DATE OF CAPITAL STRUCTURE: 13 MO AVG FOR FORECASTED PERIOD TYPE OF FILING: _____ORIGINAL _____UPDATED __X_ REVISED WORKPAPER REFERENCE NO(S).:

SCHEDULE J-1.1/J-1.2

PAGE 1 OF 4

WITNESS: D. K. ARBOUGH

LINE NO.	CLASS OF CAPITAL	WORKPAPER REFERENCE	13 MONTH AVERAGE AMOUNT	JURISDICTIONAL RATE BASE PERCENTAGE	JURISDICTIONAL CAPITAL	ADJUSTMENT AMOUNT	JURISDICTIONAL ADJUSTED CAPITAL	PERCENT OF TOTAL	COST RATE	13 MONTH AVERAGE WEIGHTED COST
	(A)	(B)	(C)	(D)	(E=CxD)	(F)	(G=E+F)	(H)	(I)	(J=HxI)
			\$	%	\$	\$	\$		%	%
	ELECTRIC:									
1	SHORT-TERM DEBT	J-2	159,467,796	82.68%	131,847,974	(40,566,630)	91,281,343	3.82%	0.72%	0.03%
2	LONG-TERM DEBT	J-3	1,790,485,621	82.68%	1,480,373,511	(455,477,345)	1,024,896,166	42.91%	4.12%	1.77%
3	COMMON EQUITY	_	2,222,485,866	82.68%	1,837,551,314	(565,372,852)	1,272,178,462	53.27%	9.70%	5.17%
							2			
4	TOTAL CAPITAL	_	4,172,439,283		3,449,772,799	(1,061,416,828)	2,388,355,971	100.00%		6.96%
		-								

REVISED PSC

LOUISVILLE GAS AND ELECTRIC COMPANY CASE NO. 2016-00371 COST OF CAPITAL SUMMARY THIRTEEN MONTH AVERAGE FROM JULY 1, 2017 TO JUNE 30, 2018

DATA: ____BASE PERIOD_X_FORECASTED PERIOD DATE OF CAPITAL STRUCTURE: 13 MO AVG FOR FORECASTED PERIOD TYPE OF FILING: _____ORIGINAL ____UPDATED __X_ REVISED WORKPAPER REFERENCE NO(S).:

SCHEDULE J-1.1/J-1.2 PAGE 1 OF 4 WITNESS: D. K. ARBOUGH

			13 MONTH	JURISDICTIONAL						13 MONTH AVERAGE		WEIGHTED COST ADJUSTED		WEIGHTED COST ADJUSTED
LINE NO.	CLASS OF CAPITAL	WORKPAPER	AVERAGE	RATE BASE PERCENTAGE	JURISDICTIONAL	ADJUSTMENT AMOUNT	JURISDICTIONAL ADJUSTED CAPITAL	PERCENT OF TOTAL	COST	WEIGHTED	TAX GROSS-UP	FOR INCOME	TAX GROSS-	FOR INCOME TAXES
	(A)	(B)	(C)	(D)	(E=CxD)	(F)	(G=E+F)	(H)	(1)	(J=HxI)	38.65%	TALL	25.64%	TAKEO
			\$	%	\$	\$	\$		%	%	%	%	%	
	ELECTRIC:													
1	SHORT-TERM DEBT	J-2	159,467,796	82.68%	131,847,974	(40,566,630)	91,281,343	3.82%	0.72%	0.03%		0.03%		0.03%
2	LONG-TERM DEBT	J-3	1,790,485,621	82.68%	1,480,373,511	(455,477,345)	1,024,896,166	42.91%	4.12%	1.77%		1.77%		1.77%
3	COMMON EQUITY		2,222,485,866	B2.68%	1,837,551,314	(565,372,852)	1,272,178,462	53.27%	9.70%	5.17%	3.26%	8.42%	1.78%	6.95%
4	TOTAL CAPITAL		4,172,439,283		3,449,772,799	(1,061,416,828)	2,388,355,971	100.00%		6.96%	3.26%	10.22%	1.78%	8.7424%

and the state of the second second

PSC Exhibit #6

REVISED PSC

APPENDIX C Page 2

LOUISVILLE GAS AND ELECTRIC COMPANY

CASE NO. 2018-00034 - ELECTRIC OPERATIONS

ENERGY CREDIT CALCULATIONS

LINE NO.	DESCRIPTION	SUPPORTING SCHEDULE REFERENCE	CASE NO. 2016-00371 FINAL ORDER (7/1/2017 - 6/30/2018)	CASE INC. 2010/0037111104E ORDER (7/1/2017 - 6/30/2018) REFLECTING CHANGES TO FEDERAL INCOME TAX RATE	REVENUE REQUIREMENT IMPACT	RESIDENTIAL TARIFF (41% OF TOTAL REVENUES)	OTHER TARIFFS (59% OF TOTAL REVENUES)
			\$	\$	\$	\$	\$
1	CAPITALIZATION ALLOCATED TO ELECTRIC OPERATIONS	PAGE 2	2,388,355,971	2,388,355,971			
2	REQUIRED RATE OF RETURN ADJUSTED FOR INCOME TAXES	PAGE 2	10.22%	8.7424%	-1.47%		
3							
4	REQUIRED ANNUAL OPERATING INCOME BEFORE TAXES (Line 1 x Line2)		243,998,420	208,798,584	(35,199,837)		
5	YEARS EQUIVALENT TO 16 MONTHS (16/12)				1.33		
6							
7	TOTAL REDUCTION IN INCOME TAX EXPENSE (Line 4 x Line 5)				(46,933,115)		
8							
9	AMORTIZATION OF EXCESS ADIT (PROTECTED) - (\$207,520,098 USING ARAM)			(7,552,799)			
10	AMORTIZATION OF EXCESS ADIT (UNPROTECTED) - (SL OVER 15 YEARS)			(1,618,844)			
11							
12	TOTAL AMORTIZATION OF EXCESS ADIT (Line 9 + Line 10)			(9,171,643)			
13	GROSS-UP FACTOR USING 25.64% EFFECTIVE TAX RATE			1.34			
14							
15	TOTAL REDUCTION IN DEFERRED INCOME TAX EXPENSE (Line 12 x Line 13)				(12,334,125)		
16	TOTAL OFFICIAL IN DEVENUE OF OUR DEVENTO (1 1				(50 000 044)	((24.007.070)
17	TOTAL REDUCTION IN REVENUE REQUIREMENTS (Line 7 + Line 15) ENERGY BILLING UNITS (TY KWH / 12 MO x 13 MO)				(59,267,241)		
19	ENERGY BILLING UNITS (IT KWH / 12 MO X 13 MO)				12,919,919,682	4,528,429,567	8,391,490,115
20	ENERGY CREDIT PER KWH (APRIL 1, 2018 - APRIL 30, 2019) (11 / 12)					(0.00537)	(0.00417)
21						(0.00557)	(0.00417)
22	RATE PER MONTH CALCULATIONS:						
23	TOTAL MONTHLY REDUCTION IN REVENUE REQUIREMENTS (Line 17 / 16 MO)				(3,704,203)	(1,518,723)	(2,185,479)
24	ENERGY BILLING UNITS PER MONTH (TY KWH / 12 MO)				993,839,976		
25							
26	MONTHLY ENERGY CREDIT PER KWH (Line 23 / Line 24)				(0.00373)	(0.00436)	(0.00339)

PSC Exhibit #7

												Party and the second	Conception and in the second s	and the second sec	COLUMN STR	Aug. 201 21	
		APPE	NDIX A						vised				A	PPENDIX A Revised			
		KENTUCKY UTILITIE	ES COMPANY				KENTUCK	Y UTILITIES COMP	ANY				KENTUCKY	UTILITIES COMPANY			
		LOUISVILLE GAS AND EL					LOUISVILLE GA	S AND ELECTRIC	COMPANY				LOUISVILLE GAS	AND ELECTRIC COMPA	NY		
		CASE NO. 201						E NO. 2018-00034						NO. 2018-00034			
		SUMMARY OF TAX RED	OUCTION CREDITS				SUMMARY OF	TAX REDUCTION	CREDITS				SUMMARY OF T	AX REDUCTION CREDIT	S		
																出现走	
LINE NO.	DESCRIPTION	ĸu	LG&E-ELECTRIC	LGAE-GAS	TOTAL CREDITS		DESCRIPTION	KU	LG&E- ELECTRIC	LG&E-GAS	TOTAL CREDITS	LINE NO	DESCRIPTION	KU	LG&E- ELECTRIC	LG&E-GAS	TOTAL
		\$	\$	\$	\$			\$	S	S	\$			S	S	\$	S
.1	BASE RATE CREDIT MECHANISM	(86,891,224)	(58,967,924)	(16,504,277)	(162,363,425)	1	BASE RATE CREDIT MECHANISM	(87,022,983)	(59,267,241)	(16,592,403)	(162,882,626)	1	BASE RATE CREDIT MECHANISM	(131,759)	(299.317)	(88, 126)	(519,202)
2	ENVIRONMENTAL SURCHARGE (ECR)	(21,002,921)	(19,852,212)		(40,855,133)	2	ENVIRONMENTAL SURCHARGE (ECR)	(21,002,921)	(19,852,212)		(40,855,133)	2	ENVIRONMENTAL SURCHARGE (ECR)				
3	GAS LINE TRACKER (GLT)			(364,288)	(364,288)	3	GAS LINE TRACKER (GLT)			(364,288)	(364,288)	3	GAS LINE TRACKER (GLT)	1. S. F.		1.35-16	
4	DEMAND SIDE MANAGEMENT (DSM)	(107.480)	(89.217)		(196.697)	4	DEMAND SIDE MANAGEMENT (DSM)	(107,480)	(89,217)	-	(196,697)	4	DEMAND SIDE MANAGEMENT (DSM)	1. 1. A.			
5	TOTAL CREDITS	(108,001,624)	(78,909,353)	(16,868,565)	(203,779,543)	5	TOTAL CREDITS	(108,133,384)	(79,208 670)	(16,956,690)	(204,298,744)	5	TOTAL CREDITS	(131,759)	(299,317)	(88, 126)	(519,202)

Louisville Gas and Electric Company Case No. 2018-00034 Balance Sheet - Total Company

As of December	31.	2017 -	April 3	30, 2	2019
----------------	-----	--------	---------	-------	------

Line	Description	December	January	February	March	And	May		h.h.		Contraction	Outstan	Martin	Deverber	January	February	March	April	17 Mo Avg December 201
No	Cosciptori	2017	2018	2018	2018	April 2013	2018	June 2018	July 2018	August 2018	September 2018	October 2018	November 2018	2018	2019	2019	2019	2019	April 2019
1	ASSETS AND OTHER DEBITS										2010	2010	2010	2010					
2	UTILITY PLANT																		
3	Gross Utility Plant	\$ 7,176,922,033	\$ 7,228,425,331	\$ 7,270,990,625	\$ 7.316.542.672	\$ 7.370.976.678	\$ 7.419.638.555	7.463.033.290	\$ 7,508,558,678	\$ 7.548 828 158	\$ 7.583.806.223	\$ 7 822 120 208	\$ 7 657 113 364	5 7.690 361 461	\$ 7,719,812,302	\$ 7,747,443,394	\$ 7,787,100,697	\$ 7,800,405,565	\$ 7.524,122.6
4	Accumulated Provision for Depreciation and Amortization	(2,143,589,441)		(2.169.065.952)					(2.227.649.232)			(2.264.016.230)		(2.291,871,543)			(2.331.793.005)		
5	Total Utility Net Plant				\$ 5,135,520,583														
6	INVESTMENTS																		
7	Investment in Subsidiary Companies	s -	s -	s .	s .	s . :			s .	s .	s -	\$.	5 - 5	- 2	s .	s .	s -	s -	\$
8	Net Nonubility property	567,537	587.537	567,537	567,537	567,537	567,537	567,537	587,537	567,537	567,537	587,537	567,537	567,537	587,537	587,537	567,537	567,537	567.5
9	Other Investments	594,286	594.286	594,286	594,288	594,286	594,286	594,286	594,286	594,286	594,286	594,288	594,286	594,286	594,286	594,286	594.286	594,286	594.3
10	Special Funds	1.468.086	1,468.086	1,468,086	1,468,086	1.468,086	1,468.086	1,468,086	1,468,086	1,468,086	1,468,086	1,488,086	1,468,086	1,468,086	1,488,086	1,468,086	1,468,086	1,468,086	1,468.0
11	Total other Property and Investments	\$ 2.629,909	\$ 2,629,909	\$ 2,829,909	\$ 2,629,909	\$ 2,629,909	2,629.909 \$	2,629,909	\$ 2,629.909	\$ 2.629.909	\$ 2,629,909	\$ 2,629,909	\$ 2.629,909	2,629,909	\$ 2,629.909	\$ 2,629,909	\$ 2,629,909	\$ 2.629,909	\$ 2.829.9
12	CURRENT AND ACCRUED ASSETS																		
13	Cash	\$ 5,019,790	\$ 5,019,790	\$ 5,019,790	\$ 5,019,790	\$ 5,019,790 \$	5,019,790 \$	5,019,790	\$ 5.019,790	\$ 5,019,790	\$ 5.019.790	\$ 5,019,790	\$ 5.019.790 \$	5.019,790	\$ 5,019,790	\$ 5,019,790	\$ 5,019,790	\$ 5,019,790	\$ 5,019,7
14	Special Deposits and Temporary Cash Investments	(0)	0	(0)	(0)	0	0	0	0	(0)	(0)	(0)	0	(0)	0	0	0	0	
15	Accounts Receivable - Less Reserves	197.738.088	212,218,832	200,954,083	190,173,985	170,122,830	172,715.292	182,944,764	188,274,755	189,001,727	175,581,631	164,276,797	172,102,927	196,173,418	208,748,760	198,033,557	185,986,317	169.357,882	
16	Accounts Receivable from Associated Companies	27,697,932	28,280,771	27,239,954	26,768,081	24.548,875	24,255.085	24,548,320	24,228,076	24,284,902	25,453.354	25.831,115	25,834,972	28.821.957	29,116,924	28,114,324	28,713,897	26,027,186	
17	Inventories	125,411,041	108,538,158	93,199,040	89,076,377	91,615,892	92,380,798	98,244,793	103,653,143	110,522,557	119,669,715	129,661,011	133,303,988	122.601.051	104,689,578	92,320,362	85,204,334	88,764,945	104,991.4
18	Prepayments	14,212,811	16,798,208	15,472,380	13.866,233	17,581,544	16,064,533	15,711,833	17,151,332	15,697,156	15,361,098	14,535,245	13,641,040	13,182,243	16,188,629	14.731,699	13,015,445	17,220,227	15,318.3
19	Other Current and Accrued Assets		-								-					•			
20	Total Current and Accrued Assets	\$ 370.079,662	\$ 368,853,756	\$ 341,885,208	\$ 324,904,467	\$ 308,868,932	\$ 310,435,478	324,469,299	\$ 338,325,096	\$ 344,526,132	\$ 341,085,588	\$ 339,123,958	\$ 349,902.717	\$ 365,798,459	\$ 361,763,681	\$ 338,219,732	\$ 317,939,583	\$ 306.390,030	\$ 338,268,9
21	DEFERRED DEBITS AND OTHER																		
22	Unamortized Debt Expenses	\$ 29,427,965	\$ 29,185,270	\$ 28,982,984	\$ 29,109,458	\$ 28,866,057 \$	29,447,288 \$	29,189,575	\$ 28,924,921	\$ 28,659,819	\$ 28,400,818	\$ 28,134,832	\$ 27,874,976	27,808,106	\$ 27,340,786	\$ 27,092,885	\$ 28,824,710	\$ 27,300,403	\$ 28,373,
23	Accumulated Deferred Income Tax Asset	210,421,679	210,421.879	210,421,679	210,421,679	210,421,879	210,421,679	210,421,879	210,421,679	210,421,679	210.421.679	210,421,679	210,421,679	210,421,679	210,421,679	210,421,679	210,421,679	210,421,879	
24	Regulatory Assets	416,304,599	412,944.276	411,543,548	411,431,263	415.358,807	414,742,831	412,330,205	410.277.555	409,110,412	408,893,955	409,007,392	407,374,990	405,380,890	403,107,993	402,128,942	400.692,538	402,082,891	
25	Miscellaneous Deferred Debits	10.311.491	10.455.538	12,528,755	12.669,875	12,867,899	13,023.251	13,240,347	13,447,647	13.658,097	13,794,354	13,859,931	13,997,710	14,120,669	14,251.580	18,652,516	20,778,408	12.742,385	
26	Total Deferred Debits & Other	\$ 666,485.734	\$ 663,006.762	\$ 663,454,945	\$ 663.632.275	\$ 667.514,442	667,635,047 \$	665,181.807	\$ 663,071,803	\$ 661,850,007	\$ 661,510,806	\$ 661,423,834	\$ 659,669,356	\$ 657.511,345	\$ 855,122,038	\$ 658.296.023	\$ 658.717,336	\$ 652,547,339	\$ 681,565.3
27	TOTAL ASSETS	\$ 6 072 507 896	\$ 6 102 460 005	S 8 100 804 734	\$ 6.126.687.233	S 8 158 743 088	R 105 340 530	8 239 858 252	8 8 294 028 254	E # 317 124 003	S & 222 810 110	E # 284 204 #77	E 8 200 170 272	E 8 424 420 831	\$ 8 431 114 037	\$ 8 425 803 472	\$ 6.434.594.519	\$ 8 457 707 205	\$ 6 286 058

Louisville Gas and Electric Company Case No. 2018-00034

Balance Sheet - Total Company

As of December 31, 2017 - April 30, 2019

Line No.	Description	December 2017	January 2018	February 2018	March 2018	April 2018	May 2018	June 2018	July 2018	August 2018	September 2018	October 2018	November 2018	December 2018	January 2019	February 2019	March 2019	April 2019	17 Mo Avg December 2017 April 2019
28	LIABILITIES AND OTHER CREDITS																		
29	PROPRIETARY CAPITAL																		
30	Common and Preferred Stock Issued	\$ 425,170,424	\$ 425,170,424	\$ 425,170,424	\$ 425,170,424	\$ 425,170,424	\$ 425,170,424	\$ 425,170,424	\$ 425,170,424	\$ 425,170,424	\$ 425,170,424	\$ 425,170,424	\$ 425.170.424	\$ 425,170,424	\$ 425,170,424	\$ 425,170,424	\$ 425,170,424	\$ 425.170.424	\$ 425,170.42
31	Common Stock Expense	(835,889)	(835,889)	(835,889)	(835,889)	(835,889)	(835,889)	(835.889)	(835,889)	(835,889)	(835,889)	(835,889)	(835,889)	(835,889)	(835,889)	(835,889)	(835,889)	(835,889)	(835,88
32	Paid-in-capital	552,456,795	552,458,795	552,456,795	555,216,949	555,216,949	555,216,949	623,837,032	623,837,032	623.837.032	624,731,054	624,731,054	624,731,054	672,199,276	672,199,276	672.199.276	672,199,276	672,199,276	613,513.05
33	Retained Earnings	1.187.185.837	1,214,992,243	1,237,993,820	1,228,238,055	1.237.038.661	1,249,765,780	1,228,668,435	1,250,193,392	1.273.741.977	1,263,369,517	1.269.922.951	1,282,869,106	1,266,903,020	1,294,560,340	1,317,024,135	1,274,494,248	1,282,374,925	1,256,313,90
34	Other Comprehensive Income	-						1,220,000,100			1,200,000,011	1,200,022,001							
35	Total Proprietary Capital	\$ 2,163,977,168	\$ 2,191,783.573	\$ 2.214,785,151	\$ 2,207,789,540	\$ 2,218.590,145	\$ 2,229,317,284	\$ 2.274.840.003	\$ 2.298,364,960	\$ 2,321,913,545	\$ 2,312,435.108	\$ 2,318,988,541	\$ 2.331,934.696	\$ 2,363.436.831	\$ 2,391,094,151	\$ 2.413.557.948	\$ 2.371.028.057	\$ 2,378,908,736	\$ 2,294,161.49
36	Total Long-Term Debt	\$ 1,719.992,047	\$ 1,820,007.592	\$ 1.820,021,634	\$ 1.820.037.179	\$ 1,820,052,224	\$ 1,820,067,769	\$ 1,820,082,814	\$ 1,820,098,359	\$ 1,820,113,905	\$ 1.820,128.950	\$ 1,820,144,495	\$ 1,820,159,540	\$ 1.820,175,085	\$ 1,820,190,631	\$ 1,820,204,672	\$ 1,820,220,218	\$ 1,820.235.262	\$ 1,814.231.31
37	CURRENT AND ACCRUED LIABILITIES																		
38	Notes Pavable	\$ 196,959,740	\$ 131,235,188	\$ 118,556,027	\$ 139,367,573	\$ 171,758,380	\$ 207,172,900	\$ 196,247,184	\$ 203,429,539	\$ 204.372.494	\$ 229,820,415	\$ 258,768,473	\$ 284,723,869	\$ 276,215,150	\$ 250,868,543	\$ 231,729,948	\$ 282,780,800	\$ 316,086,292	\$ 217.640.50
39	Accounts Pavable	183.814.356	185,929,170	183,900,557	175,828,890	175.880.422	172,537,416	174.024,868	180,582,620	176,931,214	172,720,355	178.625.862	173,559,142	177.768.236	174,723,572	175,338,724	170,907,403	170,781,120	176,696.11
40	Accounts Pavable to Associated Companies	16.475.473	16.448.205	16,805,520	17,580,755	17,265,292	17,663,358	18.513.319	18,102,083	17.887.942	18.032.658	17,449,438	17,500,125	17.684.359	17,498,230	17.895.202	18,207,289	18,591,163	17,623,43
41	Customer Deposita	27.345.913	27,345,913	27.345.913	27.345.913	27,345,913	27,345,913	27.345,913	27,345,913	27,345,913	27,345,913	27,345,913	27.345.913	27,345,913	27,345,913	27.345.913	27,345,913	27,345,913	27,345,91
42	Taxes Accrued	22.318,390	33,586,118	25,412,145	17.247.740	15,772,574	23.064.008	17,743,976	28,779,751	39.822.505	29.078.444	23.021.650	30,387,834	24,850,376	38,174,942	25,736,748	24,913,213	16.027.565	25,525,76
43	interest Accrued	11.584.436	16,493,269	20,550,540	25,491,686	20,014,081	9,621,061	13,319,873	18,412,438	20,233,873	25,251,438	19,850,248	9,346,061	13.044.873	16,438,550	20,296,373	25,358,883	20,002,644	17,841.66
44	Dividends Pavable Affiliate			-			-				20,201,100					-			
45	Miscellaneous Current Liabilities	48 633 409	48.267.308	47,901,207	46 648 247	48 279 781	45 911 315	45 722 819	45 357 353	44 981 888	44.611.422	44 240 957	43 870 491	43 500 028	43,150,780	42,801 534	40,899,596	40.550,350	44,901,38
46	Total Current and Accrued Liabilities	\$ 507.131.717	\$ 459,303.168	\$ 440,471,909	\$ 449,510,805	\$ 474.294,445	\$ 503,315,971	\$ 492.917.950	\$ 520.004.696	\$ 531,575,827		\$ 569,300,541	\$ 586 733,435	\$ 580.408.933	\$ 566,198,530	\$ 541 144,441	\$ 590.413.098	\$ 609.385,047	\$ 527.574.77
47	DEFERRED CREDITS																		
48	Accumulated Deferred Income Tax Liability	\$ 779,777,687	\$ 779,789,283	\$ 779,800,899	\$ 798.815.375	\$ 796,626,991	\$ 796.638.607	\$ 813,453,083	\$ 813,464,699	\$ 813,476,315	\$ 830,290,791	\$ 830,302,407	\$ 830,314,023	\$ 847,128,499	\$ 847,140,115	\$ 847,151,731	\$ 856.909,749	\$ 856,921,365	\$ 818,576.56
49	Investment Tax Credits	35,243,701	35,161,816	35.079.932	34,998,047	34,916,162	34,834,278	34,752,393	34.670.508	34.588.624	34,506,739	34.424.854	34,342,970	34,261,085	34,187,167	34,113,249	34,039,331	33,965,413	34,593,31
50	Regulatory Liabilities	600,719,643	605.398.825	609,468,829	610.326.975	609.019.645	608.359.150	604.167.075	802.337.762	600.811.269	597.625.988	597.133.987	598,582,978	591.477.504	589,425,707	588,000,387	584,079,420	583.029,043	598,703,77
51	Customer Advances for Construction	12.228.950	12.228.950	12,228,950	12,228,950	12,228,950	12.228,950	12,228,950	12,228,950	12,228,950	12.228.950	12,228,950	12,228,950	12,228,950	12.228,950	12,228,950	12,228,950	12,228,950	12.228.95
52	Asset Retirement Obligations	124,962,698	125,010,329	124,958,819	124,348,175	122.878.085	121.147.058	119,991,915	118,241,097	117,598,181	117,158,995	116.882.798	116,685,522	116,370,911	115,933,346	115,320,308	114,056,153	112,157,497	119.041.05
53	Other Deferred Credits	2,158,485	2.158.485	2.156.485	2.156.485	2,158,485	2.158,485	2.158.485	2.156.485	2,156,485	2,158,485	2,156,485	2.156.485	2.156,485	2,156,485	2,158,485	2,158,485	2,156,485	2,158.48
54	Miscellaneous Long Term Liabilities	3.681.080	3.681.080	3,681,080	3.681.080	3,681,080	3.681.080	3.681.080	3.681.080	3.681.080	3.681.080	3.681.080	3,681,080	3.681.080	3.681.080	3,681,080	3,681,080	3,681,080	3,681,08
55	Accumulated Provision for Post Retirement Benefits	122.636.740	67,939,894	67,243,048	64,996,622	64.299.776	63.602.930	60.384 504	59.687.658	55 990 812	56 744 386	56.047.540	55,350,694	53,104,268	48,877,875	48,134,222	45,781,979	45.038.327	61,109,44
58	Total Deferred Credits	\$ 1,681,406,964	\$ 1,631,368,862	\$ 1.634,616,041		\$ 1,645 807.174			\$ 1.648,468,239	\$ 1.843,531.715	1.654.393.412				\$ 1,853,830,725	\$ 1.650,788,412	\$ 1.652.933.147	\$ 1,849,178,160	\$ 1.650,090.70
57	TOTAL LIABILITIES AND STOCKHOLDER EQUITY	\$ 6.072 507 896	\$ 6,102,460,995	\$ 6,109,894,734	\$ 6.126.687.233	\$ 6.156.743.988	\$ 6 195 349 539	\$ 6 238 656 252	\$ 6 284 938 254	\$ 8 317 134 993	\$ 6 333 618 110	\$ 6 381 291 677	\$ 6 390 170 372	\$ 8,424 429 831	\$ 8 431 114 037	\$ 8,425,693,472	\$ 6 434.594.519	\$ 6,457,707.205	\$ 6.286.058.20

58

> Total Capital \$ 4.297.659.734 Capital Structure Case No. 2018-00371 Reference 1 3.82% \$ 164,253,637 KWB-5 Page 2 Line 1 Column (C) 4 42,91% 1.944,220,475 KWB-5 Page 2 Line 3 Column (C) 53,27% 2.281,85,622 KWB-5 Page 2 Line 3 Column (C) 100.00% \$ 4,297,659,734 KWB-5 Page 2 Line 4 Column (C) Short-term Debt Long-term Debt Common Equity Total Capital

pital	100.00%	S	4.297.65
	Jurisdictional Rate Base %		

2180210			
Short-term Debt	82.68%	\$	135,804.1
ong-term Debt	82.68%		1.524,801.4
Common Equity	82.68%		1.892.698.0
Total Capital		S	3.553,305.0
Gas			
Short term Daht	17 32%	\$	28 448

Short-term Debt Long-term Debt Common Equity Total Capital

PSC Exhibit #8

(2)

Attachment to PSC DR3 Question 2(b)(1) Page 1 of 5 Blake / Arbough

Attachment to PSC DR3 Question 2(b)(1) Page 2 of 5 Blake / Arbough

Reference 44,907 KWB-5 Page 2 Line 1 Column (E) 11,489 KWB-5 Page 2 Line 2 Column (E) 86,872 KWB-5 Page 2 Line 3 Column (E) 15,088 KWB-5 Page 2 Line 4 Column (E)

 Reference

 17.32%
 \$ 28,448,730
 KWB-6 Page 2 Line 1 Column (E)

 17.32%
 319,418,986
 KWB-6 Page 2 Line 1 Column (E)

 17.32%
 359,488,550
 KWB-6 Page 2 Line 1 Column (E)

 17.32%
 744,354,886
 KWB-6 Page 2 Line 1 Column (E)

Kentucky Utilities Company Case No. 2018-00034 Balance Sheet - Total Company

As of December 31, 2017 - April 30, 2019

																-	0.00			17 Mo Avg
ine	Description	Dece	mber	January	February	March	April	May	June	July	August	September	October	November	December	January	February	March	April	December 201
ło.		20	17	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2018	2019	2019	2019	2019	April 2019
1	ASSETS AND OTHER DEBITS																			
2	UTILITY PLANT																			
3	Gross Utility Plant	\$ 9,619	189,558	9,658,380,039	\$ 9,695,884,579	9,740,695,462 \$	9,797,684,595	9,850,962,830 \$	9,896,889,662 \$	9,946,673,196 \$	9,989,588,844	\$ 10,042,818,470	\$ 10,093,910,728	\$ 10,130,977,807	\$ 10,141,782,616				\$ 10,142,956,074	
1	Accumulated Provision for Depreciation and Amortization		,728,268)	(3,265,957,538)		(3,311,138,509)	(3,332,845,599)	(3,354,807,419)	(3,377,027,791)	(3,398,575,447)	(3,407,421,648)	(3,427,913,697)	(3,449,450,511)	(3,471,416,672)	(3,463,024,624)			(3.398,460,576)		
ŧ –	Total Utility Net Plant	\$ 6,376	,461 291 \$	6,392,422,501	\$ 6,406,980,220	6,429,556,953 \$	6.464.838.996	6.496,155,411 \$	6,519,861,870 \$	6,548.097.748 \$	6.582 167 195	\$ 6,614,904,773	\$ 6 644,460,217	\$ 6,659,561,134	\$ 6,678,757,992	\$ 6.687 782,118	\$ 6,706,713,850	\$ 6,723,690,994	\$ 6.761.903,087	\$ 6,570.253
	INVESTMENTS																			
	Investment in Subsidiary Companies	\$	- \$	- 1		- 5	- 1	- 5	- \$	- \$	-	\$ -	\$ - :	s - :	s -					
	Net Nonutility property		178,714	178,714	178,714	178,714	178,714	178,714	178,714	178,714	178,714	178,714	178,714	178,714	178,714	178,714	178,714	178,714	178,714	178
	Other Investments		250,000	250,000	250,000	250.000	250,000	250.000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250
	Total other Property and Investments	\$	428,714 \$	428,714	\$ 428,714 \$	428.714 \$	428,714	428,714 \$	428.714 \$	428,714 \$	428,714	\$ 428,714	\$ 428,714	\$ 428,714	\$ 428.714	\$ 428,714	\$ 428,714	\$ 428,714	\$ 428,714	\$ 428
1	CURRENT AND ACCRUED ASSETS																			
	Cash	\$ 5	,000,000 \$	5,000,000 5	5,000,000 \$	5,000,000 \$	5,000,000	5,000,000 \$	5,000,000 \$	5,000,000 \$	5,000,000	\$ 5,000,000	\$ 5,000,000	\$ 5,000,000	\$ 5,000,000	\$ 5,000,000	\$ 5,000,000	\$ 5,000,000	\$ 5,000,000	\$ 5,000
	Special Deposits and Temporary Cash Investments		61,030	61,030	61,030	61,030	61,030	61,030	61,030	61,030	61,030	61,030	61,030	61,030	61,030	61,030	61,030	61,030	61,030	61
	Accounts Receivable - Less Reserves	252	,438,293	264,335,369	250,991,524	243,802,129	225,751,346	231,041,593	243,712,383	251,396,419	254,056,393	238,294,878	226,896,250	232,685,959	250,262,741	259,708,526	246,664,869	239,864,290	224,927,350	243.342
	Accounts Receivable from Associated Companies		399,105	797,884	1,157,200	1,570,290	1,616,972	2,015,037	2,502,854	2,453,763	2,239,621	2,022,193	1,801,118	1,851,805	1,673,894	1,849,910	2,246,882	2,256,669	2,942,843	1,846
	Inventories ·	126	,258,048	122,044,877	121,829,785	123,278,492	128,930,086	131,116,761	129,090,014	124,248,769	119,326,064	120,597,434	122,378,644	124,727,555	123,689,434	119,022,548	115,274,232	117,472,831	121,700,069	122,999
	Prepayments		,095,158	17,976,290	16,385,310	14,532,538	19,100,439	17,337,846	16,708,664	18,379,598	16,763,625	16,927,117	15,984,521	14,951,152	14,188,139	17,479,386	15,753,899	13,790,015	18,996,583	16,491
3	Other Current and Accrued Assets		927.035	927.035	927,035	927,035	927,035	927,035	927,035	927,035	927,035	927,035	927,035	927,035	927,035	927,035	927,035	927,035	927,035	927
)	Total Current and Accrued Assets	\$ 400	178,669	411.142,486	\$ 396.351.885 \$	389 171 514 \$	381,386,908 \$	387 499 303 \$	398.001.981 \$	402,466.614 \$	398 373,768	\$ 383,829,687	\$ 373,048,598	\$ 380,204,535	\$ 395,802,273	\$ 404 048 436	\$ 385,927,947	\$ 379,371,869	\$ 374,554 910	\$ 390.668
	DEFERRED DEBITS AND OTHER																			
	Unamortized Debt Expenses	\$ 26	969,068 \$	26,744,824	26,540,173	26,314,773 \$	26,095,485	25,868,782 \$	25,648,200 \$	25,420,126 \$	25,191,329	\$ 24,968,668	\$ 24,738,391	\$ 24,514,262	\$ 24,282,429	\$ 24,049,774		\$ 23,603,018	\$ 23,374,916	
	Accumulated Deferred Income Tax Asset		,240,706	258,240,706	258,240,706	258,240,706	258,240,706	258,240,706	258,240,706	258,240,706	258,240,706	258,240,706	258,240,706	258,240,706	258,240,706	258,240,706	258,240,706	258,240,706	258,240,706	258,240
	Regulatory Assets	418	922,220	416,502,677	416,494,173	418,250,766	422,239,175	422,277,200	421,639,624	420,513,703	420,246,369	422,825,936	426,364,688	425,042,926	423,237,711	421,696,795	421,598,915	421,721,401	421,734,560	421,253
1	Miscellaneous Deferred Debits	49	,227,896	49.821.419	53,541,974	54,140,910	54,821,812	55,440,358	56,152,379	56.856 029	57 564,472	58 135 598	58 484 811	59,067,419	59,633,115	60,214 075	67.738.040	71.574 661	58 906 847	57.72
	Total Deferred Debits & Other		359,890 \$	751,309,626 \$	754.817.026 5	756.947.155 \$	761.397,178	761,827,046 \$	761.680,909 \$	761.030.565 \$	761,242,876	\$ 764,170,909	\$ 767.828.597	\$ 766.865.314	\$ 765.393.960	\$ 764,201,350	\$ 771,414,958	\$ 775,139,787	\$ 762.257.029	\$ 762,40

Kentucky Utilities Company Case No. 2018-00034 Balance Sheet - Total Company As of December 31, 2017 - April 30, 2019

ine No	Description	December 2017	January 2018	February 2018	March 2018	April 2018	May 2018	June 2018	July 2018	August 2018	September 2018	October 2018	November 2018	December 2018	January 2019	February 2019	March 2019	April 2019	17 Mo Avg December 2017 April 2019
27	LIABILITIES AND OTHER CREDITS																		
28	PROPRIETARY CAPITAL																		
29	Common and Preferred Stock Issued	\$ 308,139,978 \$	308,139,978 \$		\$ 308,139,978	\$ 308,139,978	\$ 308,139,978		308,139,978	\$ 308,139,978	\$ 308,139,978		\$ 308,139,978	\$ 308,139,978 \$	308,139,978				
30	Common Stock Expense	(321,289)	(321,289)	(321,289)	(321,289)	(321,289)	(321,289)	(321,289)	(321,289)	(321,289)	(321,289)	(321,289)	(321,289)	(321,289)	(321,289)	(321,289)	(321,289) 704.022,592	(321,289) 704,022,592	(321,2 645,140,5
31	Paid-in-capital	583,858,083	583,858,083	583,858,083	583,858,083	583,858,083	583,858,083	657,354,611	657,354,611	657,354,611	657,354,611	657,354,611	657,354,611	704,022,592	704,022,592	704,022,592	1,931,636,684	1,941,522,940	1,914,722,8
32	Retained Earnings	1,852,726,064	1,886,297,670	1,914,183,631	1,884,076,741	1,893,856,239	1,909,686,680	1,880,745,803	1,907,858,247	1,935,522,169	1,907,486,505	1,918,131,901	1,936,895,975	1,919,046,252	1,952,294,088	1,978,321,009	1,931,030,004	1,941,522,940	1,914,722,0
33	Other Comprehensive Income	-	-					-				-	-			2 000 162 200	8 2 0/3 /77 065	\$ 2 053 364 220	\$ 28676820
34	Total Proprietary Capital	\$ 2,744,402,836 \$	5 2 777,974 442 \$	2,805,860,402	\$ 2,775,753,513	\$ 2,785,533,010	\$ 2,801,363,451	\$ 2,845,919,104	\$ 2,873,031,547	\$ 2,900,695,469	\$ 2,872,659,805	\$ 2,883,305,201	\$ 2,902,069,276	\$ 2,930,887,532 \$	2,964,135,368	\$ 2,990,102,290	\$ 2,943,477,905	\$ 2,900,004,440	\$ 2,007,002.00
35	Total Long-Term Debt	\$ 2,342,209,368 \$	\$ 2,342,255,116 \$	2,342,296,437	\$ 2,342,342,185	\$ 2,342,386,457	\$ 2,342,432,205	\$ 2,342,476,477	\$ 2,342,522,225	\$ 2,342,567,973	\$ 2,342,612,245	\$ 2,342,657,993	\$ 2,342,702,265	\$ 2,342,748,013 \$	2,342,793,761	\$ 2,342,835,082	\$ 2,342,880,830	\$ 2,342,925,102	\$ 2,342,567,27
36	CURRENT AND ACCRUED LIABILITIES																		
37	Notes Payable	\$ 88,757,433 \$	115,284,207 \$	80,223,956	\$ 121,132,941	\$ 148,699,047	\$ 192,732,523	\$ 181,134,637	\$ 171,967,439	\$ 158,153,465	\$ 204,139,312	\$ 234,068,428	\$ 265,582,184	\$ 256,266,518 \$	232,926,101			\$ 296,436,768	
38	Accounts Payable	137,713,328	128,243,349	126,576,237	123,250,701	130,732,847	130,839,725	127,593,885	130,173,705	133,904,013	132,884,178	132,300,981	124,075,862	127,287,515	122,457,737	126,856,226	118,950,534	123,274,376	128,065,6
39	Accounts Payable to Associated Companies	47,030,503	47,139,750	46,098,933	46,049,679	43,407,854	43,114,044	43,829,917	43,085,055	43,143,881	44,734,951	44,490,094	44,693,951	48,103,554	47,975,903	46,973,303	47,925,456	44,886,165	45,451,9
40	Customer Deposits	30,120,479	30,120,479	30,120,479	30,120,479	30,120,479	30,120,479	30,120,479	30,120,479	30, 120, 479	30,120,479	30,120,479	30,120,479	30,120,479	30,120,479	30,120,479	30,120,479	30,120,479	30,120,4
41	Taxes Accrued	16,996,171	27,585,373	30,724,522	19,835,292	14,578,754	22,477,280	15,732,969	27,539,345	39,534,388	26,971,598	17,895,784	26,801,610	18,430,562	28,805,437	30,675,377	27,347,137	15,704,533	23,978,5
42	Interest Accrued	16,057,746	23,456,666	30,703,740	37,598,660	35,403,830	9,467,598	16,084,802	23,483,722	30,703,740	37,598,660	35,403,830	9,467,598	16,084,802	23,488,554	30,703,740	37,603,492	35,413,493	26,395,5
43	Dividends Payable Affiliate	-	-	•	-		•		•			-	-	-	·			-	00.000.0
44	Miscellaneous Current Liabilities	23,842.997	23,810,073	23,777 149	23 179 480	23,143,718	23 107 957	23,288,158	23,249,996	23,211,835	23,173,674	23,135,512	23,097,351	23,059,189	23,021,028	22,982,867	21,712,257	21,674,096	
45	Total Current and Accrued Liabilities	\$360.518.657 \$	395,639,896 \$	368,225,016	\$ 401 167 233	\$ 426,086,529	\$ 451,859,606	\$ 437,784,846	\$ 449,619,741	\$ 458,771,800	\$ 499,622,852	\$ 517,415,108	\$ 523,839,035	\$ 519,352,619	508,795,239	\$ 494 262 267	\$ 552,543,355	\$ 567.509.910	\$ 400,047,6
46	DEFERRED CREDITS																		
47	Accumulated Deferred Income Tax Liability	\$ 948.955.783 \$	948,999,760 \$	949,043,737	\$ 967,177,976	\$ 967,221,953	\$ 967,265,930	\$ 985,400,168	\$ 985,444,145	\$ 985.488.123	\$ 1.003.622.361	\$ 1,003,666,338	\$ 1,003,710,315	\$ 1,021,844,554	1,021,888,531	\$ 1,021,932,508		\$ 1,032,898,059	
48	Investment Tax Credits	93.847.405	93,680,150	93.512.894	93.345.638	93.178.382	93.011.127	92.843.871	92.676.615	92,509,359	92,342,104	92,174,848	92,007,592	91,840.336	91,673,081	91,505,825	91,338,569	91,171,313	92,509,3
49	Regulatory Liabilities	740,195,509	744,961,071	749,459,181	749,640,255	750,095,477	751,371,941	745,653,464	743,521,677	742,031,509	738,423,922	737,124,830	736,208,863	730,603,263	728,237,981	726,775,025	722,455,258	721,681,526	738,731,
50	Customer Advances for Construction	662,564	662,564	662,564	662,564	662,564	662.564	662,564	662,564	662,564	662,564	662,564	662,564	662,564	662,564	662,564	662,564	662,564	662,5
51	Asset Retirement Obligations	220,214,856	217,953,174	216,584,893	214,593,026	211,709,909	207,010,570	202,818,674	198,375,251	193,560,316	188,973,563	184,589,008	181,933,985	180,029,030	178,544,376	176,912,725	174,579,491	171,384,328	195,280,4
52	Other Deferred Credits	1,593,731	1,593,731	1,593,731	1,593,731	1,593,731	1,593,731	1,593,731	1,593,731	1,593,731	1,593,731	1,593,731	1,593,731	1,593,731	1,593,731	1,593,731	1,593,731	1,593,731	1,593.
53	Miscellaneous Long Term Liabilities	3,444,941	3,444,941	3,444,941	3,444,941	3,444,941	3,444,941	3,444,941	3,444,941	3,444,941	3,444,941	3,444,941	3,444,941	3,444,941	3,444,941	3,444,941	3,444,941	3,444,941	3.444,
54	Accumulated Provision for Post Retirement Benefits	74,382,915	28,138,483	27,894,050	26,383 276	26 138,843	25.894.410	21,375,636	21,131,203	20,886,771	19,375,996	19 131 563	18,887,131	17 376 356	14,691,045	14,398,512	12,800,579	12,508,047	23,611,
5	Total Deferred Credits	\$ 2,083,297,704 \$	2,039,433,873 \$	2.042,195,990	\$ 2.056.841.406	\$ 2,054,045,799	\$ 2,050,255,212	\$ 2,053,793,048	\$ 2,046,850,127	\$ 2.040,177,312	\$ 2,048,439,181	\$ 2,042,387,823	\$ 2,038,449,121	\$ 2.047,394,775	\$ 2,040,736,249	\$ 2,037,225,830	\$ 2.039,729,214	\$ 2.035.344.508	\$ 2,046,858
6	TOTAL LIABILITIES AND STOCKHOLDER EQUITY	\$ 7.530.428.564 \$	7,555,303.327	7,558,577,845	\$ 7,576,104,336	\$ 7.608.051.795	\$ 7,645,910,474	\$ 7,679,973,474	\$ 7.712,023,641	\$ 7,742,212,554	\$ 7,763,334,083	\$ 7,785,766,125	\$ 7,807,059,697	\$ 7,840.382,940	\$ 7,856.460,617	\$ 7,864,485,469	\$ 7,878,631,364	\$ 7.899,143,740	\$ 7,723,755.
7																		Total Capital	\$ 5,374 612
																		Capital Structure	
8																	c	ase No. 2016-00370)
3																	Short-term Debt	2.479	
,																	Long-term Debt	44.259	
																	Common Equity	53.289	
6																	Total Capital		\$ 5,374.612

Attachment to PSC DR3 Question 2(a)(1) Page 1 of 3 Blake / Arbough

Attachment to PSC DR3 Question 2(a)(1) Page 2 of 3 Blake / Arbough

Short-term Debt Long-term Debt	Case No. 2016-00370 2.47% 44.25%	\$ 2,378,495,605	Supporting Schedule Reference KWB-4 Page 2 Line 1 Column (C) KWB-4 Page 2 Line 2 Column (C)
Common Equity			KWB-4 Page 2 Line 3 Column (C)
Total Capital	100.00%	\$ 5,374,612,758	KWB-4 Page 2 Line 4 Column (C)

*Honorable Allyson K Sturgeon Senior Corporate Attorney LG&E and KU Energy LLC 220 West Main Street Louisville, KENTUCKY 40202

*Jody Kyler Cohn Boehm, Kurtz & Lowry 36 East Seventh Street Suite 1510 Cincinnati, OHIO 45202

*Honorable Kurt J Boehm Attorney at Law Boehm, Kurtz & Lowry 36 East Seventh Street Suite 1510 Cincinnati, OHIO 45202

*Honorable Kendrick R Riggs Attorney at Law Stoll Keenon Ogden, PLLC 2000 PNC Plaza 500 W Jefferson Street Louisville, KENTUCKY 40202-2828

*Kent Chandler Assistant Attorney General Office of the Attorney General Office of Rate 700 Capitol Avenue Suite 20 Frankfort, KENTUCKY 40601-8204

*Honorable Michael L Kurtz Attorney at Law Boehm, Kurtz & Lowry 36 East Seventh Street Suite 1510 Cincinnati, OHIO 45202

*Rebecca W Goodman Assistant Attorney General Office of the Attorney General Office of Rate 700 Capitol Avenue Suite 20 Frankfort, KENTUCKY 40601-8204 *Robert Conroy LG&E and KU Energy LLC 220 West Main Street Louisville, KENTUCKY 40202

*Kentucky Utilities Company 220 W. Main Street P. O. Box 32010 Louisville, KY 40232-2010

*Louisville Gas and Electric Company 220 W. Main Street P. O. Box 32010 Louisville, KY 40232-2010