

**COMMONWEALTH OF KENTUCKY**  
**BEFORE THE PUBLIC SERVICE COMMISSION**

In the Matter of:

AN ELECTRONIC EXAMINATION BY THE	)	
PUBLIC SERVICE COMMISSION OF THE	)	Case No. 2019-00391
ENVIRONMENTAL SURCHARGE MECHANISM	)	
OF DUKE ENERGY KENTUCKY, INC. FOR THE	)	
SIX-MONTH BILLING PERIOD ENDING MAY 31,	)	
2019	)	

---

**DIRECT TESTIMONY OF**  
**THEODORE H. CZUPIK JR.**  
**ON BEHALF OF**  
**DUKE ENERGY KENTUCKY, INC.**

---

December 12, 2019

**TABLE OF CONTENTS**

	<u>PAGE</u>
<b>I. INTRODUCTION AND PURPOSE .....</b>	<b>1</b>
<b>II. DISCUSSION .....</b>	<b>3</b>
<b>A. The Company's Rider ESM.....</b>	<b>3</b>
<b>B. Data Requests Sponsored.....</b>	<b>6</b>
<b>III. CONCLUSION .....</b>	<b>6</b>

**I. INTRODUCTION AND PURPOSE**

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

2 A. My name is Theodore H. Czupik Jr. and my business address is 139 E. Fourth  
3 Street, Cincinnati, Ohio 45202.

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

5 A. I am employed by Duke Energy Business Services LLC (DEBS) as Rates and  
6 Regulatory Strategy Manager. DEBS is a service company subsidiary of Duke  
7 Energy Corporation and a non-utility affiliate of Duke Energy Kentucky, Inc.  
8 (Duke Energy Kentucky or Company).

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

11 A. I received a Bachelor of Science degree in Accounting from the University of  
12 Dayton in 1985. I became a Certified Public Accountant (CPA) in the State of  
13 Ohio in 1988.

14 I began my career with The Cincinnati Gas & Electric Company (CG&E)  
15 in 1985 as a Staff Accountant in the Accounting Department. Between 1985 and  
16 1993, I held various positions in the Accounting Department until I transferred to  
17 the Rate Department in 1993. I progressed through various positions until  
18 receiving my current position as Rates & Regulatory Strategy Manager in January  
19 2014.

1 **Q. PLEASE DESCRIBE YOUR PROFESSIONAL AFFILIATIONS.**

2 A. I am a member of the American Institute of Certified Public Accountants and the  
3 Ohio Society of Certified Public Accountants.

4 **Q. HAVE YOU TESTIFIED PREVIOUSLY BEFORE THE PUBLIC  
5 SERVICE COMMISSION?**

6 A. Yes. I have testified in fuel adjustment clause (FAC) and environmental surcharge  
7 mechanism (ESM) proceedings before the Kentucky Public Service Commission  
8 (Commission).

9 **Q. PLEASE SUMMARIZE YOUR DUTIES AS RATES AND REGULATORY  
10 STRATEGY MANAGER.**

11 A. As Rates & Regulatory Strategy Manager, my duties include filing various  
12 monthly, quarterly and annual rate recovery mechanisms, preparation of cost of  
13 service studies, and preparation of other schedules used in retail rate filings for  
14 Duke Energy Kentucky and its parent, Duke Energy Ohio, Inc.

15 **Q. WHAT IS THE PURPOSE OF THIS PROCEEDING?**

16 A. The purpose of this proceeding is to review the operation of Duke Energy  
17 Kentucky's environmental surcharge mechanism tariff (Rider ESM or ESM)  
18 during the six-month billing period ending May 31, 2019 and to determine  
19 whether the ESM revenues collected during the review period are just and  
20 reasonable.

1 **Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?**

2 A. The purpose of my testimony is to (1) support the Company's Rider ESM filings  
3 during the sixth-month review period, (2) explain how the ESM billing factors  
4 were calculated and (3) demonstrate that the revenue collected during the period  
5 was just and reasonable.

**II. DISCUSSION**

**A. The Company's Rider ESM**

6 **Q. PLEASE DESCRIBE THE OPERATION OF DUKE ENERGY**  
7 **KENTUCKY'S RIDER ESM FOR THE BILLING PERIODS UNDER**  
8 **REVIEW.**

9 A. The monthly environmental surcharge billing factors applied during the billing  
10 period under review were calculated consistent with the Commission's Orders in  
11 Duke Energy Kentucky's previous applications to implement or amend its  
12 environmental surcharge mechanism and compliance plan. In each month of the  
13 six-month period under review in this proceeding, Duke Energy Kentucky  
14 calculated the environmental surcharge factors in accordance with its Rider ESM  
15 Tariff approved by the Commission's Order in Case No. 2017-00321. Duke  
16 Energy Kentucky billed an environmental surcharge to its customers from  
17 December 1, 2018 through May 31, 2019. The calculations were made in  
18 accordance with the Commission approved monthly forms and were filed with the  
19 Commission ten days before the new monthly charge was billed by the Company,  
20 per KRS 278.183.

1 **Q. WHAT ARE THE COMPONENTS OF THE ENVIRONMENTAL**  
2 **COMPLIANCE COSTS THAT WERE INCLUDED IN THE**  
3 **CALCULATION OF THE ENVIRONMENTAL SURCHARGE BILLING**  
4 **FACTORS FOR THE BILLING PERIODS UNDER REVIEW?**

5 A. In each month of the six-month period under review in this proceeding, Duke  
6 Energy Kentucky's environmental compliance costs,  $E(m)$ , include: (1) a return  
7 on environmental compliance rate base; (2) environmental operating expenses;  
8 and (3) and adjustment for over- or under-recovery of previously filed monthly  
9 jurisdictional  $E(m)$ .

10 **Q. PLEASE DESCRIBE THE COMPONENTS OF ENVIRONMENTAL**  
11 **COMPLIANCE RATE BASE THAT WERE INCLUDED IN THE**  
12 **CALCULATION OF THE ENVIRONMENTAL SURCHARGE BILLING**  
13 **FACTORS FOR THE BILLING PERIODS UNDER REVIEW?**

14 A. Environmental compliance rate base in the calculation of the environmental  
15 surcharge billing factors for the six-month billing period under review includes:  
16 (1) eligible environmental compliance plant in-service; (2) eligible environmental  
17 compliance construction work in progress (CWIP); (3) emission allowance  
18 inventory; (4) accumulated depreciation on eligible environmental compliance  
19 plant in-service; and (5) deferred income taxes on eligible environmental  
20 compliance plant in-service. The capital projects that comprise the environmental  
21 compliance plant in-service and CWIP are those approved by the Commission in  
22 Case No. 2017-00321 and Case No. 2018-00156. Capital projects included in the

1 calculation of the Rider ESM are the following as shown on FORM 2.10 of the  
2 monthly Rider ESM filings:

Project No.	Description
1	EB020290 Lined Retention Basin West
2	EB020745 Lined Retention Basin East
3	EB020298 East Bend SW/PW Reroute
4	EB021281 East Bend Landfill Cell 2

3 **Q. WHAT ENVIRONMENTAL PLAN OPERATING EXPENSES WERE**  
4 **INCLUDED IN THE CALCULATION OF THE ENVIRONMENTAL**  
5 **SURCHARGE BILLING FACTORS FOR THE BILLING PERIODS**  
6 **UNDER REVIEW?**

7 A. The environmental plan operating expenses included in the calculation of the  
8 environmental surcharge billing factors for the six-month billing period under  
9 review are those approved by the Commission in Case No. 2017-00321 and are  
10 shown on FORM 2.00 of the monthly Rider ESM filings. The expenses included  
11 in the calculation of Rider ESM include the following as shown on FORM 2.00 of  
12 the monthly Rider ESM filings:

Description	Source
Monthly Depreciation Expense	ES Form 2.10
Monthly Taxes Other Than Income Taxes	ES Form 2.10
Monthly Amortization Expense	ES Form 2.20
Monthly Emission Allowance Expense	ES Form 2.30
Monthly Environmental Reagent Expense	ES Form 2.50

1 **Q. IS THE COMPANY PROPOSING TO MAKE ANY CHANGES TO ITS**  
2 **RIDER ESM TARIFF?**

3 A. No. The Company does not believe that it is necessary to make any changes to its  
4 Rider ESM tariff.

**B. Data Requests Sponsored**

5 **Q. PLEASE IDENTIFY THE RESPONSES TO COMMISSION DATA**  
6 **REQUESTS YOU ARE SPONSORING.**

7 A. I sponsor the Company's responses to Staff Data Request Numbers 1 through 4.  
8 These responses were prepared by me and/or under my direction and control and  
9 are true and accurate to the best of my knowledge and belief.

**III. CONCLUSION**

10 **Q. WERE THE ESM BILLING FACTORS CHARGED DURING THE SIX**  
11 **MONTHS UNDER REVIEW CALCULATED IN ACCORDANCE WITH**  
12 **THE RIDER ESM TARIFF AND APPLICABLE COMMISSION ORDERS?**

13 A. Yes, the ESM billing factors charged during the six months under review were  
14 calculated in accordance with the Rider ESM tariff and applicable commission  
15 orders. The environmental surcharge billing factors charged during the review  
16 period were fair, just and reasonable.

17 As shown on the bottom of Form 2.00 of each monthly filing, any over-  
18 recovery of net jurisdictional E(m) is deducted from the current expense month  
19 net jurisdictional E(m) and any under-recovery of net jurisdictional E(m) is added  
20 to the current expense month net jurisdictional E(m). This over- or under-  
21 recovery is reflected on Line 11 of FORM 1.10 of each monthly filing.



1 Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

2 A. Yes.

**VERIFICATION**

STATE OF OHIO                    )  
  )     SS:  
COUNTY OF HAMILTON        )

The undersigned, Theodore H. Czupik, Jr., Rates & Regulatory Strategy Manager, being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing testimony and that it is true and correct to the best of his knowledge, information and belief.

Theodore H. Czupik, Jr.  
Theodore H. Czupik, Jr., Affiant

Subscribed and sworn to before me by Theodore H. Czupik, Jr., on this 10<sup>th</sup> day of December, 2019.

E. Minna Rolfes-Adkins  
NOTARY PUBLIC

My Commission Expires: July 8, 2022



E. MINNA ROLFES-ADKINS  
Notary Public, State of Ohio  
My Commission Expires  
July 8, 2022

VERIFICATION

STATE OF OHIO                    )  
  )     SS:  
COUNTY OF HAMILTON        )

The undersigned, Theodore H. Czupik, Jr., Rates & Regulatory Strategy Manager, being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing data requests, and that the answers contained therein are true and correct to the best of his knowledge, information and belief.

Theodore H. Czupik Jr  
Theodore H. Czupik, Jr., Affiant

Subscribed and sworn to before me by Theodore H. Czupik, Jr., on this 10<sup>th</sup> day of December, 2019.

E. Minna Rolfes-Adkins  
NOTARY PUBLIC

My Commission Expires: July 8, 2022



**E. MINNA ROLFES-ADKINS**  
Notary Public, State of Ohio  
My Commission Expires  
July 8, 2022

**KyPSC Case No. 2019-00391**  
**TABLE OF CONTENTS**

<b><u>DATA REQUEST</u></b>	<b><u>WITNESS</u></b>	<b><u>TAB NO.</u></b>
STAFF-DR-01-001	Theodore H. Czupik, Jr. ....	1
STAFF-DR-01-002	Theodore H. Czupik, Jr. ....	2
STAFF-DR-01-003	Theodore H. Czupik, Jr. ....	3
STAFF-DR-01-004	Theodore H. Czupik, Jr. ....	4

**STAFF-DR-01-001**

**REQUEST:**

Prepare a summary schedule showing the calculation of E(m) and the surcharge factor for the expense months covered by the billing period under review. ES Form 1.10 can be used as a model for this summary. Include the two expense months subsequent to the billing period in order to show the over- and under-recovery adjustments for the months included for the billing period. The summary schedule is to incorporate any corrections or revisions to the monthly surcharge filings Duke Kentucky has submitted for the billing period under review. Provide the schedule and all supporting calculations and documentation in Excel spreadsheet format, with formulas intact and unprotected and all rows and columns accessible.

**RESPONSE:**

See STAFF-DR-01-001 Attachment 1 for a summary showing the calculation of E(m) and the surcharge factor for the expense months covered by the billing period under review and the two expense months subsequent to the billing period under review. Detailed calculations are available in the Excel files provided for each expense month.

For Excel files for the expense months in the review period please see:

- STAFF-DR-01-001 Attachment 2 – 102018 DEK ESM Filing for 122018
- STAFF-DR-01-001 Attachment 3 – 112018 DEK ESM Filing for 012019
- STAFF-DR-01-001 Attachment 4 – 122018 DEK ESM Filing for 022019
- STAFF-DR-01-001 Attachment 5 – 012019 DEK ESM Filing for 032019
- STAFF-DR-01-001 Attachment 6 – 022019 DEK ESM Filing for 042019
- STAFF-DR-01-001 Attachment 7 – 032019 DEK ESM Filing for 052019

**PERSON RESPONSIBLE:** Theodore H. Czupik Jr.

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

Calculation of Current Month Environmental Surcharge Factors

Summary of Environmental Compliance Plans

E(m) = RORB + OE - EAS + Prior Period Adjustment + (Over)/Under Recovery	Source	Expense Month								
		October 2018	November 2018	December 2018	January 2019	February 2019	March 2019	April 2019	May 2019	
Environmental Compliance Rate Base (RB)	ES Form 2.00	\$ 35,579,059	\$ 37,128,715	\$ 37,089,972	\$ 37,725,269	\$ 38,199,497	\$ 39,965,989	\$ 40,448,174	\$ 41,423,724	
RB + 12 months	(1) + 12	\$ 2,964,922	\$ 3,094,060	\$ 3,091,664	\$ 3,143,772	\$ 3,183,291	\$ 3,330,499	\$ 3,370,681	\$ 3,451,977	
Pretax Rate of Return (ROR)	ES Form 1.20	8.446%	8.446%	8.446%	8.446%	8.446%	8.446%	8.446%	8.446%	
Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 250,417	\$ 261,324	\$ 261,122	\$ 265,523	\$ 268,861	\$ 281,294	\$ 284,688	\$ 291,554	
Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 1,914,960	\$ 2,029,144	\$ 2,384,373	\$ 2,013,699	\$ 2,219,184	\$ 2,387,300	\$ 2,636,180	\$ 2,899,513	
Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Sub-Total E(m)	(4) + (5) - (6)	\$ 2,165,377	\$ 2,290,468	\$ 2,645,495	\$ 2,279,222	\$ 2,488,045	\$ 2,668,594	\$ 2,920,868	\$ 3,191,067	
Jurisdictional Allocation Ratio for Expense Month	ES Form 1.10	97.33%	97.37%	97.09%	97.39%	97.42%	97.15%	97.20%	96.97%	
Jurisdictional E(m)	(7) x (8)	\$ 2,107,561	\$ 2,230,229	\$ 2,568,511	\$ 2,219,734	\$ 2,423,853	\$ 2,592,539	\$ 2,839,084	\$ 3,094,378	
Prior Period Adjustment (if necessary)	(A)	+ \$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (1,885,759)	
Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ (12,363)	\$ 128,615	\$ (78,897)	\$ (205,653)	\$ (161,349)	\$ 67,548	\$ 267,920	\$ 395,017	
Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 2,095,198	\$ 2,358,844	\$ 2,489,614	\$ 2,014,081	\$ 2,262,504	\$ 2,660,087	\$ 3,107,004	\$ 1,603,636	
Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 57,816	\$ 60,239	\$ 76,984	\$ 59,488	\$ 64,192	\$ 76,055	\$ 81,784	\$ 96,689	
<b>Revenues as a Percentage of 12 Month Average Total Revenues</b>										
Residential	ES Form 3.00	41.21%	41.15%	41.14%	40.53%	40.53%	40.68%	40.50%	40.45%	
Non-Residential	ES Form 3.00	58.79%	58.85%	58.86%	59.47%	59.47%	59.32%	59.50%	59.55%	
<b>Adjusted Jurisdictional E(m) - Allocated</b>										
Residential	(12) * (15)	\$ 863,431	\$ 970,664	\$ 1,024,227	\$ 816,307	\$ 916,993	\$ 1,082,123	\$ 1,258,337	\$ 648,671	
Non-Residential	(12) * (16)	\$ 1,231,767	\$ 1,388,180	\$ 1,465,387	\$ 1,197,774	\$ 1,345,511	\$ 1,577,964	\$ 1,848,667	\$ 954,965	
<b>R(m)</b>										
Residential R(m) = Average Total Revenue (Total Revenue excluding ESM)	ES Form 3.00	\$ 11,437,455	\$ 11,487,883	\$ 11,574,282	\$ 11,329,337	\$ 11,414,436	\$ 11,497,201	\$ 11,455,973	\$ 11,344,727	
Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM)	ES Form 3.00	\$ 10,274,115	\$ 10,327,585	\$ 10,416,963	\$ 10,458,095	\$ 10,540,463	\$ 10,620,061	\$ 10,685,000	\$ 10,745,188	
<b>Environmental Surcharge Billing Factor</b>										
Residential	(18) / (21)	7.55%	8.45%	8.85%	7.21%	8.03%	9.41%	10.98%	5.72%	
Non-Residential	(19) / (22)	11.99%	13.44%	14.07%	11.45%	12.77%	14.86%	17.30%	8.89%	

Note: (A) Amounts determined by the Commission during six-month and two-year reviews.

Input:  
 Expense Month: October 2018  
 Case No. 2017-00321

**Property Tax Rates**

ARO Account: 0.15000%  
 Structures & Improvements 1.42740%

Adj. Jurisdictional E(m)  
 Authorized for Aug-18  
 Expense Month \$ 2,280,451.00

Effective Date for Billing: November 29, 2018  
 Date Submitted: November 19, 2018

**Error Check:**  
 To make sure that retail  
 and SLSRSL are entered  
 for the current expense month

File:  
 Original & 2 copies

Jurisdictional E(m) Table									
Form 1.10	Juris. E(m)				Juris. E(m) vs. Revenue Collected				
Expense Month	Ln 9 (H30) Retail	Ln 13 (H38) PSM	Ln 7 (H26) Total	Ln 12 (H38) Adj. Retail Recovery	(Over)/Under Recovery	Recovered in Rates	Recovery vs. Allowed	Exp Month / Billing	
Feb-18	\$ -	\$ -	\$ -	\$ -					
Mar-18	\$ -	\$ -	\$ -	\$ -					
Apr-18	\$ 683,831	\$ 23,922	\$ 707,753	\$ 683,831	\$ -			Apr / June	
May-18	\$ 783,036	\$ 23,802	\$ 806,838	\$ 783,036	\$ -			May / July	
Jun-18	\$ 1,461,780	\$ 41,954	\$ 1,503,734	\$ 1,413,676	\$ (48,104)	\$ 731,935		June / August	
Jul-18	\$ 2,237,252	\$ 73,482	\$ 2,310,734	\$ 2,122,573	\$ (114,679)	\$ 897,715		July / September	
Aug-18	\$ 2,407,393	\$ 79,069	\$ 2,486,462	\$ 2,280,451	\$ (126,942)	\$ 1,540,618		August / October	
Sep-18	\$ 1,928,868	\$ 61,091	\$ 1,989,959	\$ 1,699,711	\$ (229,157)	\$ 2,351,730		September / November	
Oct-18	\$ 2,107,561	\$ 57,816	\$ 2,165,377	\$ 2,095,198	\$ (12,363)	\$ 2,292,814		October / December	

ES FORM 1.00

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

Summary of Jurisdictional E(m), Jurisdictional R(m) and Environmental Surcharge Billing Factors  
For the Expense Month of October 2018

**Residential (Total Revenue)**

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	863,431
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	11,437,455
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		7.55%

**Non-Residential (Net Revenue)**

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,231,767
Jurisdictional R(m)	ES Form 1.10, Line 16		\$	10,274,115
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		11.99%

Effective Date for Billing: November 29, 2018

Submitted by: Theodore H. Czupik Jr.

Title: Rates & Regulatory Strategy Manager

Date Submitted: November 19, 2018



ES FORM 1.10

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

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of October 2018

Line No.	E(m) = RORB + OE - EAS + Prior Period Adjustment + (Over)/Under Recovery	Source	Environmental Compliance Plans
1	Environmental Compliance Rate Base (RB)	ES Form 2.00	\$ 35,579,059
2	RB + 12 months	(1) + 12	\$ 2,964,922
3	Pretax Rate of Return (ROR)	ES Form 1.20	8.446%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 250,417
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 1,914,960
6	Less, Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 2,165,377
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	97.33%
9	Jurisdictional E(m)	(7) x (8)	\$ 2,107,561
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ (12,363)
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 2,095,198
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 57,816

**Calculation of Environmental Surcharge Billing Factors**

		Residential (Total Revenue)	Non-Residential (Net Revenue)
14	Revenues as a Percentage of 12 Month Average Total Revenues	41.21%	58.79%
15	Adjusted Jurisdictional E(m) - Allocated	\$ 863,431	\$ 1,231,767
16	<b>R(m)</b> Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	\$ 11,437,455	\$ 10,274,115
17	Jurisdictional E(m) / R(m)	7.55%	11.99%

**Calculation of Jurisdictional Allocation Ratio - 12 Month Average**

18	Retail Revenue	ES Form 3.00	\$ 27,752,084	97.33%
19	Sales for Resale	Company Records	\$ 759,970	2.67%
20	Total Revenue		\$ 28,512,054	100.00%

Note: (A) Amounts determined by the Commission during six-month and two-year reviews.

ES FORM 1.20

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

Cost of Capital

Line No.	Capital Structure	Ratio	Cost	Weighted Cost (A)	Gross up for Tax Rate (B)	Pre-Tax Rate of Return (A)x(B)
1	Short-term Debt	9.772%	3.083%	0.301%		0.301%
2	Long-term Debt	40.977%	4.243%	1.739%		1.739%
3	Common Equity	49.251%	9.725%	4.790%	1.3373044	6.406%
4	Total	100.000%		6.830%		8.446%

Note: Capital structure, cost of debt and tax rate gross-up factor as approved in Case No. 2017-00321. These rates are to remain constant until the Commission sets base rates in Duke Kentucky's next base rate case proceeding.

ES FORM 2.00

DUKE ENERGY KENTUCKY, INC.  
 ENVIRONMENTAL SURCHARGE REPORT

Revenue Requirement of Environmental Compliance Costs

For the Expense Month of October 2018

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant)	ES Form 2.10	\$ -
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	35,554,614
3	Subtotal		\$ 35,554,614
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 24,445
6	Subtotal		\$ 24,445
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ -
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	-
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ -
12	Environmental Compliance Rate Base		\$ 35,579,059
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ -
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 507,508
16	Monthly Amortization Expense	ES Form 2.20	\$ 272,372
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 1,151
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 1,133,931
19	Total Environmental Compliance Operating Expense		\$ 1,914,960
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO <sub>2</sub> Allowance Sales		\$ -
22	NO <sub>x</sub> Allowances Sales		-
23	Total Emission Allowance Sales		\$ -
24	<u>(Over) / Under Recovery</u>		
25	Adjusted Jurisdictional E(m) Authorized for Expense Month two Months Prior		\$ 2,280,451
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		2,292,814
27	(Over) / Under Recovery		\$ (12,363)

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

ES FORM 2.10

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

Plant, Accumulated Depreciation, CWIP, ITC, ADIT  
 Depreciation Expense, Taxes Other Than Income Taxes

For the Expense Month of October 2018

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
Project No.	Description	Gross Plant in-Service as of October-18	Accumulated Depreciation as of October-18	Net Plant in-Service as of October-18	CWIP Excluding AFUDC as of October-18	Accumulated Deferred ITC as of October-18	Accumulated Deferred Tax Balance as of October-18	Monthly Depreciation Expense	Monthly Property Tax Expense
				(2)-(3)					
1	EB020290 Lined Retention Basin West	\$ -	\$ -	\$ -	\$ 9,032,744	\$ -	\$ -	\$ -	\$ 128,933
2	EB020745 Lined Retention Basin East	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
3	EB020298 East Bend SW/PW Reroute	\$ -	\$ -	\$ -	\$ 26,521,870	\$ -	\$ -	\$ -	\$ 378,573
4				\$ -					
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ -	\$ -	\$ -	\$ 35,554,614	\$ -	\$ -	\$ -	\$ 507,506

ES FORM 2.20  
 Page 1 of 3

DUKE ENERGY KENTUCKY, INC.  
 ENVIRONMENTAL SURCHARGE REPORT  
 Amortization Calculation for Coal Ash ARO

Line No.	Period (1)	Cash Spend (2)	COR Credit (3)	Carrying Cost (4)	Recovery: 10-Yr Amort. (5)	Ending Balance (6)	Cash Spend (7)	Recovery: 2-Month Cycle (8)	Ending Balance (9)	Total Recovery (10) = (5) + (8)
1	2015 Total Actual	\$ 3,858,084	\$ (856,412)	\$ 20,378	\$ -	\$ 3,022,050	\$ -	\$ -	\$ -	\$ -
2	2016 Total Actual	\$ 4,486,812	\$ (107,052)	\$ 379,037	\$ -	\$ 7,780,847	\$ -	\$ -	\$ -	\$ -
3	Jan-17 Actual	\$ 358,148	\$ -	\$ 43,243	\$ -	\$ 8,182,238	\$ -	\$ -	\$ -	\$ -
4	Feb-17 Actual	\$ 424,021	\$ -	\$ 40,351	\$ -	\$ 8,646,610	\$ -	\$ -	\$ -	\$ -
5	Mar-17 Actual	\$ 692,184	\$ (26,763)	\$ 44,724	\$ -	\$ 9,356,755	\$ -	\$ -	\$ -	\$ -
6	Apr-17 Actual	\$ 254,067	\$ -	\$ 50,949	\$ -	\$ 9,661,771	\$ -	\$ -	\$ -	\$ -
7	May-17 Actual	\$ 608,377	\$ -	\$ 56,141	\$ -	\$ 10,326,289	\$ -	\$ -	\$ -	\$ -
8	Jun-17 Actual	\$ 265,619	\$ (26,763)	\$ 53,472	\$ -	\$ 10,618,617	\$ -	\$ -	\$ -	\$ -
9	Jul-17 Actual	\$ 220,636	\$ -	\$ 51,558	\$ -	\$ 10,890,811	\$ -	\$ -	\$ -	\$ -
10	Aug-17 Actual	\$ 272,053	\$ -	\$ 47,731	\$ -	\$ 11,210,595	\$ -	\$ -	\$ -	\$ -
11	Sep-17 Actual	\$ 233,743	\$ (26,763)	\$ 44,389	\$ -	\$ 11,461,964	\$ -	\$ -	\$ -	\$ -
12	Oct-17 Actual	\$ 444,793	\$ -	\$ 60,670	\$ -	\$ 11,967,427	\$ -	\$ -	\$ -	\$ -
13	Nov-17 Actual	\$ 525,770	\$ -	\$ 68,573	\$ -	\$ 12,561,770	\$ -	\$ -	\$ -	\$ -
14	Dec-17 Actual	\$ 2,482,493	\$ (26,763)	\$ 82,850	\$ -	\$ 15,100,350	\$ -	\$ -	\$ -	\$ -
15	Jan-18 Actual	\$ 510,525	\$ -	\$ 91,185	\$ -	\$ 15,702,060	\$ -	\$ -	\$ -	\$ -
16	Feb-18 Actual	\$ 89,648	\$ -	\$ 91,534	\$ -	\$ 15,883,242	\$ -	\$ -	\$ -	\$ -
17	Mar-18 Actual	\$ 396,977	\$ (26,763)	\$ 93,696	\$ -	\$ 16,347,152	\$ -	\$ -	\$ -	\$ -
18	Apr-18 Actual	\$ 132,294	\$ -	\$ 111,722	\$ -	\$ 16,591,168	\$ 173,000	\$ -	\$ 173,000	\$ -
19	May-18 Actual	\$ -	\$ -	\$ 112,480	\$ -	\$ 16,703,648	\$ 100,234	\$ -	\$ 273,234	\$ -
20	Jun-18 Actual	\$ -	\$ -	\$ 111,870	\$ (202,486)	\$ 16,613,032	\$ 150,901	\$ (173,000)	\$ 251,135	\$ (375,486)
21	Jul-18 Actual	\$ -	\$ -	\$ 111,255	\$ (202,486)	\$ 16,521,801	\$ 196,586	\$ (100,234)	\$ 347,486	\$ (302,720)
22	Aug-18 Actual	\$ -	\$ -	\$ 110,637	\$ (202,486)	\$ 16,429,952	\$ 321,815	\$ (150,901)	\$ 518,400	\$ (353,387)
23	Sep-18 Actual	\$ -	\$ -	\$ 110,014	\$ (202,486)	\$ 16,337,480	\$ 275,135	\$ (196,585)	\$ 596,950	\$ (399,071)
24	Oct-18 Actual	\$ -	\$ -	\$ 109,387	\$ (202,486)	\$ 16,244,381	\$ 69,886	\$ (321,815)	\$ 345,021	\$ (524,301)
25	Nov-18 Actual	\$ -	\$ -	\$ 108,756	\$ (202,486)	\$ 16,150,651	\$ -	\$ (275,135)	\$ 69,886	\$ (477,621)
26	Dec-18 Actual	\$ -	\$ -	\$ 108,121	\$ (202,486)	\$ 16,056,286	\$ -	\$ (69,886)	\$ -	\$ (272,372)
27	Jan-19 Actual	\$ -	\$ -	\$ 107,481	\$ (202,486)	\$ 15,961,281	\$ -	\$ -	\$ -	\$ (202,486)
28	Feb-19 Actual	\$ -	\$ -	\$ 106,837	\$ (202,486)	\$ 15,865,632	\$ -	\$ -	\$ -	\$ (202,486)
29	Mar-19 Actual	\$ -	\$ -	\$ 106,188	\$ (202,486)	\$ 15,769,334	\$ -	\$ -	\$ -	\$ (202,486)
30	Apr-19 Actual	\$ -	\$ -	\$ 105,535	\$ (202,486)	\$ 15,672,383	\$ -	\$ -	\$ -	\$ (202,486)
31	May-19 Actual	\$ -	\$ -	\$ 104,878	\$ (202,486)	\$ 15,574,775	\$ -	\$ -	\$ -	\$ (202,486)
32	Jun-19 Actual	\$ -	\$ -	\$ 104,216	\$ (202,486)	\$ 15,476,505	\$ -	\$ -	\$ -	\$ (202,486)
33	Jul-19 Actual	\$ -	\$ -	\$ 103,550	\$ (202,486)	\$ 15,377,569	\$ -	\$ -	\$ -	\$ (202,486)
34	Aug-19 Actual	\$ -	\$ -	\$ 102,880	\$ (202,486)	\$ 15,277,963	\$ -	\$ -	\$ -	\$ (202,486)
35	Sep-19 Actual	\$ -	\$ -	\$ 102,204	\$ (202,486)	\$ 15,177,681	\$ -	\$ -	\$ -	\$ (202,486)
36	Oct-19 Actual	\$ -	\$ -	\$ 101,524	\$ (202,486)	\$ 15,076,719	\$ -	\$ -	\$ -	\$ (202,486)
37	Nov-19 Actual	\$ -	\$ -	\$ 100,840	\$ (202,486)	\$ 14,975,073	\$ -	\$ -	\$ -	\$ (202,486)
38	Dec-19 Actual	\$ -	\$ -	\$ 100,151	\$ (202,486)	\$ 14,872,738	\$ -	\$ -	\$ -	\$ (202,486)
39	Jan-20 Actual	\$ -	\$ -	\$ 99,457	\$ (202,486)	\$ 14,769,709	\$ -	\$ -	\$ -	\$ (202,486)
40	Feb-20 Actual	\$ -	\$ -	\$ 98,759	\$ (202,486)	\$ 14,665,982	\$ -	\$ -	\$ -	\$ (202,486)
41	Mar-20 Actual	\$ -	\$ -	\$ 98,055	\$ (202,486)	\$ 14,561,551	\$ -	\$ -	\$ -	\$ (202,486)
42	Apr-20 Actual	\$ -	\$ -	\$ 97,347	\$ (202,486)	\$ 14,456,412	\$ -	\$ -	\$ -	\$ (202,486)
43	May-20 Actual	\$ -	\$ -	\$ 96,635	\$ (202,486)	\$ 14,350,561	\$ -	\$ -	\$ -	\$ (202,486)
44	Jun-20 Actual	\$ -	\$ -	\$ 95,917	\$ (202,486)	\$ 14,243,992	\$ -	\$ -	\$ -	\$ (202,486)
45	Jul-20 Actual	\$ -	\$ -	\$ 95,194	\$ (202,486)	\$ 14,136,700	\$ -	\$ -	\$ -	\$ (202,486)
46	Aug-20 Actual	\$ -	\$ -	\$ 94,467	\$ (202,486)	\$ 14,028,681	\$ -	\$ -	\$ -	\$ (202,486)
47	Sep-20 Actual	\$ -	\$ -	\$ 93,735	\$ (202,486)	\$ 13,919,930	\$ -	\$ -	\$ -	\$ (202,486)
48	Oct-20 Actual	\$ -	\$ -	\$ 92,997	\$ (202,486)	\$ 13,810,441	\$ -	\$ -	\$ -	\$ (202,486)
49	Nov-20 Actual	\$ -	\$ -	\$ 92,255	\$ (202,486)	\$ 13,700,210	\$ -	\$ -	\$ -	\$ (202,486)
50	Dec-20 Actual	\$ -	\$ -	\$ 91,508	\$ (202,486)	\$ 13,589,232	\$ -	\$ -	\$ -	\$ (202,486)

ES FORM 2.20  
 Page 2 of 3

DUKE ENERGY KENTUCKY, INC.  
 ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

Line No.	Period (1)	Cash Spend (2)	COR Credit (3)	Carrying Cost (4)	Recovery: 10-Yr Amort. (5)	Ending Balance (6)	Cash Spend (7)	Recovery: 2-Month Cycle (8)	Ending Balance (9)	Total Recovery (10) = (5) + (8)
51	Jan-21	Actual	-	90,756	(202,486)	13,477,502	-	-	-	(202,486)
52	Feb-21	Actual	-	89,998	(202,486)	13,365,014	-	-	-	(202,486)
53	Mar-21	Actual	-	89,235	(202,486)	13,251,763	-	-	-	(202,486)
54	Apr-21	Actual	-	88,468	(202,486)	13,137,745	-	-	-	(202,486)
55	May-21	Actual	-	87,695	(202,486)	13,022,954	-	-	-	(202,486)
56	Jun-21	Actual	-	86,916	(202,486)	12,907,384	-	-	-	(202,486)
57	Jul-21	Actual	-	86,133	(202,486)	12,791,031	-	-	-	(202,486)
58	Aug-21	Actual	-	85,344	(202,486)	12,673,889	-	-	-	(202,486)
59	Sep-21	Actual	-	84,550	(202,486)	12,555,953	-	-	-	(202,486)
60	Oct-21	Actual	-	83,750	(202,486)	12,437,217	-	-	-	(202,486)
61	Nov-21	Actual	-	82,945	(202,486)	12,317,676	-	-	-	(202,486)
62	Dec-21	Actual	-	82,135	(202,486)	12,197,325	-	-	-	(202,486)
63	Jan-22	Actual	-	81,319	(202,486)	12,076,158	-	-	-	(202,486)
64	Feb-22	Actual	-	80,498	(202,486)	11,954,170	-	-	-	(202,486)
65	Mar-22	Actual	-	79,671	(202,486)	11,831,355	-	-	-	(202,486)
66	Apr-22	Actual	-	78,838	(202,486)	11,707,707	-	-	-	(202,486)
67	May-22	Actual	-	78,000	(202,486)	11,583,221	-	-	-	(202,486)
68	Jun-22	Actual	-	77,156	(202,486)	11,457,891	-	-	-	(202,486)
69	Jul-22	Actual	-	76,306	(202,486)	11,331,711	-	-	-	(202,486)
70	Aug-22	Actual	-	75,451	(202,486)	11,204,676	-	-	-	(202,486)
71	Sep-22	Actual	-	74,589	(202,486)	11,076,779	-	-	-	(202,486)
72	Oct-22	Actual	-	73,722	(202,486)	10,948,015	-	-	-	(202,486)
73	Nov-22	Actual	-	72,849	(202,486)	10,818,378	-	-	-	(202,486)
74	Dec-22	Actual	-	71,971	(202,486)	10,687,863	-	-	-	(202,486)
75	Jan-23	Actual	-	71,086	(202,486)	10,556,463	-	-	-	(202,486)
76	Feb-23	Actual	-	70,195	(202,486)	10,424,172	-	-	-	(202,486)
77	Mar-23	Actual	-	69,298	(202,486)	10,290,984	-	-	-	(202,486)
78	Apr-23	Actual	-	68,395	(202,486)	10,156,893	-	-	-	(202,486)
79	May-23	Actual	-	67,486	(202,486)	10,021,893	-	-	-	(202,486)
80	Jun-23	Actual	-	66,571	(202,486)	9,885,978	-	-	-	(202,486)
81	Jul-23	Actual	-	65,649	(202,486)	9,749,141	-	-	-	(202,486)
82	Aug-23	Actual	-	64,722	(202,486)	9,611,377	-	-	-	(202,486)
83	Sep-23	Actual	-	63,788	(202,486)	9,472,679	-	-	-	(202,486)
84	Oct-23	Actual	-	62,847	(202,486)	9,333,040	-	-	-	(202,486)
85	Nov-23	Actual	-	61,901	(202,486)	9,192,455	-	-	-	(202,486)
86	Dec-23	Actual	-	60,948	(202,486)	9,050,917	-	-	-	(202,486)
87	Jan-24	Actual	-	59,988	(202,486)	8,908,419	-	-	-	(202,486)
88	Feb-24	Actual	-	59,022	(202,486)	8,764,955	-	-	-	(202,486)
89	Mar-24	Actual	-	58,049	(202,486)	8,620,518	-	-	-	(202,486)
90	Apr-24	Actual	-	57,070	(202,486)	8,475,102	-	-	-	(202,486)
91	May-24	Actual	-	56,084	(202,486)	8,328,700	-	-	-	(202,486)
92	Jun-24	Actual	-	55,092	(202,486)	8,181,306	-	-	-	(202,486)
93	Jul-24	Actual	-	54,093	(202,486)	8,032,913	-	-	-	(202,486)
94	Aug-24	Actual	-	53,087	(202,486)	7,883,514	-	-	-	(202,486)
95	Sep-24	Actual	-	52,074	(202,486)	7,733,102	-	-	-	(202,486)
96	Oct-24	Actual	-	51,054	(202,486)	7,581,670	-	-	-	(202,486)
97	Nov-24	Actual	-	50,027	(202,486)	7,429,211	-	-	-	(202,486)
98	Dec-24	Actual	-	48,994	(202,486)	7,275,719	-	-	-	(202,486)
99	Jan-25	Actual	-	47,953	(202,486)	7,121,186	-	-	-	(202,486)

ES FORM 2.20  
 Page 3 of 3

DUKE ENERGY KENTUCKY, INC.  
 ENVIRONMENTAL SURCHARGE REPORT  
 Amortization Calculation for Coal Ash ARO

Line No.	Period (1)	Cash Spend (2)	COR Credit (3)	Carrying Cost (4)	Recovery: 10-Yr Amort. (5)	Ending Balance (6)	Cash Spend (7)	Recovery: 2-Month Cycle (8)	Ending Balance (9)	Total Recovery (10) = (5) + (8)
100	Feb-25 Actual		-	46,906	(202,486)	6,965,606	-	-	-	(202,486)
101	Mar-25 Actual		-	45,851	(202,486)	6,808,971	-	-	-	(202,486)
102	Apr-25 Actual		-	44,789	(202,486)	6,651,274	-	-	-	(202,486)
103	May-25 Actual		-	43,720	(202,486)	6,492,508	-	-	-	(202,486)
104	Jun-25 Actual		-	42,643	(202,486)	6,332,665	-	-	-	(202,486)
105	Jul-25 Actual		-	41,560	(202,486)	6,171,739	-	-	-	(202,486)
106	Aug-25 Actual		-	40,469	(202,486)	6,009,722	-	-	-	(202,486)
107	Sep-25 Actual		-	39,370	(202,486)	5,846,606	-	-	-	(202,486)
108	Oct-25 Actual		-	38,265	(202,486)	5,682,385	-	-	-	(202,486)
109	Nov-25 Actual		-	37,151	(202,486)	5,517,050	-	-	-	(202,486)
110	Dec-25 Actual		-	36,030	(202,486)	5,350,594	-	-	-	(202,486)
111	Jan-26 Actual		-	34,902	(202,486)	5,183,010	-	-	-	(202,486)
112	Feb-26 Actual		-	33,766	(202,486)	5,014,290	-	-	-	(202,486)
113	Mar-26 Actual		-	32,622	(202,486)	4,844,428	-	-	-	(202,486)
114	Apr-26 Actual		-	31,470	(202,486)	4,673,410	-	-	-	(202,486)
115	May-26 Actual		-	30,311	(202,486)	4,501,235	-	-	-	(202,486)
116	Jun-26 Actual		-	29,144	(202,486)	4,327,893	-	-	-	(202,486)
117	Jul-26 Actual		-	27,968	(202,486)	4,153,375	-	-	-	(202,486)
118	Aug-26 Actual		-	26,785	(202,486)	3,977,674	-	-	-	(202,486)
119	Sep-26 Actual		-	25,594	(202,486)	3,800,782	-	-	-	(202,486)
120	Oct-26 Actual		-	24,395	(202,486)	3,622,691	-	-	-	(202,486)
121	Nov-26 Actual		-	23,188	(202,486)	3,443,393	-	-	-	(202,486)
122	Dec-26 Actual		-	21,972	(202,486)	3,262,879	-	-	-	(202,486)
123	Jan-27 Actual		-	20,748	(202,486)	3,081,141	-	-	-	(202,486)
124	Feb-27 Actual		-	19,516	(202,486)	2,898,171	-	-	-	(202,486)
125	Mar-27 Actual		-	18,276	(202,486)	2,713,961	-	-	-	(202,486)
126	Apr-27 Actual		-	17,027	(202,486)	2,528,502	-	-	-	(202,486)
127	May-27 Actual		-	15,769	(202,486)	2,341,785	-	-	-	(202,486)
128	Jun-27 Actual		-	14,504	(202,486)	2,153,803	-	-	-	(202,486)
129	Jul-27 Actual		-	13,229	(202,486)	1,964,546	-	-	-	(202,486)
130	Aug-27 Actual		-	11,946	(202,486)	1,774,006	-	-	-	(202,486)
131	Sep-27 Actual		-	10,654	(202,486)	1,582,174	-	-	-	(202,486)
132	Oct-27 Actual		-	9,354	(202,486)	1,389,042	-	-	-	(202,486)
133	Nov-27 Actual		-	8,045	(202,486)	1,194,601	-	-	-	(202,486)
134	Dec-27 Actual		-	6,726	(202,486)	998,841	-	-	-	(202,486)
135	Jan-28 Actual		-	5,399	(202,486)	801,754	-	-	-	(202,486)
136	Feb-28 Actual		-	4,063	(202,486)	603,331	-	-	-	(202,486)
137	Mar-28 Actual		-	2,718	(202,486)	403,563	-	-	-	(202,486)
138	Apr-28 Actual		-	1,409	(202,486)	202,486	-	-	-	(202,486)
139	May-28 Actual		-	-	(202,486)	-	-	-	-	(202,486)
		\$ 16,256,244	\$ (1,097,279)	\$ 9,139,355	\$ (24,298,320)		\$ 1,287,556	\$ (1,287,556)		(25,585,876)

Monthly Amortization Amount

(272,372)

**ES FORM 2.30**

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending October 2018

<b>Total SO<sub>2</sub> and NO<sub>x</sub> Emission Allowances</b>					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
<b>SO<sub>2</sub> Allowances - Acid Rain Program (a)</b>					
Quantity	110,717		188	-	110,529
Dollars	\$ 17,233.79	\$ -	\$ 30.08	\$ -	\$ 17,203.71
\$/Allowance	\$ 0.155656	\$ -	\$ 0.160000	\$ -	\$ 0.155649
<b>NO<sub>x</sub> Allowances - Annual</b>					
Quantity	5,236		185	-	5,051
Dollars	\$ 4,898.55	\$ -	\$ 173.08	\$ -	\$ 4,725.47
\$/Allowance	\$ 0.935552	\$ -	\$ 0.935568	\$ -	\$ 0.935551
<b>NO<sub>x</sub> Allowances - Seasonal</b>					
Quantity	676		185	-	491
Dollars	\$ 3,463.19	\$ -	\$ 947.77	\$ -	\$ 2,515.42
\$/Allowance	\$ 5.123062	\$ -	\$ 5.123081	\$ -	\$ 5.123055
<b>Total Emission Allowances</b>					
Quantity	116,629	-	558	-	116,071
Dollars	\$ 25,595.53	\$ -	\$ 1,150.93	\$ -	\$ 24,444.60

(a) Note: The SO<sub>2</sub> Allowances exclude the CSSO<sub>2</sub>G1 Program Allowances as there is no dollar value associated with this program inventory. Thus, there is no expense booked to the ledger as a result of the program.



**ES FORM 2.50**

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

Environmental Reagent Expenses

For the Expense Month of October 2018

<b>Line No.</b>	<b>Expense Type</b>	<b>Account Number</b>	<b>East Bend Unit 2</b>	<b>Total</b>
1	Ammonia	502020	\$ 66,545	\$ 66,545
2	Lime	502040	1,010,123	1,010,123
3	Hydrated Lime	502040	57,263	57,263
4	Total		\$ 1,133,931	\$ 1,133,931

ES FORM 3.00

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

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

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge
					(2) - (5)
Nov-17	\$ 8,584,302			\$ -	\$ 8,584,302
Dec-17	10,686,318			-	10,686,318
Jan-18	16,073,289			-	16,073,289
Feb-18	11,744,958			-	11,744,958
Mar-18	9,705,373			-	9,705,373
Apr-18	9,192,616			-	9,192,616
May-18	9,225,511			-	9,225,511
Jun-18	13,041,663			298,777	12,742,886
Jul-18	15,332,757			383,577	14,949,180
Aug-18	12,716,657			642,457	12,074,200
Sep-18	13,028,155			947,252	12,080,903
Oct-18	\$ 11,048,101			\$ 858,182	\$ 10,189,919
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 11,437,455
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 27,752,084
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					41.21%

Non-Residential - Kentucky Jurisdictional Revenues						
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Month	Total Revenues	Base Rate Fuel Component	Fuel Clause Revenues	Environmental Surcharge Revenues	Total Excluding Environmental Surcharge	Total Non-Fuel Revenue
					(2) - (5)	(6) - (3) - (4)
Nov-17	\$ 14,457,057	\$ 4,776,618	\$ 92,796	\$ -	\$ 14,457,057	\$ 9,587,643
Dec-17	14,438,593	4,921,948	(172,877)	-	14,438,593	9,689,522
Jan-18	16,089,643	5,218,344	546,874	-	16,089,643	10,324,425
Feb-18	14,714,026	4,857,707	37,207	-	14,714,026	9,819,112
Mar-18	14,704,676	4,684,206	731,789	-	14,704,676	9,288,681
Apr-18	14,331,036	4,767,544	200,332	-	14,331,036	9,363,160
May-18	16,761,608	4,821,687	2,218,031	-	16,761,608	9,721,890
Jun-18	19,350,865	5,564,309	2,385,574	433,158	18,917,707	10,967,824
Jul-18	20,520,965	5,713,914	3,024,833	514,138	20,006,827	11,268,080
Aug-18	17,980,988	5,529,498	628,882	898,161	17,082,827	10,924,447
Sep-18	18,634,396	5,702,447	75,261	1,404,478	17,229,918	11,452,210
Oct-18	\$ 18,476,264	\$ 5,092,424	\$ 1,068,820	\$ 1,434,632	\$ 17,041,632	\$ 10,882,388
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 16,314,629	\$ 10,274,115
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 27,752,084	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					58.79%	

Source: MW\_RAC\_044

Class	Revcy	Period	Unbilled	Billed	Total	BaseFuel	DSM	FAC	PSM	ESM	BaseRev	TotalBilled	
Residential	0	5/1/2017	784,453	7,508,315	8,292,768	2,588,234	706,320	(801,494)	(135,356)	0	5,150,802	7,508,315	TRUE
Commercial	2	5/1/2017	223,817	8,137,894	8,361,511	3,344,724	295,277	(1,037,055)	(175,342)	0	5,710,290	8,137,894	TRUE
Industrial	4	5/1/2017	162,141	3,929,156	4,091,297	1,832,761	132,522	(590,393)	(101,113)	0	2,555,378	3,929,156	TRUE
Lighting	15	5/1/2017	0	127,100	127,100	36,136	260	(11,195)	(1,886)	0	103,785	127,100	TRUE
OPA	16	5/1/2017	83,810	1,560,496	1,624,306	685,147	50,452	(205,394)	(34,716)	0	1,085,007	1,560,496	TRUE
Residential	0	6/1/2017	940,089	9,659,183	10,599,272	3,378,933	923,266	(1,029,257)	(174,137)	0	6,560,378	9,659,183	TRUE
Commercial	2	6/1/2017	565,911	9,006,447	9,572,358	3,746,715	331,662	(1,143,205)	(193,511)	0	6,264,606	9,006,447	TRUE
Industrial	4	6/1/2017	278,841	4,218,650	4,497,491	2,014,732	139,633	(601,392)	(103,795)	0	2,769,472	4,218,650	TRUE
Lighting	15	6/1/2017	0	119,193	119,193	33,812	235	(10,337)	(1,739)	0	97,222	119,193	TRUE
OPA	16	6/1/2017	115,294	1,508,064	1,621,358	602,156	45,082	(189,778)	(31,869)	0	1,080,473	1,508,064	TRUE
Residential	0	7/1/2017	1,301,409	12,661,898	13,963,307	4,176,245	1,141,439	(415,742)	(215,265)	0	7,975,221	12,661,898	TRUE
Commercial	2	7/1/2017	224,801	10,326,875	10,551,676	3,891,980	353,441	(398,582)	(206,002)	0	6,688,038	10,326,875	TRUE
Industrial	4	7/1/2017	38,403	4,666,134	4,704,537	2,019,527	140,063	(198,673)	(104,031)	0	2,807,248	4,666,134	TRUE
Lighting	15	7/1/2017	0	142,099	142,099	38,253	253	(4,277)	(1,970)	0	109,840	142,099	TRUE
OPA	16	7/1/2017	30,351	1,922,746	1,953,097	748,931	57,734	(79,172)	(37,665)	0	1,232,918	1,922,746	TRUE
Residential	0	8/1/2017	(948,589)	12,185,554	11,236,965	4,074,108	1,113,648	(587,185)	(210,043)	0	7,795,026	12,185,554	TRUE
Commercial	2	8/1/2017	56,340	10,011,077	10,068,017	3,897,817	345,569	(563,132)	(201,306)	0	6,532,129	10,011,077	TRUE
Industrial	4	8/1/2017	108,915	4,705,420	4,814,335	2,089,197	144,525	(294,245)	(107,611)	0	2,873,554	4,705,420	TRUE
Lighting	15	8/1/2017	0	132,171	132,171	35,841	234	(5,180)	(1,845)	0	103,121	132,171	TRUE
OPA	16	8/1/2017	44,537	1,825,858	1,870,395	725,160	55,760	(104,233)	(37,262)	0	1,186,433	1,825,858	TRUE
Residential	0	9/1/2017	(443,981)	10,036,825	9,592,844	2,766,048	923,855	(164,082)	(62,907)	0	6,663,913	10,036,825	TRUE
Commercial	2	9/1/2017	(385,833)	9,450,649	9,064,816	3,075,967	332,194	(183,449)	(59,281)	0	6,285,218	9,450,649	TRUE
Industrial	4	9/1/2017	(252,900)	4,518,823	4,265,923	1,878,520	142,197	(96,993)	(32,054)	0	2,820,153	4,518,823	TRUE
Lighting	15	9/1/2017	0	131,617	131,617	29,778	284	(1,765)	(548)	0	103,868	131,617	TRUE
OPA	16	9/1/2017	(114,713)	1,801,940	1,687,227	588,243	55,416	(34,758)	(11,210)	0	1,204,249	1,801,940	TRUE
Residential	0	10/1/2017	(705,141)	8,738,582	8,033,441	2,503,044	835,843	(548,638)	(47,728)	0	5,996,061	8,738,582	TRUE
Commercial	2	10/1/2017	100,478	8,337,514	8,437,992	2,821,070	305,154	(617,548)	(54,006)	0	5,882,844	8,337,514	TRUE
Industrial	4	10/1/2017	202,345	3,986,829	4,189,174	1,997,329	134,004	(341,465)	(30,508)	0	2,627,469	3,986,829	TRUE
Lighting	15	10/1/2017	0	127,281	127,281	29,928	300	(6,562)	(551)	0	104,166	127,281	TRUE
OPA	16	10/1/2017	102,722	1,612,658	1,714,390	556,585	52,319	(121,297)	(10,475)	0	1,135,526	1,612,658	TRUE
Residential	0	11/1/2017	1,280,257	8,584,302	9,864,559	2,281,980	761,901	68,740	(43,566)	0	5,515,247	8,584,302	TRUE
Commercial	2	11/1/2017	62,729	8,455,289	8,518,018	2,634,821	284,719	51,495	(60,435)	0	5,534,889	8,455,289	TRUE
Industrial	4	11/1/2017	(77,061)	4,226,492	4,149,431	1,570,102	129,885	30,093	(29,995)	0	2,526,407	4,226,492	TRUE
Lighting	15	11/1/2017	0	135,387	135,387	30,389	349	573	(580)	0	104,636	135,387	TRUE
OPA	16	11/1/2017	(2,477)	1,639,889	1,637,412	541,306	49,810	10,635	(10,302)	0	1,048,440	1,639,889	TRUE
Residential	0	12/1/2017	2,183,729	10,686,318	12,870,047	2,938,285	981,309	109,117	(60,937)	0	6,936,778	10,686,318	TRUE
Commercial	2	12/1/2017	144,604	8,577,566	8,722,170	2,747,849	297,692	(96,837)	(56,814)	0	5,685,676	8,577,566	TRUE
Industrial	4	12/1/2017	(50,660)	4,176,862	4,126,202	1,612,481	134,777	(55,195)	(33,300)	0	2,519,099	4,176,862	TRUE
Lighting	15	12/1/2017	0	133,921	133,921	30,482	366	(1,098)	(607)	0	104,778	133,921	TRUE
OPA	16	12/1/2017	14,000	1,550,244	1,564,244	531,136	48,848	(18,747)	(10,928)	0	999,935	1,550,244	TRUE
Residential	0	1/1/2018	(2,009,512)	16,073,289	14,063,777	4,323,072	1,444,510	457,047	(89,396)	0	9,938,056	16,073,289	TRUE
Commercial	2	1/1/2018	(685,804)	9,911,332	9,225,528	3,072,865	334,780	323,408	(63,777)	0	6,244,058	9,911,332	TRUE
Industrial	4	1/1/2018	(344,589)	4,281,321	3,936,732	1,534,189	128,466	158,615	(31,892)	0	2,481,743	4,281,321	TRUE
Lighting	15	1/1/2018	0	114,155	114,155	24,358	389	3,447	(485)	0	86,448	114,155	TRUE
OPA	16	1/1/2018	(204,843)	1,782,835	1,578,192	586,934	53,911	61,406	(12,140)	0	1,092,724	1,782,835	TRUE
Residential	0	2/1/2018	(604,918)	11,744,958	11,140,040	3,259,164	894,041	24,178	(67,395)	0	7,634,970	11,744,958	TRUE
Commercial	2	2/1/2018	(198,544)	8,825,962	8,627,418	2,751,166	296,781	21,324	(57,105)	0	5,813,796	8,825,962	TRUE
Industrial	4	2/1/2018	(115,938)	4,105,599	3,989,661	1,525,627	128,601	11,837	(31,487)	0	2,471,221	4,105,599	TRUE
Lighting	15	2/1/2018	0	159,341	159,341	36,739	351	18	(731)	0	122,964	159,341	TRUE
OPA	16	2/1/2018	(47,975)	1,623,124	1,575,149	544,175	49,820	4,228	(11,176)	0	1,036,077	1,623,124	TRUE
Residential	0	3/1/2018	(1,147,167)	9,705,373	8,558,206	2,676,311	427,276	431,877	(202,284)	0	6,372,193	9,705,373	TRUE
Commercial	2	3/1/2018	(7,895)	8,705,678	8,697,784	2,627,513	280,930	413,109	(194,792)	0	5,578,919	8,705,678	TRUE
Industrial	4	3/1/2018	114,261	4,223,518	4,337,779	1,515,655	126,041	234,195	(112,073)	0	2,459,700	4,223,518	TRUE
Lighting	15	3/1/2018	0	136,841	136,841	29,960	306	4,713	(2,229)	0	104,091	136,841	TRUE
OPA	16	3/1/2018	19,951	1,638,638	1,658,589	511,078	46,387	79,772	(37,495)	0	1,038,896	1,638,638	TRUE
Residential	0	4/1/2018	(279,968)	9,192,616	8,912,648	2,613,999	421,995	114,337	(193,872)	0	6,236,157	9,192,616	TRUE
Commercial	2	4/1/2018	230,268	8,531,638	8,761,906	2,683,647	286,880	114,054	(199,453)	0	5,646,510	8,531,638	TRUE
Industrial	4	4/1/2018	174,937	4,072,833	4,247,770	1,527,323	128,368	62,914	(113,061)	0	2,467,289	4,072,833	TRUE
Lighting	15	4/1/2018	0	132,847	132,847	29,777	291	1,267	(2,216)	0	103,738	132,847	TRUE
OPA	16	4/1/2018	81,786	1,593,718	1,675,504	526,797	47,989	22,107	(38,735)	0	1,035,580	1,593,718	TRUE
Residential	0	5/1/2018	750,139	9,225,511	9,975,650	2,263,987	365,310	1,058,577	(168,009)	0	5,705,646	9,225,511	TRUE
Commercial	2	5/1/2018	706,147	9,918,317	10,624,464	2,710,151	289,793	1,254,578	(201,555)	0	5,865,350	9,918,317	TRUE
Industrial	4	5/1/2018	371,605	4,897,146	5,268,751	1,572,561	132,640	714,001	(116,393)	0	2,594,337	4,897,146	TRUE
Lighting	15	5/1/2018	0	144,432	144,432	29,449	248	13,627	(2,192)	0	103,302	144,432	TRUE
OPA	16	5/1/2018	178,325	1,801,713	1,978,038	509,526	48,753	235,825	(37,719)	0	1,047,328	1,801,713	TRUE
Residential	0	6/1/2018	792,224	13,041,663	13,833,887	3,251,112	525,305	1,402,488	(342,065)	298,777	7,906,046	13,041,663	TRUE
Commercial	2	6/1/2018	664,391	11,694,570	12,358,961	3,236,512	348,150	1,398,714	(341,397)	266,511	6,786,080	11,694,570	TRUE
Industrial	4	6/1/2018	58,512	5,408,731	5,467,243	1,721,810	145,464	719,816	(178,410)	112,445	2,887,605	5,408,731	TRUE
Lighting	15	6/1/2018	0	68,887	68,887	9,294	231	11,078	(2,138)	3,905	46,517	68,887	TRUE
OPA	16	6/1/2018	49,096	2,178,677	2,227,773	596,693	56,070	255,966	(62,491)	50,297	1,282,142	2,178,677	TRUE
Residential	0	7/1/2018	(632,639)	15,332,757	14,700,118	3,770,604	609,408	2,012,795	(396,461)	383,577	8,952,834	15,332,757	TRUE
Commercial	2	7/1/2018	(476,404)	12,461,177	11,984,773	3,353,672	360,558	1,794,869	(353,782)	318,480	6,987,400	12,461,177	TRUE
Industrial	4	7/1/2018	(258,197)	5,721,662	5,463,465	1,722,593	146,388	894,974	(160,736)	135,923	3,002,520	5,721,662	TRUE
Lighting	15	7/1/2018	0	172,506	172,506	38,145	196	15,846	(3,448)	4,769	116,998	172,506	TRUE
OPA	16	7/1/2018	(115,052)	2,165,620	2,050,568	599,504	55,519	310,144	(62,788)	54,986	1,199,255	2,165,620	TRUE
Residential	0	8/1/2018	398,920	12,716,657	13,115,577	3,363,068	543,940	379,161	(353,083)	642,457	8,141,114	12,716,657	TRUE
Commercial	2	8/1/2018	459,977	10,818,720	11,278,697	3,181,005	341,751	365,132	(335,424)	551,990	6,714,266	10,818,720	TRUE
Industrial	4	8/1/2018	179,492	5,095,383	5,274,875								

**Source: PSM Schedule 2**

Asset Energy = Non-native portion of DA Asset Energy (PJM BLI 1200, 1210, 1220) and RT Asset Energy (PJM BLI 1205, 1215, 1225, 1400, 1410, 1420)

<u>Bill Period</u>	<u>Amount</u>	<u>12 Month Average</u>	<u>PSM</u>	
5/1/2017	1,173,611.46		1,173,611.46	0.00
6/1/2017	593,771.89		593,771.89	0.00
7/1/2017	415,058.79		415,058.79	0.00
8/1/2017	447,589.45		447,589.45	0.00
9/1/2017	1,077,979.15		1,077,979.15	0.00
10/1/2017	2,400,518.78		2,400,518.78	0.00
11/1/2017	1,648,921.22		1,648,921.22	0.00
12/1/2017	647,230.19		647,230.19	0.00
1/1/2018	1,989,969.08		1,989,969.08	0.00
2/1/2018	220,839.74		220,839.74	0.00
3/1/2018	58,321.90		58,321.90	0.00
4/1/2018	0.00	889,484.00	0.00	0.00
5/1/2018	0.00	791,683.00	0.00	0.00
6/1/2018	573,409.20	789,986.00	573,409.20	0.00
7/1/2018	1,617,776.12	890,213.00	1,617,776.12	0.00
8/1/2018	461,630.53	891,383.00	461,630.53	0.00
9/1/2018	695,754.67	859,531.00	695,754.67	0.00
10/1/2018	1,205,786.45	759,970.00	1,205,786.45	0.00
11/1/2018		679,156.00		0.00
12/1/2018		682,349.00		0.00
1/1/2019		537,058.00		0.00
2/1/2019		576,585.00		0.00
3/1/2019		650,622.00		0.00
4/1/2019		759,059.00		0.00
5/1/2019		910,871.00		0.00
6/1/2019		995,237.00		0.00
7/1/2019		787,724.00		0.00
8/1/2019		950,771.00		0.00
9/1/2019		1,205,786.00		0.00

**Input**  
 Expense Month: November 2018  
 Case No. 2017-00321

**Property Tax Rates**

ARO Account: 0.15000%  
 Structures & Improvements: 1.42740%

Adj. Jurisdictional E(m)  
 Authorized for Sep-18  
 Expense Month \$ 1,699,711.00

Effective Date for Billing: January 2, 2019  
 Date Submitted: December 21, 2018

**Error Check:**  
 To make sure that retail  
 and SLSRSL are entered  
 for the current expense month

**File:**  
 Original & 2 copies

Jurisdictional E(m) Table									
Form 1.10 Expense Month	Juris. E(m)				Juris. E(m) vs. Revenue Collected			Exp Month / Billing	
	Ln 9 (H30) Retail	Ln 13 (H38) PSM	Ln 7 (H26) Total	Ln 12 (H36) Adj. Retail Recovery	(Over)/Under Recovery	Recovered In Rates	Recovery vs. Allowed		
Feb-18	\$ -	\$ -	\$ -	\$ -					
Mar-18	\$ -	\$ -	\$ -	\$ -				Apr / June	
Apr-18	\$ 683,831	\$ 23,922	\$ 707,753	\$ 683,831	\$ -			May / July	
May-18	\$ 783,036	\$ 23,802	\$ 806,838	\$ 783,036	\$ -			June / August	
Jun-18	\$ 1,461,780	\$ 41,954	\$ 1,503,734	\$ 1,413,676	\$ (48,104)	\$ 731,935		July / September	
Jul-18	\$ 2,237,252	\$ 73,482	\$ 2,310,734	\$ 2,122,573	\$ (114,679)	\$ 897,715		August / October	
Aug-18	\$ 2,407,393	\$ 79,069	\$ 2,486,462	\$ 2,280,451	\$ (126,942)	\$ 1,540,618		September / November	
Sep-18	\$ 1,928,868	\$ 61,091	\$ 1,989,959	\$ 1,699,711	\$ (229,157)	\$ 2,351,730		October / December	
Oct-18	\$ 2,107,561	\$ 57,816	\$ 2,165,377	\$ 2,095,198	\$ (12,363)	\$ 2,292,814		November / January	
Nov-18	\$ 2,230,229	\$ 60,239	\$ 2,290,468	\$ 2,358,844	\$ 128,615	\$ 1,571,096			

**ES FORM 1.00**

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

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

For the Expense Month of November 2018

**Residential (Total Revenue)**

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	970,664
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	11,487,883
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		8.45%

**Non-Residential (Net Revenue)**

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,388,180
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	10,327,585
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		13.44%

Effective Date for Billing: January 2, 2019

Submitted by: Theodore H. Czupik Jr.

Title: Rates & Regulatory Strategy Manager

Date Submitted: December 21, 2018

ES FORM 1.10

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

Calculation of Current Month Environmental Surcharge Factors  
 For the Expense Month of November 2018

Line No.	<b>E(m) = RORB + OE - EAS + Prior Period Adjustment + (Over)/Under Recovery</b>	Source	Environmental Compliance Plans
1	Environmental Compliance Rate Base (RB)	ES Form 2.00	\$ 37,128,715
2	RB ÷ 12 months	(1) ÷ 12	\$ 3,094,060
3	Pretax Rate of Return (ROR)	ES Form 1.20	8.446%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 261,324
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 2,029,144
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 2,290,468
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	97.37%
9	Jurisdictional E(m)	(7) x (8)	\$ 2,230,229
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ 128,615
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 2,358,844
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 60,239

**Calculation of Environmental Surcharge Billing Factors**

		Residential (Total Revenue)	Non-Residential (Net Revenue)
14	Revenues as a Percentage of 12 Month Average Total Revenues	ES Form 3.00	41.15% 58.85%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 970,664 \$ 1,388,180
16	<b>R(m)</b> Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	ES Form 3.00 ES Form 3.00	\$ 11,487,883 \$ 10,327,585
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	8.45% 13.44%

**Calculation of Jurisdictional Allocation Ratio - 12 Month Average**

18	Retail Revenue	ES Form 3.00	\$ 27,914,972	97.37%
19	Sales for Resale	Company Records	\$ 752,948	2.63%
20	Total Revenue		\$ 28,667,920	100.00%

Note: (A) Amounts determined by the Commission during six-month and two-year reviews.

ES FORM 1.20

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

Cost of Capital

Line No.	Capital Structure	Ratio	Cost	Weighted Cost (A)	Gross up for Tax Rate (B)	Pre-Tax Rate of Return (A)x(B)
1	Short-term Debt	9.772%	3.083%	0.301%		0.301%
2	Long-term Debt	40.977%	4.243%	1.739%		1.739%
3	Common Equity	49.251%	9.725%	4.790%	1.3373044	6.406%
4	Total	100.000%		6.830%		8.446%

Note: Capital structure, cost of debt and tax rate gross-up factor as approved in Case No. 2017-00321. These rates are to remain constant until the Commission sets base rates in Duke Kentucky's next base rate case proceeding.



ES FORM 2.00

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

Revenue Requirement of Environmental Compliance Costs

For the Expense Month of November 2018

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant)	ES Form 2.10	\$ 9,535,804
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	27,568,718
3	Subtotal		\$ 37,104,522
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 24,193
6	Subtotal		\$ 24,193
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ -
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	-
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ -
12	Environmental Compliance Rate Base		\$ 37,128,715
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ -
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 529,630
16	Monthly Amortization Expense	ES Form 2.20	\$ 440,914
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 252
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 1,058,348
19	Total Environmental Compliance Operating Expense		\$ 2,029,144
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO <sub>2</sub> Allowance Sales		\$ -
22	NO <sub>x</sub> Allowances Sales		-
23	Total Emission Allowance Sales		\$ -
24	<u>(Over) / Under Recovery</u>		
25	Adjusted Jurisdictional E(m) Authorized for Expense Month two Months Prior		\$ 1,699,711
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		1,571,096
27	(Over) / Under Recovery		\$ 128,615

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

ES FORM 2.10

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

Plant, Accumulated Depreciation, CWIP, ITC, ADIT  
 Depreciation Expense, Taxes Other Than Income Taxes

For the Expense Month of November 2018

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project No.	Description	Gross Plant in-Service as of November-18	Accumulated Depreciation as of November-18	Net Plant in-Service as of November-18	CWIP Excluding AFUDC as of November-18	Accumulated Deferred ITC as of November-18	Accumulated Deferred Tax Balance as of November-18	Monthly Depreciation Expense	Monthly Property Tax Expense
				(2)-(3)					
1	EB020290 Lined Retention Basin West	\$ 9,535,804	\$ -	\$ 9,535,804	\$ 32,084	\$ -	\$ -	\$ -	\$ 136,572
2	EB020745 Lined Retention Basin East	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
3	EB020298 East Bend SW/PW Reroute	\$ -	\$ -	\$ -	\$ 27,536,634	\$ -	\$ -	\$ -	\$ 393,058
4	EB021281 East Bend Landfill Cell 2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 9,535,804	\$ -	\$ 9,535,804	\$ 27,568,718	\$ -	\$ -	\$ -	\$ 529,630

ES FORM 2.20  
 Page 1 of 3

DUKE ENERGY KENTUCKY, INC.  
 ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

Line No.	Period (1)	Cash Spend (2)	COR Credit (3)	Carrying Cost (4)	Recovery: 10-Yr Amort. (5)	Ending Balance (6)	Cash Spend (7)	Recovery: 2-Month Cycle (8)	Ending Balance (9)	Total Recovery (10) = (5) + (8)
1	2015 Total	Actual \$ 3,858,084	\$ (856,412)	\$ 20,378	\$ -	\$ 3,022,050	\$ -	\$ -	\$ -	\$ -
2	2016 Total	Actual \$ 4,486,812	\$ (107,052)	\$ 379,037	\$ -	\$ 7,780,847	\$ -	\$ -	\$ -	\$ -
3	Jan-17	Actual \$ 358,148	\$ -	\$ 43,243	\$ -	\$ 8,182,238	\$ -	\$ -	\$ -	\$ -
4	Feb-17	Actual \$ 424,021	\$ -	\$ 40,351	\$ -	\$ 8,646,610	\$ -	\$ -	\$ -	\$ -
5	Mar-17	Actual \$ 692,184	\$ (26,763)	\$ 44,724	\$ -	\$ 9,356,755	\$ -	\$ -	\$ -	\$ -
6	Apr-17	Actual \$ 254,067	\$ -	\$ 50,949	\$ -	\$ 9,661,771	\$ -	\$ -	\$ -	\$ -
7	May-17	Actual \$ 608,377	\$ -	\$ 56,141	\$ -	\$ 10,326,289	\$ -	\$ -	\$ -	\$ -
8	Jun-17	Actual \$ 265,619	\$ (26,763)	\$ 53,472	\$ -	\$ 10,618,617	\$ -	\$ -	\$ -	\$ -
9	Jul-17	Actual \$ 220,636	\$ -	\$ 51,558	\$ -	\$ 10,890,811	\$ -	\$ -	\$ -	\$ -
10	Aug-17	Actual \$ 272,053	\$ -	\$ 47,731	\$ -	\$ 11,210,595	\$ -	\$ -	\$ -	\$ -
11	Sep-17	Actual \$ 233,743	\$ (26,763)	\$ 44,389	\$ -	\$ 11,461,964	\$ -	\$ -	\$ -	\$ -
12	Oct-17	Actual \$ 444,793	\$ -	\$ 60,670	\$ -	\$ 11,967,427	\$ -	\$ -	\$ -	\$ -
13	Nov-17	Actual \$ 525,770	\$ -	\$ 68,573	\$ -	\$ 12,561,770	\$ -	\$ -	\$ -	\$ -
14	Dec-17	Actual \$ 2,482,493	\$ (26,763)	\$ 82,850	\$ -	\$ 15,100,350	\$ -	\$ -	\$ -	\$ -
15	Jan-18	Actual \$ 510,525	\$ -	\$ 91,185	\$ -	\$ 15,702,060	\$ -	\$ -	\$ -	\$ -
16	Feb-18	Actual \$ 89,648	\$ -	\$ 91,534	\$ -	\$ 15,883,242	\$ -	\$ -	\$ -	\$ -
17	Mar-18	Actual \$ 396,977	\$ (26,763)	\$ 93,696	\$ -	\$ 16,347,152	\$ -	\$ -	\$ -	\$ -
18	Apr-18	Actual \$ 132,294	\$ -	\$ 111,722	\$ -	\$ 16,591,168	\$ 173,000	\$ -	\$ 173,000	\$ -
19	May-18	Actual \$ -	\$ -	\$ 112,480	\$ -	\$ 16,703,648	\$ 100,234	\$ -	\$ 273,234	\$ -
20	Jun-18	Actual \$ -	\$ -	\$ 111,870	\$ (202,486)	\$ 16,613,032	\$ 150,901	\$ (173,000)	\$ 251,135	\$ (375,486)
21	Jul-18	Actual \$ -	\$ -	\$ 111,255	\$ (202,486)	\$ 16,521,801	\$ 196,585	\$ (100,234)	\$ 347,486	\$ (302,720)
22	Aug-18	Actual \$ -	\$ -	\$ 110,637	\$ (202,486)	\$ 16,429,952	\$ 321,815	\$ (150,901)	\$ 518,400	\$ (353,387)
23	Sep-18	Actual \$ -	\$ -	\$ 110,014	\$ (202,486)	\$ 16,337,480	\$ 275,135	\$ (196,585)	\$ 596,950	\$ (399,071)
24	Oct-18	Actual \$ -	\$ -	\$ 109,387	\$ (202,486)	\$ 16,244,381	\$ 69,886	\$ (321,815)	\$ 345,021	\$ (524,301)
25	Nov-18	Actual \$ -	\$ -	\$ 108,756	\$ (202,486)	\$ 16,150,651	\$ 238,428	\$ (275,135)	\$ 308,314	\$ (477,621)
26	Dec-18	Actual \$ -	\$ -	\$ 108,121	\$ (202,486)	\$ 16,056,286	\$ -	\$ (69,886)	\$ 238,428	\$ (272,372)
27	Jan-19	Actual \$ -	\$ -	\$ 107,481	\$ (202,486)	\$ 15,961,281	\$ -	\$ (238,428)	\$ -	\$ (440,914)
28	Feb-19	Actual \$ -	\$ -	\$ 106,837	\$ (202,486)	\$ 15,865,632	\$ -	\$ -	\$ -	\$ (202,486)
29	Mar-19	Actual \$ -	\$ -	\$ 106,188	\$ (202,486)	\$ 15,769,334	\$ -	\$ -	\$ -	\$ (202,486)
30	Apr-19	Actual \$ -	\$ -	\$ 105,535	\$ (202,486)	\$ 15,672,383	\$ -	\$ -	\$ -	\$ (202,486)
31	May-19	Actual \$ -	\$ -	\$ 104,878	\$ (202,486)	\$ 15,574,775	\$ -	\$ -	\$ -	\$ (202,486)
32	Jun-19	Actual \$ -	\$ -	\$ 104,216	\$ (202,486)	\$ 15,476,505	\$ -	\$ -	\$ -	\$ (202,486)
33	Jul-19	Actual \$ -	\$ -	\$ 103,550	\$ (202,486)	\$ 15,377,569	\$ -	\$ -	\$ -	\$ (202,486)
34	Aug-19	Actual \$ -	\$ -	\$ 102,880	\$ (202,486)	\$ 15,277,963	\$ -	\$ -	\$ -	\$ (202,486)
35	Sep-19	Actual \$ -	\$ -	\$ 102,204	\$ (202,486)	\$ 15,177,681	\$ -	\$ -	\$ -	\$ (202,486)
36	Oct-19	Actual \$ -	\$ -	\$ 101,524	\$ (202,486)	\$ 15,076,719	\$ -	\$ -	\$ -	\$ (202,486)
37	Nov-19	Actual \$ -	\$ -	\$ 100,840	\$ (202,486)	\$ 14,975,073	\$ -	\$ -	\$ -	\$ (202,486)
38	Dec-19	Actual \$ -	\$ -	\$ 100,151	\$ (202,486)	\$ 14,872,738	\$ -	\$ -	\$ -	\$ (202,486)
39	Jan-20	Actual \$ -	\$ -	\$ 99,457	\$ (202,486)	\$ 14,769,709	\$ -	\$ -	\$ -	\$ (202,486)
40	Feb-20	Actual \$ -	\$ -	\$ 98,759	\$ (202,486)	\$ 14,665,982	\$ -	\$ -	\$ -	\$ (202,486)
41	Mar-20	Actual \$ -	\$ -	\$ 98,055	\$ (202,486)	\$ 14,561,551	\$ -	\$ -	\$ -	\$ (202,486)
42	Apr-20	Actual \$ -	\$ -	\$ 97,347	\$ (202,486)	\$ 14,456,412	\$ -	\$ -	\$ -	\$ (202,486)
43	May-20	Actual \$ -	\$ -	\$ 96,635	\$ (202,486)	\$ 14,350,561	\$ -	\$ -	\$ -	\$ (202,486)
44	Jun-20	Actual \$ -	\$ -	\$ 95,917	\$ (202,486)	\$ 14,243,992	\$ -	\$ -	\$ -	\$ (202,486)
45	Jul-20	Actual \$ -	\$ -	\$ 95,194	\$ (202,486)	\$ 14,136,700	\$ -	\$ -	\$ -	\$ (202,486)
46	Aug-20	Actual \$ -	\$ -	\$ 94,467	\$ (202,486)	\$ 14,028,681	\$ -	\$ -	\$ -	\$ (202,486)
47	Sep-20	Actual \$ -	\$ -	\$ 93,735	\$ (202,486)	\$ 13,919,930	\$ -	\$ -	\$ -	\$ (202,486)
48	Oct-20	Actual \$ -	\$ -	\$ 92,997	\$ (202,486)	\$ 13,810,441	\$ -	\$ -	\$ -	\$ (202,486)
49	Nov-20	Actual \$ -	\$ -	\$ 92,255	\$ (202,486)	\$ 13,700,210	\$ -	\$ -	\$ -	\$ (202,486)
50	Dec-20	Actual \$ -	\$ -	\$ 91,508	\$ (202,486)	\$ 13,589,232	\$ -	\$ -	\$ -	\$ (202,486)

ES FORM 2.20  
 Page 2 of 3

DUKE ENERGY KENTUCKY, INC.  
 ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

Line No.	Period (1)	Cash Spend (2)	COR Credit (3)	Carrying Cost (4)	Recovery: 10-Yr Amort. (5)	Ending Balance (6)	Cash Spend (7)	Recovery: 2-Month Cycle (8)	Ending Balance (9)	Total Recovery (10) = (5) + (8)
51	Jan-21	Actual	-	90,756	(202,486)	13,477,502	-	-	-	(202,486)
52	Feb-21	Actual	-	89,998	(202,486)	13,365,014	-	-	-	(202,486)
53	Mar-21	Actual	-	89,235	(202,486)	13,251,763	-	-	-	(202,486)
54	Apr-21	Actual	-	88,468	(202,486)	13,137,745	-	-	-	(202,486)
55	May-21	Actual	-	87,695	(202,486)	13,022,954	-	-	-	(202,486)
56	Jun-21	Actual	-	86,916	(202,486)	12,907,384	-	-	-	(202,486)
57	Jul-21	Actual	-	86,133	(202,486)	12,791,031	-	-	-	(202,486)
58	Aug-21	Actual	-	85,344	(202,486)	12,673,889	-	-	-	(202,486)
59	Sep-21	Actual	-	84,550	(202,486)	12,555,953	-	-	-	(202,486)
60	Oct-21	Actual	-	83,750	(202,486)	12,437,217	-	-	-	(202,486)
61	Nov-21	Actual	-	82,945	(202,486)	12,317,676	-	-	-	(202,486)
62	Dec-21	Actual	-	82,135	(202,486)	12,197,325	-	-	-	(202,486)
63	Jan-22	Actual	-	81,319	(202,486)	12,076,158	-	-	-	(202,486)
64	Feb-22	Actual	-	80,498	(202,486)	11,954,170	-	-	-	(202,486)
65	Mar-22	Actual	-	79,671	(202,486)	11,831,355	-	-	-	(202,486)
66	Apr-22	Actual	-	78,838	(202,486)	11,707,707	-	-	-	(202,486)
67	May-22	Actual	-	78,000	(202,486)	11,583,221	-	-	-	(202,486)
68	Jun-22	Actual	-	77,156	(202,486)	11,457,891	-	-	-	(202,486)
69	Jul-22	Actual	-	76,306	(202,486)	11,331,711	-	-	-	(202,486)
70	Aug-22	Actual	-	75,451	(202,486)	11,204,676	-	-	-	(202,486)
71	Sep-22	Actual	-	74,589	(202,486)	11,076,779	-	-	-	(202,486)
72	Oct-22	Actual	-	73,722	(202,486)	10,948,015	-	-	-	(202,486)
73	Nov-22	Actual	-	72,849	(202,486)	10,818,378	-	-	-	(202,486)
74	Dec-22	Actual	-	71,971	(202,486)	10,687,863	-	-	-	(202,486)
75	Jan-23	Actual	-	71,088	(202,486)	10,556,463	-	-	-	(202,486)
76	Feb-23	Actual	-	70,195	(202,486)	10,424,172	-	-	-	(202,486)
77	Mar-23	Actual	-	69,298	(202,486)	10,290,984	-	-	-	(202,486)
78	Apr-23	Actual	-	68,395	(202,486)	10,156,893	-	-	-	(202,486)
79	May-23	Actual	-	67,486	(202,486)	10,021,893	-	-	-	(202,486)
80	Jun-23	Actual	-	66,571	(202,486)	9,885,978	-	-	-	(202,486)
81	Jul-23	Actual	-	65,649	(202,486)	9,749,141	-	-	-	(202,486)
82	Aug-23	Actual	-	64,722	(202,486)	9,611,377	-	-	-	(202,486)
83	Sep-23	Actual	-	63,788	(202,486)	9,472,679	-	-	-	(202,486)
84	Oct-23	Actual	-	62,847	(202,486)	9,333,040	-	-	-	(202,486)
85	Nov-23	Actual	-	61,901	(202,486)	9,192,455	-	-	-	(202,486)
86	Dec-23	Actual	-	60,948	(202,486)	9,050,917	-	-	-	(202,486)
87	Jan-24	Actual	-	59,988	(202,486)	8,908,419	-	-	-	(202,486)
88	Feb-24	Actual	-	59,022	(202,486)	8,764,955	-	-	-	(202,486)
89	Mar-24	Actual	-	58,049	(202,486)	8,620,518	-	-	-	(202,486)
90	Apr-24	Actual	-	57,070	(202,486)	8,475,102	-	-	-	(202,486)
91	May-24	Actual	-	56,084	(202,486)	8,328,700	-	-	-	(202,486)
92	Jun-24	Actual	-	55,092	(202,486)	8,181,306	-	-	-	(202,486)
93	Jul-24	Actual	-	54,093	(202,486)	8,032,913	-	-	-	(202,486)
94	Aug-24	Actual	-	53,087	(202,486)	7,883,514	-	-	-	(202,486)
95	Sep-24	Actual	-	52,074	(202,486)	7,733,102	-	-	-	(202,486)
96	Oct-24	Actual	-	51,054	(202,486)	7,581,670	-	-	-	(202,486)
97	Nov-24	Actual	-	50,027	(202,486)	7,429,211	-	-	-	(202,486)
98	Dec-24	Actual	-	48,994	(202,486)	7,275,719	-	-	-	(202,486)
99	Jan-25	Actual	-	47,953	(202,486)	7,121,186	-	-	-	(202,486)

ES FORM 2.20  
 Page 3 of 3

DUKE ENERGY KENTUCKY, INC.  
 ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

Line No.	Period (1)	Cash Spend (2)	COR Credit (3)	Carrying Cost (4)	Recovery: 10-Yr Amort. (5)	Ending Balance (6)	Cash Spend (7)	Recovery: 2-Month Cycle (8)	Ending Balance (9)	Total Recovery (10) = (5) + (8)
100	Feb-25	Actual	-	46,906	(202,486)	6,965,606	-	-	-	(202,486)
101	Mar-25	Actual	-	45,851	(202,486)	6,808,971	-	-	-	(202,486)
102	Apr-25	Actual	-	44,789	(202,486)	6,651,274	-	-	-	(202,486)
103	May-25	Actual	-	43,720	(202,486)	6,492,508	-	-	-	(202,486)
104	Jun-25	Actual	-	42,643	(202,486)	6,332,865	-	-	-	(202,486)
105	Jul-25	Actual	-	41,560	(202,486)	6,171,739	-	-	-	(202,486)
106	Aug-25	Actual	-	40,469	(202,486)	6,009,722	-	-	-	(202,486)
107	Sep-25	Actual	-	39,370	(202,486)	5,846,606	-	-	-	(202,486)
108	Oct-25	Actual	-	38,265	(202,486)	5,682,385	-	-	-	(202,486)
109	Nov-25	Actual	-	37,151	(202,486)	5,517,050	-	-	-	(202,486)
110	Dec-25	Actual	-	36,030	(202,486)	5,350,594	-	-	-	(202,486)
111	Jan-26	Actual	-	34,902	(202,486)	5,183,010	-	-	-	(202,486)
112	Feb-26	Actual	-	33,766	(202,486)	5,014,290	-	-	-	(202,486)
113	Mar-26	Actual	-	32,622	(202,486)	4,844,426	-	-	-	(202,486)
114	Apr-26	Actual	-	31,470	(202,486)	4,673,410	-	-	-	(202,486)
115	May-26	Actual	-	30,311	(202,486)	4,501,235	-	-	-	(202,486)
116	Jun-26	Actual	-	29,144	(202,486)	4,327,893	-	-	-	(202,486)
117	Jul-26	Actual	-	27,968	(202,486)	4,153,375	-	-	-	(202,486)
118	Aug-26	Actual	-	26,785	(202,486)	3,977,674	-	-	-	(202,486)
119	Sep-26	Actual	-	25,594	(202,486)	3,800,782	-	-	-	(202,486)
120	Oct-26	Actual	-	24,395	(202,486)	3,622,691	-	-	-	(202,486)
121	Nov-26	Actual	-	23,188	(202,486)	3,443,393	-	-	-	(202,486)
122	Dec-26	Actual	-	21,972	(202,486)	3,262,879	-	-	-	(202,486)
123	Jan-27	Actual	-	20,748	(202,486)	3,081,141	-	-	-	(202,486)
124	Feb-27	Actual	-	19,516	(202,486)	2,898,171	-	-	-	(202,486)
125	Mar-27	Actual	-	18,276	(202,486)	2,713,961	-	-	-	(202,486)
126	Apr-27	Actual	-	17,027	(202,486)	2,528,502	-	-	-	(202,486)
127	May-27	Actual	-	15,769	(202,486)	2,341,785	-	-	-	(202,486)
128	Jun-27	Actual	-	14,504	(202,486)	2,153,803	-	-	-	(202,486)
129	Jul-27	Actual	-	13,229	(202,486)	1,964,546	-	-	-	(202,486)
130	Aug-27	Actual	-	11,946	(202,486)	1,774,006	-	-	-	(202,486)
131	Sep-27	Actual	-	10,654	(202,486)	1,582,174	-	-	-	(202,486)
132	Oct-27	Actual	-	9,354	(202,486)	1,389,042	-	-	-	(202,486)
133	Nov-27	Actual	-	8,045	(202,486)	1,194,601	-	-	-	(202,486)
134	Dec-27	Actual	-	6,726	(202,486)	998,841	-	-	-	(202,486)
135	Jan-28	Actual	-	5,399	(202,486)	801,754	-	-	-	(202,486)
136	Feb-28	Actual	-	4,063	(202,486)	603,331	-	-	-	(202,486)
137	Mar-28	Actual	-	2,718	(202,486)	403,563	-	-	-	(202,486)
138	Apr-28	Actual	-	1,409	(202,486)	202,486	-	-	-	(202,486)
139	May-28	Actual	-	-	(202,486)	-	-	-	-	(202,486)
		\$ 16,256,244	\$ (1,097,279)	\$ 9,139,355	\$ (24,298,320)		\$ 1,525,984	\$ (1,525,984)		(25,824,304)

Monthly Amortization Amount

(440,914)

**ES FORM 2.30**

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending November 2018

<b>Total SO<sub>2</sub> and NO<sub>x</sub> Emission Allowances</b>					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
<b>SO<sub>2</sub> Allowances - Acid Rain Program (a)</b>					
Quantity	110,529		229	-	110,300
Dollars	\$ 17,203.71	\$ -	\$ 36.64	\$ -	\$ 17,167.07
\$/Allowance	\$ 0.155649	\$ -	\$ 0.160000	\$ -	\$ 0.155640
<b>NO<sub>x</sub> Allowances - Annual</b>					
Quantity	5,051		196	-	4,855
Dollars	\$ 4,725.47	\$ -	\$ 184.24	\$ -	\$ 4,541.23
\$/Allowance	\$ 0.935551	\$ -	\$ 0.940000	\$ -	\$ 0.935372
<b>NO<sub>x</sub> Allowances - Seasonal</b>					
Quantity	491		6	-	485
Dollars	\$ 2,515.42	\$ -	\$ 30.72	\$ -	\$ 2,484.70
\$/Allowance	\$ 5.123055	\$ -	\$ 5.120000	\$ -	\$ 5.123093
<b>Total Emission Allowances</b>					
Quantity	116,071		431	-	115,640
Dollars	\$ 24,444.60	\$ -	\$ 251.60	\$ -	\$ 24,193.00

(a) Note: The SO<sub>2</sub> Allowances exclude the CSSO2G1 Program Allowances as there is no dollar value associated with this program inventory. Thus, there is no expense booked to the ledger as a result of the program.

**ES FORM 2.50**

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

Environmental Reagent Expenses

For the Expense Month of November 2018

<b>Line No.</b>	<b>Expense Type</b>	<b>Account Number</b>	<b>East Bend Unit 2</b>	<b>Total</b>
1	Ammonia	502020	\$ 58,479	\$ 58,479
2	Lime	502040	958,677	958,677
3	Hydrated Lime	502040	41,192	41,192
4	Total		\$ 1,058,348	\$ 1,058,348

ES FORM 3.00

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

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

For the Expense Month of November 2018

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge
					(2) - (5)
Dec-17	\$ 10,686,318			\$ -	\$ 10,686,318
Jan-18	16,073,289			-	16,073,289
Feb-18	11,744,958			-	11,744,958
Mar-18	9,705,373			-	9,705,373
Apr-18	9,192,616			-	9,192,616
May-18	9,225,511			-	9,225,511
Jun-18	13,041,663			298,777	12,742,886
Jul-18	15,332,757			383,577	14,949,180
Aug-18	12,716,657			642,457	12,074,200
Sep-18	13,028,155			947,252	12,080,903
Oct-18	11,048,101			858,182	10,189,919
Nov-18	\$ 9,761,936			\$ 572,491	\$ 9,189,445
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 11,487,883
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 27,914,972
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					41.15%

Non-Residential - Kentucky Jurisdictional Revenues						
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Month	Total Revenues	Base Rate Fuel Component	Fuel Clause Revenues	Environmental Surcharge Revenues	Total Excluding Environmental Surcharge	Total Non-Fuel Revenue
					(2) - (5)	(6) - (3) - (4)
Dec-17	\$ 14,438,593	\$ 4,921,948	\$ (172,877)	\$ -	\$ 14,438,593	\$ 9,689,522
Jan-18	16,089,643	5,218,344	546,874	-	16,089,643	10,324,425
Feb-18	14,714,026	4,857,707	37,207	-	14,714,026	9,819,112
Mar-18	14,704,676	4,684,206	731,789	-	14,704,676	9,288,681
Apr-18	14,331,036	4,767,544	200,332	-	14,331,036	9,363,160
May-18	16,761,608	4,821,687	2,218,031	-	16,761,608	9,721,890
Jun-18	19,350,865	5,564,309	2,385,574	433,158	18,917,707	10,967,824
Jul-18	20,520,965	5,713,914	3,024,833	514,138	20,006,827	11,268,080
Aug-18	17,980,988	5,529,498	628,882	898,161	17,082,827	10,924,447
Sep-18	18,634,396	5,702,447	75,261	1,404,478	17,229,918	11,452,210
Oct-18	18,476,264	5,092,424	1,066,820	1,434,632	17,041,632	10,882,388
Nov-18	\$ 16,805,182	\$ 4,770,452	\$ 806,842	\$ 998,605	\$ 15,806,577	\$ 10,229,283
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 16,427,089	\$ 10,327,585
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 27,914,972	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					58.85%	



Source: MW\_RAC\_044

Class	Revcls	Bill										TotalBilled	
		Period	Unbilled	Billed	Total	BaseFuel	DSM	FAC	PSM	ESM	BaseRev		
Residential	0	5/1/2017	784,453	7,508,315	8,292,768	2,588,234	706,329	(801,494)	(135,356)	0	5,150,602	7,508,315	TRUE
Commercial	2	5/1/2017	223,617	8,137,894	8,361,511	3,344,724	295,277	(1,037,055)	(175,342)	0	5,710,290	8,137,894	TRUE
Industrial	4	5/1/2017	162,141	3,928,156	4,091,297	1,832,761	132,522	(590,393)	(101,113)	0	2,555,379	3,928,156	TRUE
Lighting	15	5/1/2017	0	127,100	127,100	38,136	260	(11,195)	(1,886)	0	103,785	127,100	TRUE
OPA	16	5/1/2017	63,810	1,560,496	1,624,306	665,147	50,452	(205,394)	(34,716)	0	1,085,007	1,560,496	TRUE
Residential	0	6/1/2017	940,089	9,659,183	10,599,272	3,378,933	923,266	(1,029,257)	(174,137)	0	6,560,378	9,659,183	TRUE
Commercial	2	6/1/2017	565,911	9,006,447	9,572,358	3,746,715	331,662	(1,143,025)	(193,511)	0	6,264,606	9,006,447	TRUE
Industrial	4	6/1/2017	278,841	4,218,650	4,497,491	2,014,732	139,633	(601,392)	(103,795)	0	2,769,472	4,218,650	TRUE
Lighting	15	6/1/2017	0	119,193	119,193	33,812	235	(10,337)	(1,739)	0	97,222	119,193	TRUE
OPA	16	6/1/2017	115,294	1,506,064	1,621,358	602,156	45,082	(189,778)	(31,869)	0	1,080,473	1,506,064	TRUE
Residential	0	7/1/2017	1,301,408	12,661,898	13,963,307	4,176,245	1,141,439	(415,742)	(215,285)	0	7,975,221	12,661,898	TRUE
Commercial	2	7/1/2017	224,801	10,326,875	10,551,676	3,991,980	353,441	(398,582)	(206,002)	0	6,586,038	10,326,875	TRUE
Industrial	4	7/1/2017	38,403	4,686,134	4,704,537	2,019,527	140,063	(196,673)	(104,031)	0	2,807,248	4,686,134	TRUE
Lighting	15	7/1/2017	0	142,099	142,099	38,253	253	(4,277)	(1,070)	0	109,840	142,099	TRUE
OPA	16	7/1/2017	30,351	1,922,746	1,953,097	748,931	57,734	(79,172)	(37,665)	0	1,232,918	1,922,746	TRUE
Residential	0	8/1/2017	(948,589)	12,185,554	11,236,965	4,074,108	1,113,648	(587,185)	(210,043)	0	7,795,226	12,185,554	TRUE
Commercial	2	8/1/2017	56,940	10,011,077	10,068,017	3,897,817	345,569	(563,132)	(201,308)	0	6,532,129	10,011,077	TRUE
Industrial	4	8/1/2017	108,915	4,705,420	4,814,335	2,089,197	144,525	(294,245)	(107,611)	0	2,873,554	4,705,420	TRUE
Lighting	15	8/1/2017	0	132,171	132,171	35,841	234	(5,180)	(1,845)	0	103,121	132,171	TRUE
OPA	16	8/1/2017	44,537	1,825,858	1,870,395	725,160	55,760	(104,233)	(37,262)	0	1,186,433	1,825,858	TRUE
Residential	0	9/1/2017	(443,981)	10,036,825	9,592,844	2,768,046	923,855	(164,082)	(52,907)	0	6,563,913	10,036,825	TRUE
Commercial	2	9/1/2017	(385,833)	9,450,649	9,064,816	3,075,967	332,184	(183,449)	(59,281)	0	6,285,218	9,450,649	TRUE
Industrial	4	9/1/2017	(252,900)	4,518,823	4,265,923	1,879,520	142,197	(96,993)	(32,054)	0	2,826,153	4,518,823	TRUE
Lighting	15	9/1/2017	0	131,617	131,617	29,778	284	(1,765)	(548)	0	103,868	131,617	TRUE
OPA	16	9/1/2017	(114,713)	1,801,940	1,687,227	588,243	55,416	(34,758)	(11,210)	0	1,204,249	1,801,940	TRUE
Residential	0	10/1/2017	(705,141)	8,738,582	8,033,441	2,503,044	835,843	(548,638)	(47,728)	0	5,996,061	8,738,582	TRUE
Commercial	2	10/1/2017	100,478	8,337,514	8,437,992	2,821,070	305,154	(617,548)	(54,006)	0	5,882,844	8,337,514	TRUE
Industrial	4	10/1/2017	202,345	3,986,829	4,189,174	1,597,329	134,004	(341,465)	(30,508)	0	2,627,469	3,986,829	TRUE
Lighting	15	10/1/2017	0	127,281	127,281	29,928	300	(6,562)	(551)	0	104,166	127,281	TRUE
OPA	16	10/1/2017	102,272	1,612,658	1,714,930	556,585	52,319	(121,297)	(10,475)	0	1,135,526	1,612,658	TRUE
Residential	0	11/1/2017	1,280,257	8,584,302	9,864,559	2,281,980	761,901	68,740	(43,568)	0	5,515,247	8,584,302	TRUE
Commercial	2	11/1/2017	62,729	8,455,289	8,518,018	2,834,821	284,719	51,495	(60,435)	0	5,534,689	8,455,289	TRUE
Industrial	4	11/1/2017	(77,061)	4,228,492	4,149,431	1,570,102	129,885	30,093	(29,995)	0	2,526,407	4,228,492	TRUE
Lighting	15	11/1/2017	0	135,387	135,387	30,389	349	573	(560)	0	104,636	135,387	TRUE
OPA	16	11/1/2017	(2,477)	1,639,889	1,637,412	541,306	49,810	10,635	(10,302)	0	1,048,440	1,639,889	TRUE
Residential	0	12/1/2017	2,183,729	10,686,318	12,870,047	2,938,285	981,309	(109,117)	(60,937)	0	6,936,778	10,686,318	TRUE
Commercial	2	12/1/2017	144,604	8,577,566	8,722,170	2,747,489	297,692	(96,837)	(56,814)	0	5,685,676	8,577,566	TRUE
Industrial	4	12/1/2017	(50,660)	4,176,862	4,126,202	1,612,481	134,777	(56,195)	(33,300)	0	2,519,099	4,176,862	TRUE
Lighting	15	12/1/2017	0	133,921	133,921	30,482	366	(1,098)	(607)	0	104,778	133,921	TRUE
OPA	16	12/1/2017	14,000	1,550,244	1,564,244	531,136	48,848	(18,747)	(10,928)	0	999,935	1,550,244	TRUE
Residential	0	1/1/2018	(2,009,512)	16,073,289	14,063,777	4,323,072	1,444,510	457,047	(89,398)	0	9,938,058	16,073,289	TRUE
Commercial	2	1/1/2018	(685,804)	9,911,332	9,225,528	3,072,865	334,780	323,406	(83,777)	0	6,244,058	9,911,332	TRUE
Industrial	4	1/1/2018	(344,589)	4,281,321	3,936,732	1,534,189	128,468	158,815	(31,692)	0	2,491,743	4,281,321	TRUE
Lighting	15	1/1/2018	0	114,155	114,155	24,356	389	3,447	(485)	0	86,448	114,155	TRUE
OPA	16	1/1/2018	(204,643)	1,782,835	1,578,192	586,934	53,911	61,406	(12,140)	0	1,092,724	1,782,835	TRUE
Residential	0	2/1/2018	(604,918)	11,744,958	11,140,040	3,259,184	894,041	24,178	(67,395)	0	7,634,970	11,744,958	TRUE
Commercial	2	2/1/2018	(198,544)	8,825,962	8,627,418	2,751,166	296,781	21,324	(57,105)	0	5,813,796	8,825,962	TRUE
Industrial	4	2/1/2018	(115,938)	4,105,599	3,989,661	1,525,627	128,601	11,637	(31,487)	0	2,471,221	4,105,599	TRUE
Lighting	15	2/1/2018	0	159,341	159,341	36,739	351	18	(731)	0	122,964	159,341	TRUE
OPA	16	2/1/2018	(47,975)	1,623,124	1,575,149	544,175	49,820	4,228	(11,176)	0	1,036,077	1,623,124	TRUE
Residential	0	3/1/2018	(1,147,167)	9,705,373	8,558,206	2,676,311	427,276	431,877	(202,284)	0	6,372,193	9,705,373	TRUE
Commercial	2	3/1/2018	(7,895)	8,705,679	8,697,784	2,827,513	280,930	413,109	(194,792)	0	5,578,919	8,705,679	TRUE
Industrial	4	3/1/2018	114,261	4,223,516	4,337,779	1,515,855	126,041	234,195	(112,073)	0	2,459,700	4,223,516	TRUE
Lighting	15	3/1/2018	0	136,841	136,841	29,980	306	4,713	(2,229)	0	104,091	136,841	TRUE
OPA	16	3/1/2018	19,951	1,638,638	1,658,589	511,078	46,387	79,772	(37,495)	0	1,038,896	1,638,638	TRUE
Residential	0	4/1/2018	(279,968)	9,192,616	8,912,648	2,613,999	421,995	114,337	(193,872)	0	6,236,157	9,192,616	TRUE
Commercial	2	4/1/2018	230,268	8,531,638	8,761,906	2,683,647	286,880	114,054	(199,453)	0	5,646,510	8,531,638	TRUE
Industrial	4	4/1/2018	174,937	4,072,833	4,247,770	1,527,323	128,368	62,914	(113,061)	0	2,467,289	4,072,833	TRUE
Lighting	15	4/1/2018	0	132,847	132,847	29,777	291	1,257	(2,216)	0	103,738	132,847	TRUE
OPA	16	4/1/2018	81,786	1,593,718	1,675,504	526,797	47,969	22,107	(38,735)	0	1,035,580	1,593,718	TRUE
Residential	0	5/1/2018	750,139	9,225,511	9,975,650	2,283,987	365,310	1,058,577	(168,009)	0	5,705,646	9,225,511	TRUE
Commercial	2	5/1/2018	706,147	9,918,317	10,624,464	2,710,151	289,793	1,254,578	(201,555)	0	5,885,350	9,918,317	TRUE
Industrial	4	5/1/2018	371,605	4,897,146	5,268,751	1,572,561	132,640	714,001	(116,393)	0	2,594,337	4,897,146	TRUE
Lighting	15	5/1/2018	0	144,432	144,432	29,449	246	13,627	(2,192)	0	103,302	144,432	TRUE
OPA	16	5/1/2018	176,326	1,801,713	1,978,038	509,528	46,753	235,825	(37,719)	0	1,047,328	1,801,713	TRUE
Residential	0	6/1/2018	792,224	13,041,663	13,833,887	3,251,112	525,305	1,402,488	(342,065)	298,777	7,906,046	13,041,663	TRUE
Commercial	2	6/1/2018	664,391	11,694,570	12,358,961	3,236,512	348,150	1,398,714	(341,397)	266,511	6,786,080	11,694,570	TRUE
Industrial	4	6/1/2018	58,512	5,408,731	5,467,243	1,721,810	145,464	719,816	(178,410)	112,445	2,887,606	5,408,731	TRUE
Lighting	15	6/1/2018	0	68,887	68,887	9,294	231	11,078	(2,138)	3,905	46,517	68,887	TRUE
OPA	16	6/1/2018	49,096	2,178,677	2,227,773	596,693	56,070	255,966	(62,491)	50,297	1,282,142	2,178,677	TRUE
Residential	0	7/1/2018	(632,639)	15,332,757	14,70								

Source: MW\_RAC\_044

Class	Revs	Bill		Total	BaseFuel	DSM	FAC	PSM	ESM	BaseRev	TotalBilled		
		Period	Unbilled										Billed
Commercial	2	11/1/2018	(21,324)	9,835,049	9,813,725	2,625,633	551,032	448,383	(155,506)	802,739	5,762,768	9,835,049	TRUE
Industrial	4	11/1/2018	(49,065)	4,901,539	4,852,474	1,569,314	259,087	260,816	(92,505)	271,381	2,633,646	4,901,539	TRUE
Lighting	15	11/1/2018	0	178,681	178,681	37,027	692	6,799	(2,376)	11,690	124,649	178,681	TRUE
OPA	18	11/1/2018	59	1,889,913	1,889,972	536,476	97,371	91,044	(31,629)	112,595	1,082,054	1,889,913	TRUE

**Source: PSM Schedule 2**

Asset Energy = Non-native portion of DA Asset Energy (PJM BLI 1200, 1210, 1220) and RT Asset Energy (PJM BLI 1205, 1215, 1225, 1400, 1410, 1420)

<u>Bill Period</u>	<u>Amount</u>	<u>12 Month Average</u>	<u>PSM</u>	
5/1/2017	1,173,611.46		1,173,611.46	0.00
6/1/2017	593,771.89		593,771.89	0.00
7/1/2017	415,058.79		415,058.79	0.00
8/1/2017	447,589.45		447,589.45	0.00
9/1/2017	1,077,979.15		1,077,979.15	0.00
10/1/2017	2,400,518.78		2,400,518.78	0.00
11/1/2017	1,648,921.22		1,648,921.22	0.00
12/1/2017	647,230.19		647,230.19	0.00
1/1/2018	1,989,969.08		1,989,969.08	0.00
2/1/2018	220,839.74		220,839.74	0.00
3/1/2018	58,321.90		58,321.90	0.00
4/1/2018	0.00	889,484.00	0.00	0.00
5/1/2018	0.00	791,683.00	0.00	0.00
6/1/2018	573,409.20	789,986.00	573,409.20	0.00
7/1/2018	1,622,817.60	890,633.00	1,622,817.60	0.00
8/1/2018	461,630.53	891,803.00	461,630.53	0.00
9/1/2018	695,754.67	859,951.00	695,754.67	0.00
10/1/2018	1,249,439.54	764,028.00	1,249,439.54	0.00
11/1/2018	1,515,964.78	752,948.00	1,515,964.78	0.00

**Input:**  
Expense Month: December 2018  
Case No. 2017-00321

**Property Tax Rates**

ARO Account: 0.15000%  
Structures & Improvements 1.42740%

Adj. Jurisdictional E(m)  
Authorized for Oct-18  
Expense Month \$ 2,095,198.00

Effective Date for Billing: January 31, 2019  
Date Submitted: January 21, 2019

**Error Check:**  
To make sure that retail  
and SLRSRL are entered  
for the current expense month

**File:**  
Original & 2 copies

Jurisdictional E(m) Table											
Juris. E(m)					Juris. E(m) vs. Revenue Collected						
Form 1.10	Ln 9 (H30)	Ln 13 (H38)	Ln 7 (H26)	Ln 12 (H36)	Recovered		Recovery	ESM Billing Factor		Exp Month / Billing	
Expense	Retail	PSM	Total	Adj. Retail Recovery	(Over)/Under Recovery	in Rates	vs. Allowed	Res	Non-Res		
Month											
Feb-18	\$ -	\$ -	\$ -	\$ -							
Mar-18	\$ -	\$ -	\$ -	\$ -							
Apr-18	\$ 683,831	\$ 23,922	\$ 707,753	\$ 683,831	\$ -			2.67%	3.99%	Apr / June	
May-18	\$ 783,036	\$ 23,802	\$ 806,838	\$ 783,036	\$ -			3.01%	4.57%	May / July	
Jun-18	\$ 1,461,780	\$ 41,954	\$ 1,503,734	\$ 1,413,676	\$ (48,104)	\$ 731,935		5.31%	8.21%	June / August	
Jul-18	\$ 2,237,252	\$ 73,482	\$ 2,310,734	\$ 2,122,573	\$ (114,679)	\$ 897,715		7.84%	12.28%	July / September	
Aug-18	\$ 2,407,393	\$ 79,069	\$ 2,486,462	\$ 2,280,451	\$ (126,942)	\$ 1,540,618		8.41%	13.21%	August / October	
Sep-18	\$ 1,928,868	\$ 61,091	\$ 1,989,959	\$ 1,699,711	\$ (229,157)	\$ 2,351,730		6.21%	9.76%	September / November	
Oct-18	\$ 2,107,561	\$ 57,816	\$ 2,165,377	\$ 2,095,198	\$ (12,363)	\$ 2,292,814		7.55%	11.99%	October / December	
Nov-18	\$ 2,230,229	\$ 60,239	\$ 2,290,468	\$ 2,358,844	\$ 128,615	\$ 1,571,096		8.45%	13.44%	November / January	
Dec-18	\$ 2,568,511	\$ 76,984	\$ 2,645,495	\$ 2,489,614	\$ (78,897)	\$ 2,174,095		8.85%	14.07%	December / February	

ES FORM 1.00

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

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

For the Expense Month of December 2018

**Residential (Total Revenue)**

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,024,227
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	11,574,282
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		8.85%

**Non-Residential (Net Revenue)**

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,465,387
Jurisdictional R(m)	ES Form 1.10, Line 16		\$	10,416,963
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		14.07%

Effective Date for Billing: January 31, 2019

Submitted by: Theodore H. Czupik Jr.

Title: Rates & Regulatory Strategy Manager

Date Submitted: January 21, 2019

DUKE ENERGY KENTUCKY, INC.  
 ENVIRONMENTAL SURCHARGE REPORT

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of December 2018

Line No.	E(m) = RORB + OE - EAS + Prior Period Adjustment + (Over)/Under Recovery	Source	Environmental Compliance Plans
1	Environmental Compliance Rate Base (RB)	ES Form 2.00	\$ 37,099,972
2	RB + 12 months	(1) + 12	\$ 3,091,664
3	Pretax Rate of Return (ROR)	ES Form 1.20	8.446%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 261,122
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 2,384,373
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 2,645,495
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	97.09%
9	Jurisdictional E(m)	(7) x (8)	\$ 2,568,511
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ (78,897)
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 2,489,614
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 76,984

Calculation of Environmental Surcharge Billing Factors

		Residential (Total Revenue)	Non-Residential (Net Revenue)
14	Revenues as a Percentage of 12 Month Average Total Revenues	ES Form 3.00	41.14% 58.86%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 1,024,227 \$ 1,465,387
16	<b>R(m)</b> Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	ES Form 3.00 ES Form 3.00	\$ 11,574,282 \$ 10,416,963
17	Jurisdictional E(m) / R(m)	(15) + (16)	8.85% 14.07%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 28,134,547	97.09%
19	Sales for Resale	Company Records	\$ 843,493	2.91%
20	Total Revenue		\$ 28,978,040	100.00%

Note: (A) Amounts determined by the Commission during six-month and two-year reviews.

ES FORM 1.20

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

Cost of Capital

Line No.	Capital Structure	Ratio	Cost	Weighted Cost (A)	Gross up for Tax Rate (B)	Pre-Tax Rate of Return (A)x(B)
1	Short-term Debt	9.772%	3.083%	0.301%		0.301%
2	Long-term Debt	40.977%	4.243%	1.739%		1.739%
3	Common Equity	49.251%	9.725%	4.790%	1.3373044	6.406%
4	Total	100.000%		6.830%		8.446%

Note: Capital structure, cost of debt and tax rate gross-up factor as approved in Case No. 2017-00321. These rates are to remain constant until the Commission sets base rates in Duke Kentucky's next base rate case proceeding.



ES FORM 2.00

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

Revenue Requirement of Environmental Compliance Costs

For the Expense Month of December 2018

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant)	ES Form 2.10	\$ 10,190,910
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	28,044,745
3	Subtotal		\$ 38,235,655
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 24,008
6	Subtotal		\$ 24,008
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 19,628
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	1,140,063
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 1,159,691
12	Environmental Compliance Rate Base		\$ 37,099,972
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 19,628
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 545,496
16	Monthly Amortization Expense	ES Form 2.20	\$ 465,523
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 185
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 1,353,541
19	Total Environmental Compliance Operating Expense		\$ 2,384,373
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO <sub>2</sub> Allowance Sales		\$ -
22	NOx Allowances Sales		\$ -
23	Total Emission Allowance Sales		\$ -
24	<u>(Over) / Under Recovery</u>		\$ 2,095,198
25	Adjusted Jurisdictional E(m) Authorized for Expense Month two Months Prior		2,174,095
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		\$ (78,897)
27	(Over) / Under Recovery		

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

ES FORM 2.10

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

Plant, Accumulated Depreciation, CWIP, ITC, ADIT  
 Depreciation Expense, Taxes Other Than Income Taxes

For the Expense Month of December 2018

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project No.	Description	Gross Plant in-Service as of December-18	Accumulated Depreciation as of December-18	Net Plant in-Service as of December-18 (2)-(3)	CWIP Excluding AFUDC as of December-18	Accumulated Deferred ITC as of December-18	Accumulated Deferred Tax Balance as of December-18	Monthly Depreciation Expense	Monthly Property Tax Expense
1	EB020290 Lined Retention Basin West	\$ 10,190,910	\$ 19,628	\$ 10,171,282	\$ -	\$ -	\$ 1,140,063	\$ 19,628	\$ 145,185
2	EB020745 Lined Retention Basin East	\$ -	\$ -	\$ -	\$ 3,039	\$ -	\$ -	\$ -	\$ 43
3	EB020298 East Bend SW/PW Reroute	\$ -	\$ -	\$ -	\$ 27,773,119	\$ -	\$ -	\$ -	\$ 396,434
4	EB021281 East Bend Landfill Cell 2	\$ -	\$ -	\$ -	\$ 268,587	\$ -	\$ -	\$ -	\$ 3,834
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 10,190,910	\$ 19,628	\$ 10,171,282	\$ 28,044,745	\$ -	\$ 1,140,063	\$ 19,628	\$ 545,496

ES FORM 2.20  
 Page 1 of 3

DUKE ENERGY KENTUCKY, INC.  
 ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

Line No.	Period (1)	Cash Spend (2)	COR Credit (3)	Carrying Cost (4)	Recovery: 10-Yr Amort. (5)	Ending Balance (6)	Cash Spend (7)	Recovery: 2-Month Cycle (8)	Ending Balance (9)	Total Recovery (10) = (5) + (8)
1	2015 Total Actual	\$ 3,858,084	\$ (856,412)	\$ 20,378	\$ -	\$ 3,022,050	\$ -	\$ -	\$ -	\$ -
2	2016 Total Actual	\$ 4,486,812	\$ (107,052)	\$ 379,037	\$ -	\$ 7,780,847	\$ -	\$ -	\$ -	\$ -
3	Jan-17 Actual	\$ 358,148	\$ -	\$ 43,243	\$ -	\$ 8,182,238	\$ -	\$ -	\$ -	\$ -
4	Feb-17 Actual	\$ 424,021	\$ -	\$ 40,351	\$ -	\$ 8,646,610	\$ -	\$ -	\$ -	\$ -
5	Mar-17 Actual	\$ 692,184	\$ (26,763)	\$ 44,724	\$ -	\$ 9,358,755	\$ -	\$ -	\$ -	\$ -
6	Apr-17 Actual	\$ 254,067	\$ -	\$ 50,949	\$ -	\$ 9,661,771	\$ -	\$ -	\$ -	\$ -
7	May-17 Actual	\$ 608,377	\$ -	\$ 56,141	\$ -	\$ 10,326,289	\$ -	\$ -	\$ -	\$ -
8	Jun-17 Actual	\$ 265,619	\$ (26,763)	\$ 53,472	\$ -	\$ 10,618,617	\$ -	\$ -	\$ -	\$ -
9	Jul-17 Actual	\$ 220,636	\$ -	\$ 51,558	\$ -	\$ 10,890,811	\$ -	\$ -	\$ -	\$ -
10	Aug-17 Actual	\$ 272,053	\$ -	\$ 47,731	\$ -	\$ 11,210,595	\$ -	\$ -	\$ -	\$ -
11	Sep-17 Actual	\$ 233,743	\$ (26,763)	\$ 44,389	\$ -	\$ 11,461,964	\$ -	\$ -	\$ -	\$ -
12	Oct-17 Actual	\$ 444,793	\$ -	\$ 60,670	\$ -	\$ 11,967,427	\$ -	\$ -	\$ -	\$ -
13	Nov-17 Actual	\$ 525,770	\$ -	\$ 68,573	\$ -	\$ 12,561,770	\$ -	\$ -	\$ -	\$ -
14	Dec-17 Actual	\$ 2,482,493	\$ (26,763)	\$ 82,850	\$ -	\$ 15,100,350	\$ -	\$ -	\$ -	\$ -
15	Jan-18 Actual	\$ 510,525	\$ -	\$ 91,185	\$ -	\$ 15,702,060	\$ -	\$ -	\$ -	\$ -
16	Feb-18 Actual	\$ 89,648	\$ -	\$ 91,534	\$ -	\$ 15,883,242	\$ -	\$ -	\$ -	\$ -
17	Mar-18 Actual	\$ 396,977	\$ (26,763)	\$ 93,696	\$ -	\$ 16,347,152	\$ -	\$ -	\$ -	\$ -
18	Apr-18 Actual	\$ 132,294	\$ -	\$ 111,722	\$ -	\$ 16,591,168	\$ 173,000	\$ -	\$ 173,000	\$ -
19	May-18 Actual	\$ -	\$ -	\$ 112,480	\$ -	\$ 16,703,648	\$ 100,234	\$ -	\$ 273,234	\$ -
20	Jun-18 Actual	\$ -	\$ -	\$ 111,870	\$ (202,486)	\$ 16,613,032	\$ 150,901	\$ (173,000)	\$ 251,135	\$ (375,486)
21	Jul-18 Actual	\$ -	\$ -	\$ 111,255	\$ (202,486)	\$ 16,521,801	\$ 196,585	\$ (100,234)	\$ 347,486	\$ (302,720)
22	Aug-18 Actual	\$ -	\$ -	\$ 110,637	\$ (202,486)	\$ 16,429,952	\$ 321,815	\$ (150,901)	\$ 518,400	\$ (353,387)
23	Sep-18 Actual	\$ -	\$ -	\$ 110,014	\$ (202,486)	\$ 16,337,480	\$ 275,135	\$ (196,585)	\$ 596,950	\$ (399,071)
24	Oct-18 Actual	\$ -	\$ -	\$ 109,387	\$ (202,486)	\$ 16,244,381	\$ 69,886	\$ (321,815)	\$ 345,021	\$ (524,301)
25	Nov-18 Actual	\$ -	\$ -	\$ 108,758	\$ (202,486)	\$ 16,150,651	\$ 238,428	\$ (275,135)	\$ 308,314	\$ (477,621)
26	Dec-18 Actual	\$ -	\$ -	\$ 108,121	\$ (202,486)	\$ 16,056,266	\$ 263,037	\$ (69,886)	\$ 501,465	\$ (272,372)
27	Jan-19 Actual	\$ -	\$ -	\$ 107,481	\$ (202,486)	\$ 15,961,281	\$ -	\$ (238,428)	\$ 263,037	\$ (440,914)
28	Feb-19 Actual	\$ -	\$ -	\$ 106,837	\$ (202,486)	\$ 15,865,632	\$ -	\$ (263,037)	\$ -	\$ (465,523)
29	Mar-19 Actual	\$ -	\$ -	\$ 106,188	\$ (202,486)	\$ 15,769,334	\$ -	\$ -	\$ -	\$ (202,486)
30	Apr-19 Actual	\$ -	\$ -	\$ 105,535	\$ (202,486)	\$ 15,672,383	\$ -	\$ -	\$ -	\$ (202,486)
31	May-19 Actual	\$ -	\$ -	\$ 104,878	\$ (202,486)	\$ 15,574,775	\$ -	\$ -	\$ -	\$ (202,486)
32	Jun-19 Actual	\$ -	\$ -	\$ 104,216	\$ (202,486)	\$ 15,476,505	\$ -	\$ -	\$ -	\$ (202,486)
33	Jul-19 Actual	\$ -	\$ -	\$ 103,550	\$ (202,486)	\$ 15,377,589	\$ -	\$ -	\$ -	\$ (202,486)
34	Aug-19 Actual	\$ -	\$ -	\$ 102,880	\$ (202,486)	\$ 15,277,963	\$ -	\$ -	\$ -	\$ (202,486)
35	Sep-19 Actual	\$ -	\$ -	\$ 102,204	\$ (202,486)	\$ 15,177,681	\$ -	\$ -	\$ -	\$ (202,486)
36	Oct-19 Actual	\$ -	\$ -	\$ 101,524	\$ (202,486)	\$ 15,076,719	\$ -	\$ -	\$ -	\$ (202,486)
37	Nov-19 Actual	\$ -	\$ -	\$ 100,840	\$ (202,486)	\$ 14,975,073	\$ -	\$ -	\$ -	\$ (202,486)
38	Dec-19 Actual	\$ -	\$ -	\$ 100,151	\$ (202,486)	\$ 14,872,738	\$ -	\$ -	\$ -	\$ (202,486)
39	Jan-20 Actual	\$ -	\$ -	\$ 99,457	\$ (202,486)	\$ 14,769,709	\$ -	\$ -	\$ -	\$ (202,486)
40	Feb-20 Actual	\$ -	\$ -	\$ 98,759	\$ (202,486)	\$ 14,665,982	\$ -	\$ -	\$ -	\$ (202,486)
41	Mar-20 Actual	\$ -	\$ -	\$ 98,055	\$ (202,486)	\$ 14,561,551	\$ -	\$ -	\$ -	\$ (202,486)
42	Apr-20 Actual	\$ -	\$ -	\$ 97,347	\$ (202,486)	\$ 14,456,412	\$ -	\$ -	\$ -	\$ (202,486)
43	May-20 Actual	\$ -	\$ -	\$ 96,635	\$ (202,486)	\$ 14,350,561	\$ -	\$ -	\$ -	\$ (202,486)
44	Jun-20 Actual	\$ -	\$ -	\$ 95,917	\$ (202,486)	\$ 14,243,992	\$ -	\$ -	\$ -	\$ (202,486)
45	Jul-20 Actual	\$ -	\$ -	\$ 95,194	\$ (202,486)	\$ 14,136,700	\$ -	\$ -	\$ -	\$ (202,486)
46	Aug-20 Actual	\$ -	\$ -	\$ 94,467	\$ (202,486)	\$ 14,028,681	\$ -	\$ -	\$ -	\$ (202,486)
47	Sep-20 Actual	\$ -	\$ -	\$ 93,735	\$ (202,486)	\$ 13,919,930	\$ -	\$ -	\$ -	\$ (202,486)
48	Oct-20 Actual	\$ -	\$ -	\$ 92,997	\$ (202,486)	\$ 13,810,441	\$ -	\$ -	\$ -	\$ (202,486)
49	Nov-20 Actual	\$ -	\$ -	\$ 92,255	\$ (202,486)	\$ 13,700,210	\$ -	\$ -	\$ -	\$ (202,486)
50	Dec-20 Actual	\$ -	\$ -	\$ 91,508	\$ (202,486)	\$ 13,589,232	\$ -	\$ -	\$ -	\$ (202,486)

ES FORM 2.20  
 Page 2 of 3

DUKE ENERGY KENTUCKY, INC.  
 ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

Line No.	Period (1)	Cash Spend (2)	COR Credit (3)	Carrying Cost (4)	Recovery: 10-Yr Amort. (5)	Ending Balance (6)	Cash Spend (7)	Recovery: 2-Month Cycle (8)	Ending Balance (9)	Total Recovery (10) = (5) + (8)
51	Jan-21	Actual	-	90,756	(202,486)	13,477,502	-	-	-	(202,486)
52	Feb-21	Actual	-	89,998	(202,486)	13,365,014	-	-	-	(202,486)
53	Mar-21	Actual	-	89,235	(202,486)	13,251,763	-	-	-	(202,486)
54	Apr-21	Actual	-	88,468	(202,486)	13,137,745	-	-	-	(202,486)
55	May-21	Actual	-	87,695	(202,486)	13,022,954	-	-	-	(202,486)
56	Jun-21	Actual	-	86,916	(202,486)	12,907,384	-	-	-	(202,486)
57	Jul-21	Actual	-	86,133	(202,486)	12,791,031	-	-	-	(202,486)
58	Aug-21	Actual	-	85,344	(202,486)	12,673,889	-	-	-	(202,486)
59	Sep-21	Actual	-	84,550	(202,486)	12,555,953	-	-	-	(202,486)
60	Oct-21	Actual	-	83,750	(202,486)	12,437,217	-	-	-	(202,486)
61	Nov-21	Actual	-	82,945	(202,486)	12,317,676	-	-	-	(202,486)
62	Dec-21	Actual	-	82,135	(202,486)	12,197,325	-	-	-	(202,486)
63	Jan-22	Actual	-	81,319	(202,486)	12,076,158	-	-	-	(202,486)
64	Feb-22	Actual	-	80,498	(202,486)	11,954,170	-	-	-	(202,486)
65	Mar-22	Actual	-	79,671	(202,486)	11,831,355	-	-	-	(202,486)
66	Apr-22	Actual	-	78,838	(202,486)	11,707,707	-	-	-	(202,486)
67	May-22	Actual	-	78,000	(202,486)	11,583,221	-	-	-	(202,486)
68	Jun-22	Actual	-	77,156	(202,486)	11,457,891	-	-	-	(202,486)
69	Jul-22	Actual	-	76,306	(202,486)	11,331,711	-	-	-	(202,486)
70	Aug-22	Actual	-	75,451	(202,486)	11,204,676	-	-	-	(202,486)
71	Sep-22	Actual	-	74,589	(202,486)	11,076,779	-	-	-	(202,486)
72	Oct-22	Actual	-	73,722	(202,486)	10,948,015	-	-	-	(202,486)
73	Nov-22	Actual	-	72,849	(202,486)	10,818,378	-	-	-	(202,486)
74	Dec-22	Actual	-	71,971	(202,486)	10,687,863	-	-	-	(202,486)
75	Jan-23	Actual	-	71,086	(202,486)	10,556,463	-	-	-	(202,486)
76	Feb-23	Actual	-	70,195	(202,486)	10,424,172	-	-	-	(202,486)
77	Mar-23	Actual	-	69,298	(202,486)	10,290,984	-	-	-	(202,486)
78	Apr-23	Actual	-	68,395	(202,486)	10,156,893	-	-	-	(202,486)
79	May-23	Actual	-	67,486	(202,486)	10,021,893	-	-	-	(202,486)
80	Jun-23	Actual	-	66,571	(202,486)	9,885,978	-	-	-	(202,486)
81	Jul-23	Actual	-	65,649	(202,486)	9,749,141	-	-	-	(202,486)
82	Aug-23	Actual	-	64,722	(202,486)	9,611,377	-	-	-	(202,486)
83	Sep-23	Actual	-	63,788	(202,486)	9,472,679	-	-	-	(202,486)
84	Oct-23	Actual	-	62,847	(202,486)	9,333,040	-	-	-	(202,486)
85	Nov-23	Actual	-	61,901	(202,486)	9,192,455	-	-	-	(202,486)
86	Dec-23	Actual	-	60,948	(202,486)	9,050,917	-	-	-	(202,486)
87	Jan-24	Actual	-	59,988	(202,486)	8,908,419	-	-	-	(202,486)
88	Feb-24	Actual	-	59,022	(202,486)	8,764,955	-	-	-	(202,486)
89	Mar-24	Actual	-	58,049	(202,486)	8,620,518	-	-	-	(202,486)
90	Apr-24	Actual	-	57,070	(202,486)	8,475,102	-	-	-	(202,486)
91	May-24	Actual	-	56,084	(202,486)	8,328,700	-	-	-	(202,486)
92	Jun-24	Actual	-	55,092	(202,486)	8,181,306	-	-	-	(202,486)
93	Jul-24	Actual	-	54,093	(202,486)	8,032,913	-	-	-	(202,486)
94	Aug-24	Actual	-	53,087	(202,486)	7,883,514	-	-	-	(202,486)
95	Sep-24	Actual	-	52,074	(202,486)	7,733,102	-	-	-	(202,486)
96	Oct-24	Actual	-	51,054	(202,486)	7,581,670	-	-	-	(202,486)
97	Nov-24	Actual	-	50,027	(202,486)	7,429,211	-	-	-	(202,486)
98	Dec-24	Actual	-	48,994	(202,486)	7,275,719	-	-	-	(202,486)
99	Jan-25	Actual	-	47,953	(202,486)	7,121,186	-	-	-	(202,486)

ES FORM 2.20  
 Page 3 of 3

DUKE ENERGY KENTUCKY, INC.  
 ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

Line No.	Period (1)	Cash Spend (2)	COR Credit (3)	Carrying Cost (4)	Recovery: 10-Yr Amort. (5)	Ending Balance (6)	Cash Spend (7)	Recovery: 2-Month Cycle (8)	Ending Balance (9)	Total Recovery (10) = (5) + (8)
100	Feb-25 Actual		-	46,906	(202,486)	6,965,606	-	-	-	(202,486)
101	Mar-25 Actual		-	45,851	(202,486)	6,808,971	-	-	-	(202,486)
102	Apr-25 Actual		-	44,789	(202,486)	6,651,274	-	-	-	(202,486)
103	May-25 Actual		-	43,720	(202,486)	6,492,508	-	-	-	(202,486)
104	Jun-25 Actual		-	42,643	(202,486)	6,332,665	-	-	-	(202,486)
105	Jul-25 Actual		-	41,560	(202,486)	6,171,739	-	-	-	(202,486)
106	Aug-25 Actual		-	40,469	(202,486)	6,009,722	-	-	-	(202,486)
107	Sep-25 Actual		-	39,370	(202,486)	5,846,606	-	-	-	(202,486)
108	Oct-25 Actual		-	38,265	(202,486)	5,682,385	-	-	-	(202,486)
109	Nov-25 Actual		-	37,151	(202,486)	5,517,050	-	-	-	(202,486)
110	Dec-25 Actual		-	36,030	(202,486)	5,350,594	-	-	-	(202,486)
111	Jan-26 Actual		-	34,902	(202,486)	5,183,010	-	-	-	(202,486)
112	Feb-26 Actual		-	33,766	(202,486)	5,014,290	-	-	-	(202,486)
113	Mar-26 Actual		-	32,622	(202,486)	4,844,426	-	-	-	(202,486)
114	Apr-26 Actual		-	31,470	(202,486)	4,673,410	-	-	-	(202,486)
115	May-26 Actual		-	30,311	(202,486)	4,501,235	-	-	-	(202,486)
116	Jun-26 Actual		-	29,144	(202,486)	4,327,893	-	-	-	(202,486)
117	Jul-26 Actual		-	27,968	(202,486)	4,153,375	-	-	-	(202,486)
118	Aug-26 Actual		-	26,785	(202,486)	3,977,674	-	-	-	(202,486)
119	Sep-26 Actual		-	25,594	(202,486)	3,800,782	-	-	-	(202,486)
120	Oct-26 Actual		-	24,395	(202,486)	3,622,691	-	-	-	(202,486)
121	Nov-26 Actual		-	23,188	(202,486)	3,443,393	-	-	-	(202,486)
122	Dec-26 Actual		-	21,972	(202,486)	3,262,879	-	-	-	(202,486)
123	Jan-27 Actual		-	20,748	(202,486)	3,081,141	-	-	-	(202,486)
124	Feb-27 Actual		-	19,516	(202,486)	2,898,171	-	-	-	(202,486)
125	Mar-27 Actual		-	18,276	(202,486)	2,713,961	-	-	-	(202,486)
126	Apr-27 Actual		-	17,027	(202,486)	2,528,502	-	-	-	(202,486)
127	May-27 Actual		-	15,769	(202,486)	2,341,785	-	-	-	(202,486)
128	Jun-27 Actual		-	14,504	(202,486)	2,153,803	-	-	-	(202,486)
129	Jul-27 Actual		-	13,229	(202,486)	1,964,546	-	-	-	(202,486)
130	Aug-27 Actual		-	11,946	(202,486)	1,774,006	-	-	-	(202,486)
131	Sep-27 Actual		-	10,654	(202,486)	1,582,174	-	-	-	(202,486)
132	Oct-27 Actual		-	9,354	(202,486)	1,389,042	-	-	-	(202,486)
133	Nov-27 Actual		-	8,045	(202,486)	1,194,601	-	-	-	(202,486)
134	Dec-27 Actual		-	6,726	(202,486)	998,841	-	-	-	(202,486)
135	Jan-28 Actual		-	5,399	(202,486)	801,754	-	-	-	(202,486)
136	Feb-28 Actual		-	4,063	(202,486)	603,331	-	-	-	(202,486)
137	Mar-28 Actual		-	2,718	(202,486)	403,563	-	-	-	(202,486)
138	Apr-28 Actual		-	1,409	(202,486)	202,486	-	-	-	(202,486)
139	May-28 Actual		-	-	(202,486)	-	-	-	-	(202,486)
		\$ 16,256,244	\$ (1,097,279)	\$ 9,139,355	\$ (24,298,320)		\$ 1,789,021	\$ (1,789,021)		(26,087,341)

Monthly Amortization Amount

(485,523)

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending December 2018

<b>Total SO<sub>2</sub> and NO<sub>x</sub> Emission Allowances</b>					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
<b>SO<sub>2</sub> Allowances - Acid Rain Program (a)</b>					
Quantity	110,300		233	-	110,067
Dollars	\$ 17,167.07	\$ -	\$ 37.28	\$ -	\$ 17,129.79
\$/Allowance	\$ 0.155640	\$ -	\$ 0.160000	\$ -	\$ 0.155631
<b>NO<sub>x</sub> Allowances - Annual</b>					
Quantity	4,855		157	-	4,698
Dollars	\$ 4,541.23	\$ -	\$ 147.58	\$ -	\$ 4,393.65
\$/Allowance	\$ 0.935372	\$ -	\$ 0.940000	\$ -	\$ 0.935217
<b>NO<sub>x</sub> Allowances - Seasonal</b>					
Quantity	485		-	-	485
Dollars	\$ 2,484.70	\$ -	\$ -	\$ -	\$ 2,484.70
\$/Allowance	\$ 5.123093	\$ -	\$ -	\$ -	\$ 5.123093
<b>Total Emission Allowances</b>					
Quantity	115,640		390	-	115,250
Dollars	\$ 24,193.00	\$ -	\$ 184.86	\$ -	\$ 24,008.14

(a) Note: The SO<sub>2</sub> Allowances exclude the CSSO<sub>2</sub>G1 Program Allowances as there is no dollar value associated with this program inventory. Thus, there is no expense booked to the ledger as a result of the program.

**ES FORM 2.50**

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

Environmental Reagent Expenses

For the Expense Month of December 2018

<u>Line No.</u>	<u>Expense Type</u>	<u>Account Number</u>	<u>East Bend Unit 2</u>	<u>Total</u>
1	Ammonia	502020	\$ 84,947	\$ 84,947
2	Lime	502040	1,215,363	1,215,363
3	Hydrated Lime	502040	53,231	53,231
4	Total		<u>\$ 1,353,541</u>	<u>\$ 1,353,541</u>

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

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

For the Expense Month of December 2018

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge (2) - (5)
Jan-18	\$ 16,073,289			\$ -	\$ 16,073,289
Feb-18	11,744,958			-	11,744,958
Mar-18	9,705,373			-	9,705,373
Apr-18	9,192,616			-	9,192,616
May-18	9,225,511			-	9,225,511
Jun-18	13,041,663			298,777	12,742,886
Jul-18	15,332,757			383,577	14,949,180
Aug-18	12,716,657			642,457	12,074,200
Sep-18	13,028,155			947,252	12,080,903
Oct-18	11,048,101			858,182	10,189,919
Nov-18	9,761,936			572,491	9,189,445
Dec-18	\$ 12,609,557			\$ 886,457	\$ 11,723,100
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 11,574,282
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 28,134,547
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					41.14%

Non-Residential - Kentucky Jurisdictional Revenues						
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Month	Total Revenues	Base Rate Fuel Component	Fuel Clause Revenues	Environmental Surcharge Revenues	Total Excluding Environmental Surcharge (2) - (5)	Total Non-Fuel Revenue (6) - (3) - (4)
Jan-18	\$ 16,089,643	\$ 5,218,344	\$ 546,874	\$ -	\$ 16,089,643	\$ 10,324,425
Feb-18	14,714,026	4,857,707	37,207	-	14,714,026	9,819,112
Mar-18	14,704,676	4,684,206	731,789	-	14,704,676	9,288,681
Apr-18	14,331,036	4,767,544	200,332	-	14,331,036	9,363,160
May-18	16,761,608	4,821,687	2,218,031	-	16,761,608	9,721,890
Jun-18	19,350,865	5,564,309	2,385,574	433,158	18,917,707	10,967,824
Jul-18	20,520,965	5,713,914	3,024,833	514,138	20,006,827	11,268,080
Aug-18	17,980,988	5,529,498	628,882	898,161	17,082,827	10,924,447
Sep-18	18,634,396	5,702,447	75,261	1,404,478	17,229,918	11,452,210
Oct-18	18,476,264	5,092,424	1,066,820	1,434,632	17,041,632	10,882,388
Nov-18	16,805,182	4,770,452	806,842	998,605	15,806,577	10,229,283
Dec-18	\$ 17,324,338	\$ 5,092,973	\$ 181,676	\$ 1,287,638	\$ 16,036,700	\$ 10,762,051
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 16,560,265	\$ 10,416,963
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 28,134,547	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					58.86%	



Source: MW\_RAC\_044

Class	Revcls	Bill											TotalBilled	TRUE
		Period	Unbilled	Billed	Total	BaseFuel	DSM	FAC	PSM	ESM	BaseRev			
Residential	0	5/1/2017	784,453	7,508,315	8,292,768	2,588,234	706,329	(801,494)	(135,356)	0	5,150,602	7,508,315	TRUE	
Commercial	2	5/1/2017	223,617	8,137,894	8,361,511	3,344,724	295,277	(1,037,055)	(175,342)	0	5,710,290	8,137,894	TRUE	
Industrial	4	5/1/2017	162,141	3,929,156	4,091,297	1,932,761	132,522	(590,393)	(101,113)	0	2,555,379	3,929,156	TRUE	
Lighting	15	5/1/2017	0	127,100	127,100	36,136	260	(11,195)	(1,886)	0	103,785	127,100	TRUE	
OPA	16	5/1/2017	63,810	1,560,496	1,624,306	665,147	50,452	(205,394)	(34,716)	0	1,085,007	1,560,496	TRUE	
Residential	0	6/1/2017	940,089	9,659,183	10,599,272	3,378,933	923,266	(1,029,257)	(174,137)	0	6,560,378	9,659,183	TRUE	
Commercial	2	6/1/2017	565,911	9,006,447	9,572,358	3,746,715	331,662	(1,143,025)	(193,511)	0	6,264,606	9,006,447	TRUE	
Industrial	4	6/1/2017	278,841	4,218,650	4,497,491	2,014,732	139,633	(601,392)	(103,795)	0	2,769,472	4,218,650	TRUE	
Lighting	15	6/1/2017	0	119,193	119,193	33,812	235	(10,337)	(1,739)	0	97,222	119,193	TRUE	
OPA	16	6/1/2017	115,294	1,506,064	1,621,358	602,156	45,082	(189,778)	(31,869)	0	1,080,473	1,506,064	TRUE	
Residential	0	7/1/2017	1,301,409	12,661,898	13,963,307	4,176,245	1,141,439	(415,742)	(215,265)	0	7,975,221	12,661,898	TRUE	
Commercial	2	7/1/2017	224,801	10,326,875	10,551,676	3,991,980	353,441	(398,582)	(206,002)	0	6,586,038	10,326,875	TRUE	
Industrial	4	7/1/2017	38,403	4,666,134	4,704,537	2,019,527	140,063	(196,673)	(104,031)	0	2,807,248	4,666,134	TRUE	
Lighting	15	7/1/2017	0	142,099	142,099	38,253	253	(4,277)	(1,970)	0	109,840	142,099	TRUE	
OPA	16	7/1/2017	30,351	1,922,746	1,953,097	748,931	57,734	(79,172)	(37,665)	0	1,232,918	1,922,746	TRUE	
Residential	0	8/1/2017	(948,589)	12,185,554	11,236,965	4,074,108	1,113,648	(587,185)	(210,043)	0	7,795,026	12,185,554	TRUE	
Commercial	2	8/1/2017	56,940	10,011,077	10,068,017	3,897,817	345,569	(563,132)	(201,306)	0	6,532,129	10,011,077	TRUE	
Industrial	4	8/1/2017	108,915	4,705,420	4,814,335	2,089,197	144,525	(294,245)	(107,611)	0	2,873,554	4,705,420	TRUE	
Lighting	15	8/1/2017	0	132,171	132,171	35,841	234	(5,180)	(1,845)	0	103,121	132,171	TRUE	
OPA	16	8/1/2017	44,537	1,825,858	1,870,395	725,160	55,760	(104,233)	(37,262)	0	1,182,433	1,825,858	TRUE	
Residential	0	9/1/2017	(443,981)	10,036,825	9,592,844	2,766,046	923,855	(164,082)	(52,907)	0	6,563,913	10,036,825	TRUE	
Commercial	2	9/1/2017	(385,833)	9,450,649	9,064,816	3,075,967	322,194	(183,449)	(59,281)	0	6,285,218	9,450,649	TRUE	
Industrial	4	9/1/2017	(252,900)	4,518,823	4,265,923	1,679,520	142,197	(96,993)	(32,054)	0	2,826,153	4,518,823	TRUE	
Lighting	15	9/1/2017	0	131,617	131,617	29,778	284	(1,765)	(548)	0	103,868	131,617	TRUE	
OPA	16	9/1/2017	(114,713)	1,801,940	1,687,227	588,243	55,416	(34,758)	(11,210)	0	1,204,249	1,801,940	TRUE	
Residential	0	10/1/2017	(705,141)	8,738,582	8,033,441	2,503,044	835,843	(548,638)	(47,728)	0	5,996,061	8,738,582	TRUE	
Commercial	2	10/1/2017	100,478	8,337,514	8,437,992	2,821,070	305,154	(617,548)	(54,006)	0	5,882,844	8,337,514	TRUE	
Industrial	4	10/1/2017	202,345	3,986,829	4,189,174	1,597,329	134,004	(341,465)	(30,508)	0	2,627,469	3,986,829	TRUE	
Lighting	15	10/1/2017	0	127,281	127,281	29,928	300	(6,562)	(551)	0	104,166	127,281	TRUE	
OPA	16	10/1/2017	102,272	1,612,658	1,714,930	556,585	52,319	(121,297)	(10,475)	0	1,135,526	1,612,658	TRUE	
Residential	0	11/1/2017	1,280,257	8,584,302	9,864,559	2,281,980	761,901	68,740	(43,566)	0	5,515,247	8,584,302	TRUE	
Commercial	2	11/1/2017	62,729	8,455,289	8,518,018	2,634,821	284,719	51,495	(50,435)	0	5,534,689	8,455,289	TRUE	
Industrial	4	11/1/2017	(77,061)	4,226,492	4,149,431	1,570,102	129,885	30,093	(29,995)	0	2,526,407	4,226,492	TRUE	
Lighting	15	11/1/2017	0	135,387	135,387	30,389	349	573	(560)	0	104,636	135,387	TRUE	
OPA	16	11/1/2017	(2,477)	1,639,889	1,637,412	541,306	49,810	10,635	(10,302)	0	1,048,440	1,639,889	TRUE	
Residential	0	12/1/2017	2,183,729	10,686,318	12,870,047	2,938,285	981,309	(109,117)	(60,937)	0	6,936,778	10,686,318	TRUE	
Commercial	2	12/1/2017	144,604	8,577,566	8,722,170	2,747,849	297,692	(96,837)	(56,814)	0	5,686,576	8,577,566	TRUE	
Industrial	4	12/1/2017	(50,660)	4,176,862	4,126,202	1,612,481	134,777	(56,195)	(33,300)	0	2,519,099	4,176,862	TRUE	
Lighting	15	12/1/2017	0	133,921	133,921	30,482	366	(1,098)	(607)	0	104,778	133,921	TRUE	
OPA	16	12/1/2017	14,000	1,550,244	1,564,244	531,136	48,848	(18,747)	(10,928)	0	999,935	1,550,244	TRUE	
Residential	0	1/1/2018	(2,009,512)	16,073,289	14,063,777	4,323,072	1,444,510	457,047	(89,396)	0	9,938,056	16,073,289	TRUE	
Commercial	2	1/1/2018	(685,804)	9,911,332	9,225,528	3,072,865	334,780	323,406	(63,777)	0	6,244,058	9,911,332	TRUE	
Industrial	4	1/1/2018	(344,589)	4,281,321	3,936,732	1,534,189	128,466	158,615	(31,692)	0	2,491,743	4,281,321	TRUE	
Lighting	15	1/1/2018	0	114,155	114,155	24,356	389	3,447	(485)	0	88,448	114,155	TRUE	
OPA	16	1/1/2018	(204,643)	1,782,835	1,578,192	586,934	53,911	61,406	(12,140)	0	1,092,724	1,782,835	TRUE	
Residential	0	2/1/2018	(604,918)	11,744,958	11,140,040	3,259,164	894,041	24,178	(67,395)	0	7,634,970	11,744,958	TRUE	
Commercial	2	2/1/2018	(198,544)	8,825,962	8,627,418	2,751,166	296,781	21,324	(57,105)	0	5,813,796	8,825,962	TRUE	
Industrial	4	2/1/2018	(115,938)	4,105,599	3,989,661	1,525,627	128,601	11,637	(31,487)	0	2,471,221	4,105,599	TRUE	
Lighting	15	2/1/2018	0	159,341	159,341	36,739	351	18	(731)	0	122,964	159,341	TRUE	
OPA	16	2/1/2018	(47,975)	1,623,124	1,575,149	544,175	49,820	4,228	(11,176)	0	1,036,077	1,623,124	TRUE	
Residential	0	3/1/2018	(1,147,167)	9,705,373	8,558,206	2,676,311	427,276	431,877	(202,284)	0	6,372,193	9,705,373	TRUE	
Commercial	2	3/1/2018	(7,895)	8,705,679	8,697,774	2,627,513	280,930	413,109	(194,792)	0	5,578,919	8,705,679	TRUE	
Industrial	4	3/1/2018	114,281	4,223,518	4,337,779	1,515,655	126,041	234,195	(112,073)	0	2,459,700	4,223,518	TRUE	
Lighting	15	3/1/2018	0	136,841	136,841	29,960	306	4,713	(2,229)	0	104,991	136,841	TRUE	
OPA	16	3/1/2018	19,951	1,638,638	1,658,589	511,078	46,387	79,772	(37,495)	0	1,038,896	1,638,638	TRUE	
Residential	0	4/1/2018	(279,968)	9,192,616	8,912,648	2,613,999	421,995	114,337	(193,872)	0	6,236,157	9,192,616	TRUE	
Commercial	2	4/1/2018	230,268	8,531,638	8,761,906	2,683,647	286,880	114,054	(199,453)	0	5,646,510	8,531,638	TRUE	
Industrial	4	4/1/2018	174,937	4,072,833	4,247,770	1,527,323	128,368	62,914	(113,061)	0	2,467,289	4,072,833	TRUE	
Lighting	15	4/1/2018	0	132,847	132,847	29,777	291	1,257	(2,216)	0	132,847	132,847	TRUE	
OPA	16	4/1/2018	81,786	1,593,718	1,675,504	526,797	47,969	22,107	(38,735)	0	1,035,580	1,593,718	TRUE	
Residential	0	5/1/2018	750,139	9,225,511	9,975,650	2,263,987	365,310	1,058,577	(168,009)	0	5,705,646	9,225,511	TRUE	
Commercial	2	5/1/2018	706,147	9,918,317	10,624,464	2,710,151	289,793	1,254,578	(201,555)	0	5,865,350	9,918,317	TRUE	
Industrial	4	5/1/2018	371,605	4,897,146	5,268,751	1,572,561	132,640	714,001	(116,393)	0	2,594,337	4,897,146	TRUE	
Lighting	15	5/1/2018	0	144,432	144,432	29,449	246	13,627	(2,192)	0	103,302	144,432	TRUE	
OPA	16	5/1/2018	176,325	1,801,713	1,978,038	509,526	46,753	235,825	(37,719)	0	1,047,328	1,801,713	TRUE	
Residential	0	6/1/2018	792,224	13,041,663	13,833,887	3,251,112	525,305	1,402,488	(342,065)	298,777	7,906,046	13,041,663	TRUE	
Commercial	2	6/1/2018	664,391	11,694,570	12,358,961	3,236,512	348,150	1,398,714	(341,397)	266,511	6,786,080	11,694,570	TRUE	
Industrial	4	6/1/2018	58,512	5,408,731	5,467,243	1,721,810	145,464	719,816	(178,410)	112,445	2,887,606	5,408,731	TRUE	
Lighting	15	6/1/2018	0	68,887	68,887	9,294	231	11,078	(2,138)	3,905	46,517	68,887	TRUE	
OPA	16	6/1/2018	49,096	2,178,677	2,227,773	596,693	56,070	255,966	(62,491)	50,297	1,282,142	2,178,677	TRUE	
Residential	0	7/1/2018	(632,639)	15,332,757	14,700,1									

Source: MW\_RAC\_044

Class	Recycle	Bill		Total	BaseFuel	DSM	FAC	PSM	ESM	BaseRev	TotalBilled		
		Period	Unbilled										Billed
Lighting	15	10/1/2018	0	105,755	19,743	598	4,014	(935)	10,575	71,760	105,755	TRUE	
OPA	16	10/1/2018	106,453	2,128,530	2,234,983	588,927	109,532	123,510	(34,603)	165,985	1,175,179	2,128,530	TRUE
Residential	0	11/1/2018	1,819,525	9,761,936	11,581,461	2,397,043	304,928	407,297	(141,488)	572,491	6,221,665	9,761,936	TRUE
Commercial	2	11/1/2018	(21,324)	9,835,049	9,813,725	2,625,633	551,032	448,383	(155,506)	602,739	5,762,768	9,835,049	TRUE
Industrial	4	11/1/2018	(49,065)	4,901,539	4,852,474	1,569,314	259,087	260,616	(92,505)	271,381	2,633,646	4,901,539	TRUE
Lighting	15	11/1/2018	0	178,681	178,681	37,027	692	6,799	(2,376)	11,890	124,649	178,681	TRUE
OPA	16	11/1/2018	59	1,889,913	1,889,972	538,478	97,371	91,044	(31,629)	112,595	1,082,054	1,889,913	TRUE
Residential	0	12/1/2018	(7,019,116)	12,609,557	5,590,441	3,256,513	414,458	116,898	(14,414)	886,457	7,949,645	12,609,557	TRUE
Commercial	2	12/1/2018	(5,137,769)	10,390,781	5,253,012	2,889,738	606,758	104,190	(13,286)	791,419	6,011,962	10,390,781	TRUE
Industrial	4	12/1/2018	(2,504,461)	4,892,247	2,387,786	1,616,590	270,742	56,629	(7,045)	342,166	2,613,165	4,892,247	TRUE
Lighting	15	12/1/2018	0	144,479	144,479	29,366	776	1,063	(121)	12,216	101,179	144,479	TRUE
OPA	16	12/1/2018	(1,296,037)	1,896,831	600,794	557,279	99,707	19,794	(2,420)	141,837	1,080,634	1,896,831	TRUE

**Source: PSM Schedule 2**

Asset Energy = Non-native portion of DA Asset Energy (PJM BLI 1200, 1210, 1220) and RT Asset Energy (PJM BLI 1205, 1215, 1225, 1400, 1410, 1420)

<u>Bill</u>	<u>Amount</u>	<u>12 Month</u>	<u>PSM</u>	
<u>Period</u>		<u>Average</u>		
5/1/2017	1,173,611.46		1,173,611.46	0.00
6/1/2017	593,771.89		593,771.89	0.00
7/1/2017	415,058.79		415,058.79	0.00
8/1/2017	447,589.45		447,589.45	0.00
9/1/2017	1,077,979.15		1,077,979.15	0.00
10/1/2017	2,400,518.78		2,400,518.78	0.00
11/1/2017	1,648,921.22		1,648,921.22	0.00
12/1/2017	647,230.19		647,230.19	0.00
1/1/2018	1,989,969.08		1,989,969.08	0.00
2/1/2018	220,839.74		220,839.74	0.00
3/1/2018	58,321.90		58,321.90	0.00
4/1/2018	0.00	889,484.00	0.00	0.00
5/1/2018	0.00	791,683.00	0.00	0.00
6/1/2018	573,409.20	789,986.00	573,409.20	0.00
7/1/2018	1,622,817.60	890,633.00	1,622,817.60	0.00
8/1/2018	466,200.77	892,184.00	466,200.77	0.00
9/1/2018	695,754.67	860,332.00	695,754.67	0.00
10/1/2018	1,249,439.54	764,409.00	1,249,439.54	0.00
11/1/2018	1,611,209.27	761,266.00	1,611,209.27	0.00
12/1/2018	1,633,957.40	843,493.00	1,633,957.40	0.00

**Input:**  
Expense Month: January 2019  
Case No. 2017-00321

**Property Tax Rates**

ARO Account: 0.15000%  
Structures & Improvements 1.42740%

Adj. Jurisdictional E(m)  
Authorized for Nov-18  
Expense Month \$ 2,358,844.00

Effective Date for Billing: March 1, 2019  
Date Submitted: February 19, 2019

**Error Check:**  
To make sure that retail  
and SLRSLS are entered  
for the current expense month

**File:**  
Original & 2 copies

Jurisdictional E(m) Table											
Juris. E(m)					Juris. E(m) vs. Revenue Collected						
Form 1.10	Ln 9 (H30)	Ln 13 (H38)	Ln 7 (H26)	Ln 12 (H36)	(Over)/Under	Recovered	Recovery	ESM Billing Factor		Exp Month / Billing	
Expense	Retail	PSM	Total	Adj. Retail Recovery	Recovery	in Rates	vs. Allowed	Res	Non-Res		
Month											
Feb-18	\$ -	\$ -	\$ -	\$ -							
Mar-18	\$ -	\$ -	\$ -	\$ -							
Apr-18	\$ 683,831	\$ 23,922	\$ 707,753	\$ 683,831	\$ -			2.67%	3.99%	Apr / June	
May-18	\$ 783,036	\$ 23,802	\$ 806,838	\$ 783,036	\$ -			3.01%	4.57%	May / July	
Jun-18	\$ 1,461,780	\$ 41,954	\$ 1,503,734	\$ 1,413,676	\$ (48,104)	\$ 731,935		5.31%	8.21%	June / August	
Jul-18	\$ 2,237,252	\$ 73,482	\$ 2,310,734	\$ 2,122,573	\$ (114,679)	\$ 897,715		7.84%	12.28%	July / September	
Aug-18	\$ 2,407,393	\$ 79,069	\$ 2,486,462	\$ 2,280,451	\$ (126,942)	\$ 1,540,618		8.41%	13.21%	August / October	
Sep-18	\$ 1,928,868	\$ 61,091	\$ 1,989,959	\$ 1,699,711	\$ (229,157)	\$ 2,351,730		6.21%	9.76%	September / November	
Oct-18	\$ 2,107,561	\$ 57,816	\$ 2,165,377	\$ 2,095,198	\$ (12,363)	\$ 2,292,814		7.55%	11.99%	October / December	
Nov-18	\$ 2,230,229	\$ 60,239	\$ 2,290,468	\$ 2,358,844	\$ 128,615	\$ 1,571,096		8.45%	13.44%	November / January	
Dec-18	\$ 2,568,511	\$ 76,984	\$ 2,645,495	\$ 2,489,614	\$ (78,897)	\$ 2,174,095		8.85%	14.07%	December / February	
Jan-19	\$ 2,219,734	\$ 59,488	\$ 2,279,222	\$ 2,014,081	\$ (205,653)	\$ 2,564,497		7.21%	11.45%	January / March	

ES FORM 1.00

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

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

For the Expense Month of January 2019

**Residential (Total Revenue)**

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	816,307
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	11,329,337
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		7.21%

**Non-Residential (Net Revenue)**

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,197,774
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	10,458,095
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		11.45%

Effective Date for Billing: March 1, 2019

Submitted by: Theodore H. Czupik Jr.

Title: Rates & Regulatory Strategy Manager

Date Submitted: February 19, 2019

DUKE ENERGY KENTUCKY, INC.  
 ENVIRONMENTAL SURCHARGE REPORT

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of January 2019

Line No.	E(m) = RORB + OE - EAS + Prior Period Adjustment + (Over)/Under Recovery	Source	Environmental Compliance Plans
1	Environmental Compliance Rate Base (RB)	ES Form 2.00	\$ 37,725,269
2	RB + 12 months	(1) + 12	\$ 3,143,772
3	Pretax Rate of Return (ROR)	ES Form 1.20	8.446%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 265,523
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 2,013,699
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 2,279,222
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	97.39%
9	Jurisdictional E(m)	(7) x (8)	\$ 2,219,734
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ (205,653)
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 2,014,081
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 59,488

Calculation of Environmental Surcharge Billing Factors

		Residential (Total Revenue)	Non-Residential (Net Revenue)
14	Revenues as a Percentage of 12 Month Average Total Revenues	ES Form 3.00	40.53% 59.47%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 816,307 \$ 1,197,774
16	<b>R(m)</b> Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	ES Form 3.00 ES Form 3.00	\$ 11,329,337 \$ 10,458,095
17	Jurisdictional E(m) / R(m)	(15) + (16)	7.21% 11.45%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 27,951,934	97.39%
19	Sales for Resale	Company Records	\$ 750,533	2.61%
20	Total Revenue		\$ 28,702,467	100.00%

Note: (A) Amounts determined by the Commission during six-month and two-year reviews.

ES FORM 1.20

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

Cost of Capital

Line No.	Capital Structure	Ratio	Cost	Weighted Cost (A)	Gross up for Tax Rate (B)	Pre-Tax Rate of Return (A)x(B)
1	Short-term Debt	9.772%	3.083%	0.301%		0.301%
2	Long-term Debt	40.977%	4.243%	1.739%		1.739%
3	Common Equity	49.251%	9.725%	4.790%	1.3373044	6.406%
4	Total	100.000%		6.830%		8.446%

Note: Capital structure, cost of debt and tax rate gross-up factor as approved in Case No. 2017-00321. These rates are to remain constant until the Commission sets base rates in Duke Kentucky's next base rate case proceeding.



ES FORM 2.00

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

Revenue Requirement of Environmental Compliance Costs

For the Expense Month of January 2019

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant)	ES Form 2.10	\$ 10,247,008
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	28,639,093
3	Subtotal		\$ 38,886,101
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 23,757
6	Subtotal		\$ 23,757
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 40,604
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	1,143,985
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 1,184,589
12	Environmental Compliance Rate Base		\$ 37,725,269
13	<b><u>Determination of Environmental Compliance Operating Expenses (OE)</u></b>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 20,976
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 554,481
16	Monthly Amortization Expense	ES Form 2.20	\$ 380,482
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 251
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 1,057,509
19	Total Environmental Compliance Operating Expense		\$ 2,013,699
20	<b><u>Proceeds from Emission Allowance Sales (EAS)</u></b>		
21	SO <sub>2</sub> Allowance Sales		\$ -
22	NO <sub>x</sub> Allowances Sales		-
23	Total Emission Allowance Sales		\$ -
24	<b><u>(Over) / Under Recovery</u></b>		
25	Adjusted Jurisdictional E(m) Authorized for Expense Month two Months Prior		\$ 2,358,844
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		2,564,497
27	(Over) / Under Recovery		\$ (205,653)

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

ES FORM 2.10

DUKE ENERGY KENTUCKY, INC.  
 ENVIRONMENTAL SURCHARGE REPORT

Plant, Accumulated Depreciation, CWIP, ITC, ADIT  
 Depreciation Expense, Taxes Other Than Income Taxes

For the Expense Month of January 2019

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
Project No.	Description	Gross Plant in-Service as of January-19	Accumulated Depreciation as of January-19	Net Plant in-Service as of January-19	CWIP Excluding AFUDC as of January-19	Accumulated Deferred ITC as of January-19	Accumulated Deferred Tax Balance as of January-19	Monthly Depreciation Expense	Monthly Property Tax Expense
				(2)-(3)					
1	EB020290 Lined Retention Basin West	\$ 10,247,008	\$ 40,604	\$ 10,206,404	\$ -	\$ -	\$ 1,143,985	\$ 20,976	\$ 145,686
2	EB020745 Lined Retention Basin East	\$ -	\$ -	\$ -	\$ 106,469	\$ -	\$ -	\$ -	\$ 1,520
3	EB020298 East Bend SW/PW Reroute	\$ -	\$ -	\$ -	\$ 28,231,094	\$ -	\$ -	\$ -	\$ 402,971
4	EB021281 East Bend Landfill Cell 2	\$ -	\$ -	\$ -	\$ 301,530	\$ -	\$ -	\$ -	\$ 4,304
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 10,247,008	\$ 40,604	\$ 10,206,404	\$ 28,639,093	\$ -	\$ 1,143,985	\$ 20,976	\$ 554,481

ES FORM 2.20  
 Page 1 of 3

DUKE ENERGY KENTUCKY, INC.  
 ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

Line No.	Period (1)	Cash Spend (2)	COR Credit (3)	Carrying Cost (4)	Recovery: 10-Yr Amort. (5)	Ending Balance (6)	Cash Spend (7)	Recovery: 2-Month Cycle (8)	Ending Balance (9)	Total Recovery (10) = (5) + (8)
1	2015 Total	Actual \$ 3,858,084	\$ (856,412)	\$ 20,378	\$ -	\$ 3,022,050	\$ -	\$ -	\$ -	\$ -
2	2016 Total	Actual \$ 4,486,812	\$ (107,052)	\$ 379,037	\$ -	\$ 7,780,847	\$ -	\$ -	\$ -	\$ -
3	Jan-17	Actual \$ 358,148	\$ -	\$ 43,243	\$ -	\$ 8,182,238	\$ -	\$ -	\$ -	\$ -
4	Feb-17	Actual \$ 424,021	\$ -	\$ 40,351	\$ -	\$ 8,646,610	\$ -	\$ -	\$ -	\$ -
5	Mar-17	Actual \$ 692,184	\$ (26,763)	\$ 44,724	\$ -	\$ 9,356,755	\$ -	\$ -	\$ -	\$ -
6	Apr-17	Actual \$ 254,067	\$ -	\$ 50,949	\$ -	\$ 9,661,771	\$ -	\$ -	\$ -	\$ -
7	May-17	Actual \$ 608,377	\$ -	\$ 56,141	\$ -	\$ 10,326,289	\$ -	\$ -	\$ -	\$ -
8	Jun-17	Actual \$ 265,619	\$ (26,763)	\$ 53,472	\$ -	\$ 10,618,617	\$ -	\$ -	\$ -	\$ -
9	Jul-17	Actual \$ 220,636	\$ -	\$ 51,558	\$ -	\$ 10,690,811	\$ -	\$ -	\$ -	\$ -
10	Aug-17	Actual \$ 272,053	\$ -	\$ 47,731	\$ -	\$ 11,210,595	\$ -	\$ -	\$ -	\$ -
11	Sep-17	Actual \$ 233,743	\$ (26,763)	\$ 44,389	\$ -	\$ 11,481,964	\$ -	\$ -	\$ -	\$ -
12	Oct-17	Actual \$ 444,793	\$ -	\$ 60,670	\$ -	\$ 11,967,427	\$ -	\$ -	\$ -	\$ -
13	Nov-17	Actual \$ 525,770	\$ -	\$ 68,573	\$ -	\$ 12,561,770	\$ -	\$ -	\$ -	\$ -
14	Dec-17	Actual \$ 2,482,493	\$ (26,763)	\$ 82,850	\$ -	\$ 15,100,350	\$ -	\$ -	\$ -	\$ -
15	Jan-18	Actual \$ 510,525	\$ -	\$ 91,185	\$ -	\$ 15,702,060	\$ -	\$ -	\$ -	\$ -
16	Feb-18	Actual \$ 89,648	\$ -	\$ 91,534	\$ -	\$ 15,883,242	\$ -	\$ -	\$ -	\$ -
17	Mar-18	Actual \$ 396,977	\$ (26,763)	\$ 93,696	\$ -	\$ 16,347,152	\$ -	\$ -	\$ -	\$ -
18	Apr-18	Actual \$ 132,294	\$ -	\$ 111,722	\$ -	\$ 16,591,168	\$ 173,000	\$ -	\$ 173,000	\$ -
19	May-18	Actual \$ -	\$ -	\$ 112,480	\$ -	\$ 16,703,648	\$ 100,234	\$ -	\$ 273,234	\$ -
20	Jun-18	Actual \$ -	\$ -	\$ 111,870	\$ (202,486)	\$ 16,613,032	\$ 150,901	\$ (173,000)	\$ 251,135	\$ (375,486)
21	Jul-18	Actual \$ -	\$ -	\$ 111,255	\$ (202,486)	\$ 16,521,801	\$ 196,585	\$ (100,234)	\$ 347,486	\$ (302,720)
22	Aug-18	Actual \$ -	\$ -	\$ 110,637	\$ (202,486)	\$ 16,429,952	\$ 321,815	\$ (150,901)	\$ 518,400	\$ (353,387)
23	Sep-18	Actual \$ -	\$ -	\$ 110,014	\$ (202,486)	\$ 16,337,480	\$ 275,135	\$ (196,585)	\$ 596,950	\$ (399,071)
24	Oct-18	Actual \$ -	\$ -	\$ 109,387	\$ (202,486)	\$ 16,244,381	\$ 69,886	\$ (321,815)	\$ 345,021	\$ (524,301)
25	Nov-18	Actual \$ -	\$ -	\$ 108,756	\$ (202,486)	\$ 16,150,651	\$ 238,428	\$ (275,135)	\$ 308,314	\$ (477,621)
26	Dec-18	Actual \$ -	\$ -	\$ 108,121	\$ (202,486)	\$ 16,056,286	\$ 263,037	\$ (69,886)	\$ 501,465	\$ (272,372)
27	Jan-19	Actual \$ -	\$ -	\$ 107,481	\$ (202,486)	\$ 15,961,281	\$ 177,996	\$ (238,428)	\$ 441,033	\$ (440,914)
28	Feb-19	Actual \$ -	\$ -	\$ 106,837	\$ (202,486)	\$ 15,865,632	\$ -	\$ (263,037)	\$ 177,996	\$ (465,523)
29	Mar-19	Actual \$ -	\$ -	\$ 106,188	\$ (202,486)	\$ 15,769,334	\$ -	\$ (177,996)	\$ -	\$ (380,482)
30	Apr-19	Actual \$ -	\$ -	\$ 105,535	\$ (202,486)	\$ 15,672,383	\$ -	\$ -	\$ -	\$ (202,486)
31	May-19	Actual \$ -	\$ -	\$ 104,878	\$ (202,486)	\$ 15,574,775	\$ -	\$ -	\$ -	\$ (202,486)
32	Jun-19	Actual \$ -	\$ -	\$ 104,216	\$ (202,486)	\$ 15,476,505	\$ -	\$ -	\$ -	\$ (202,486)
33	Jul-19	Actual \$ -	\$ -	\$ 103,550	\$ (202,486)	\$ 15,377,569	\$ -	\$ -	\$ -	\$ (202,486)
34	Aug-19	Actual \$ -	\$ -	\$ 102,880	\$ (202,486)	\$ 15,277,963	\$ -	\$ -	\$ -	\$ (202,486)
35	Sep-19	Actual \$ -	\$ -	\$ 102,204	\$ (202,486)	\$ 15,177,681	\$ -	\$ -	\$ -	\$ (202,486)
36	Oct-19	Actual \$ -	\$ -	\$ 101,524	\$ (202,486)	\$ 15,076,719	\$ -	\$ -	\$ -	\$ (202,486)
37	Nov-19	Actual \$ -	\$ -	\$ 100,840	\$ (202,486)	\$ 14,975,073	\$ -	\$ -	\$ -	\$ (202,486)
38	Dec-19	Actual \$ -	\$ -	\$ 100,151	\$ (202,486)	\$ 14,872,738	\$ -	\$ -	\$ -	\$ (202,486)
39	Jan-20	Actual \$ -	\$ -	\$ 99,457	\$ (202,486)	\$ 14,769,709	\$ -	\$ -	\$ -	\$ (202,486)
40	Feb-20	Actual \$ -	\$ -	\$ 98,759	\$ (202,486)	\$ 14,665,982	\$ -	\$ -	\$ -	\$ (202,486)
41	Mar-20	Actual \$ -	\$ -	\$ 98,055	\$ (202,486)	\$ 14,561,551	\$ -	\$ -	\$ -	\$ (202,486)
42	Apr-20	Actual \$ -	\$ -	\$ 97,347	\$ (202,486)	\$ 14,456,412	\$ -	\$ -	\$ -	\$ (202,486)
43	May-20	Actual \$ -	\$ -	\$ 96,635	\$ (202,486)	\$ 14,350,561	\$ -	\$ -	\$ -	\$ (202,486)
44	Jun-20	Actual \$ -	\$ -	\$ 95,917	\$ (202,486)	\$ 14,243,992	\$ -	\$ -	\$ -	\$ (202,486)
45	Jul-20	Actual \$ -	\$ -	\$ 95,194	\$ (202,486)	\$ 14,136,700	\$ -	\$ -	\$ -	\$ (202,486)
46	Aug-20	Actual \$ -	\$ -	\$ 94,467	\$ (202,486)	\$ 14,028,681	\$ -	\$ -	\$ -	\$ (202,486)
47	Sep-20	Actual \$ -	\$ -	\$ 93,735	\$ (202,486)	\$ 13,919,930	\$ -	\$ -	\$ -	\$ (202,486)
48	Oct-20	Actual \$ -	\$ -	\$ 92,997	\$ (202,486)	\$ 13,810,441	\$ -	\$ -	\$ -	\$ (202,486)
49	Nov-20	Actual \$ -	\$ -	\$ 92,255	\$ (202,486)	\$ 13,700,210	\$ -	\$ -	\$ -	\$ (202,486)
50	Dec-20	Actual \$ -	\$ -	\$ 91,508	\$ (202,486)	\$ 13,589,232	\$ -	\$ -	\$ -	\$ (202,486)

ES FORM 2.20  
 Page 2 of 3

DUKE ENERGY KENTUCKY, INC.  
 ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

Line No.	Period (1)	Cash Spend (2)	COR Credit (3)	Carrying Cost (4)	Recovery: 10-Yr Amort. (5)	Ending Balance (6)	Cash Spend (7)	Recovery: 2-Month Cycle (8)	Ending Balance (9)	Total Recovery (10) = (5) + (8)
51	Jan-21	Actual	-	90,756	(202,486)	13,477,502	-	-	-	(202,486)
52	Feb-21	Actual	-	89,998	(202,486)	13,365,014	-	-	-	(202,486)
53	Mar-21	Actual	-	89,235	(202,486)	13,251,763	-	-	-	(202,486)
54	Apr-21	Actual	-	88,468	(202,486)	13,137,745	-	-	-	(202,486)
55	May-21	Actual	-	87,695	(202,486)	13,022,954	-	-	-	(202,486)
56	Jun-21	Actual	-	86,916	(202,486)	12,907,384	-	-	-	(202,486)
57	Jul-21	Actual	-	86,133	(202,486)	12,791,031	-	-	-	(202,486)
58	Aug-21	Actual	-	85,344	(202,486)	12,673,889	-	-	-	(202,486)
59	Sep-21	Actual	-	84,550	(202,486)	12,555,953	-	-	-	(202,486)
60	Oct-21	Actual	-	83,750	(202,486)	12,437,217	-	-	-	(202,486)
61	Nov-21	Actual	-	82,945	(202,486)	12,317,676	-	-	-	(202,486)
62	Dec-21	Actual	-	82,135	(202,486)	12,197,325	-	-	-	(202,486)
63	Jan-22	Actual	-	81,319	(202,486)	12,076,158	-	-	-	(202,486)
64	Feb-22	Actual	-	80,498	(202,486)	11,954,170	-	-	-	(202,486)
65	Mar-22	Actual	-	79,671	(202,486)	11,831,355	-	-	-	(202,486)
66	Apr-22	Actual	-	78,838	(202,486)	11,707,707	-	-	-	(202,486)
67	May-22	Actual	-	78,000	(202,486)	11,583,221	-	-	-	(202,486)
68	Jun-22	Actual	-	77,156	(202,486)	11,457,891	-	-	-	(202,486)
69	Jul-22	Actual	-	76,306	(202,486)	11,331,711	-	-	-	(202,486)
70	Aug-22	Actual	-	75,451	(202,486)	11,204,676	-	-	-	(202,486)
71	Sep-22	Actual	-	74,589	(202,486)	11,076,779	-	-	-	(202,486)
72	Oct-22	Actual	-	73,722	(202,486)	10,948,015	-	-	-	(202,486)
73	Nov-22	Actual	-	72,849	(202,486)	10,818,378	-	-	-	(202,486)
74	Dec-22	Actual	-	71,971	(202,486)	10,687,863	-	-	-	(202,486)
75	Jan-23	Actual	-	71,086	(202,486)	10,556,463	-	-	-	(202,486)
76	Feb-23	Actual	-	70,195	(202,486)	10,424,172	-	-	-	(202,486)
77	Mar-23	Actual	-	69,298	(202,486)	10,290,984	-	-	-	(202,486)
78	Apr-23	Actual	-	68,395	(202,486)	10,156,893	-	-	-	(202,486)
79	May-23	Actual	-	67,486	(202,486)	10,021,893	-	-	-	(202,486)
80	Jun-23	Actual	-	66,571	(202,486)	9,885,978	-	-	-	(202,486)
81	Jul-23	Actual	-	65,649	(202,486)	9,749,141	-	-	-	(202,486)
82	Aug-23	Actual	-	64,722	(202,486)	9,611,377	-	-	-	(202,486)
83	Sep-23	Actual	-	63,788	(202,486)	9,472,679	-	-	-	(202,486)
84	Oct-23	Actual	-	62,847	(202,486)	9,333,040	-	-	-	(202,486)
85	Nov-23	Actual	-	61,901	(202,486)	9,192,455	-	-	-	(202,486)
86	Dec-23	Actual	-	60,948	(202,486)	9,050,917	-	-	-	(202,486)
87	Jan-24	Actual	-	59,988	(202,486)	8,908,419	-	-	-	(202,486)
88	Feb-24	Actual	-	59,022	(202,486)	8,764,955	-	-	-	(202,486)
89	Mar-24	Actual	-	58,049	(202,486)	8,620,518	-	-	-	(202,486)
90	Apr-24	Actual	-	57,070	(202,486)	8,475,102	-	-	-	(202,486)
91	May-24	Actual	-	56,084	(202,486)	8,328,700	-	-	-	(202,486)
92	Jun-24	Actual	-	55,092	(202,486)	8,181,306	-	-	-	(202,486)
93	Jul-24	Actual	-	54,093	(202,486)	8,032,913	-	-	-	(202,486)
94	Aug-24	Actual	-	53,087	(202,486)	7,883,514	-	-	-	(202,486)
95	Sep-24	Actual	-	52,074	(202,486)	7,733,102	-	-	-	(202,486)
96	Oct-24	Actual	-	51,054	(202,486)	7,581,670	-	-	-	(202,486)
97	Nov-24	Actual	-	50,027	(202,486)	7,429,211	-	-	-	(202,486)
98	Dec-24	Actual	-	48,994	(202,486)	7,275,719	-	-	-	(202,486)
99	Jan-25	Actual	-	47,953	(202,486)	7,121,186	-	-	-	(202,486)

ES FORM 2.20  
 Page 3 of 3

DUKE ENERGY KENTUCKY, INC.  
 ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

Line No.	Period (1)	Cash Spend (2)	COR Credit (3)	Carrying Cost (4)	Recovery: 10-Yr Amort. (5)	Ending Balance (6)	Cash Spend (7)	Recovery: 2-Month Cycle (8)	Ending Balance (9)	Total Recovery (10) = (5) + (8)
100	Feb-25 Actual		-	46,906	(202,486)	6,965,606	-	-	-	(202,486)
101	Mar-25 Actual		-	45,851	(202,486)	6,808,971	-	-	-	(202,486)
102	Apr-25 Actual		-	44,789	(202,486)	6,651,274	-	-	-	(202,486)
103	May-25 Actual		-	43,720	(202,486)	6,492,508	-	-	-	(202,486)
104	Jun-25 Actual		-	42,643	(202,486)	6,332,665	-	-	-	(202,486)
105	Jul-25 Actual		-	41,560	(202,486)	6,171,739	-	-	-	(202,486)
106	Aug-25 Actual		-	40,469	(202,486)	6,009,722	-	-	-	(202,486)
107	Sep-25 Actual		-	39,370	(202,486)	5,846,606	-	-	-	(202,486)
108	Oct-25 Actual		-	38,265	(202,486)	5,682,385	-	-	-	(202,486)
109	Nov-25 Actual		-	37,151	(202,486)	5,517,050	-	-	-	(202,486)
110	Dec-25 Actual		-	36,030	(202,486)	5,350,594	-	-	-	(202,486)
111	Jan-26 Actual		-	34,902	(202,486)	5,183,010	-	-	-	(202,486)
112	Feb-26 Actual		-	33,766	(202,486)	5,014,290	-	-	-	(202,486)
113	Mar-26 Actual		-	32,622	(202,486)	4,844,426	-	-	-	(202,486)
114	Apr-26 Actual		-	31,470	(202,486)	4,673,410	-	-	-	(202,486)
115	May-26 Actual		-	30,311	(202,486)	4,501,235	-	-	-	(202,486)
116	Jun-26 Actual		-	29,144	(202,486)	4,327,893	-	-	-	(202,486)
117	Jul-26 Actual		-	27,968	(202,486)	4,153,375	-	-	-	(202,486)
118	Aug-26 Actual		-	26,785	(202,486)	3,977,674	-	-	-	(202,486)
119	Sep-26 Actual		-	25,594	(202,486)	3,800,782	-	-	-	(202,486)
120	Oct-26 Actual		-	24,395	(202,486)	3,622,691	-	-	-	(202,486)
121	Nov-26 Actual		-	23,188	(202,486)	3,443,393	-	-	-	(202,486)
122	Dec-26 Actual		-	21,972	(202,486)	3,262,879	-	-	-	(202,486)
123	Jan-27 Actual		-	20,748	(202,486)	3,081,141	-	-	-	(202,486)
124	Feb-27 Actual		-	19,516	(202,486)	2,898,171	-	-	-	(202,486)
125	Mar-27 Actual		-	18,276	(202,486)	2,713,961	-	-	-	(202,486)
126	Apr-27 Actual		-	17,027	(202,486)	2,528,502	-	-	-	(202,486)
127	May-27 Actual		-	15,769	(202,486)	2,341,785	-	-	-	(202,486)
128	Jun-27 Actual		-	14,504	(202,486)	2,153,803	-	-	-	(202,486)
129	Jul-27 Actual		-	13,229	(202,486)	1,964,546	-	-	-	(202,486)
130	Aug-27 Actual		-	11,946	(202,486)	1,774,006	-	-	-	(202,486)
131	Sep-27 Actual		-	10,654	(202,486)	1,582,174	-	-	-	(202,486)
132	Oct-27 Actual		-	9,354	(202,486)	1,389,042	-	-	-	(202,486)
133	Nov-27 Actual		-	8,045	(202,486)	1,194,601	-	-	-	(202,486)
134	Dec-27 Actual		-	6,726	(202,486)	998,841	-	-	-	(202,486)
135	Jan-28 Actual		-	5,399	(202,486)	801,754	-	-	-	(202,486)
136	Feb-28 Actual		-	4,063	(202,486)	603,331	-	-	-	(202,486)
137	Mar-28 Actual		-	2,718	(202,486)	403,563	-	-	-	(202,486)
138	Apr-28 Actual		-	1,409	(202,486)	202,486	-	-	-	(202,486)
139	May-28 Actual		-	-	(202,486)	-	-	-	-	(202,486)
		\$ 16,256,244	\$ (1,097,279)	\$ 9,139,355	\$ (24,298,320)		\$ 1,967,017	\$ (1,967,017)		(26,265,337)

Monthly Amortization Amount

(380,482)

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending January 2019

<b>Total SO<sub>2</sub> and NO<sub>x</sub> Emission Allowances</b>					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
<b>SO<sub>2</sub> Allowances - Acid Rain Program (a)</b>					
Quantity	110,067		273	-	109,794
Dollars	\$ 17,129.79	\$ -	\$ 43.68	\$ -	\$ 17,086.11
\$/Allowance	\$ 0.155631	\$ -	\$ 0.160000	\$ -	\$ 0.155620
<b>NO<sub>x</sub> Allowances - Annual</b>					
Quantity	4,698		221	-	4,477
Dollars	\$ 4,393.65	\$ -	\$ 207.74	\$ -	\$ 4,185.91
\$/Allowance	\$ 0.935217	\$ -	\$ 0.940000	\$ -	\$ 0.934981
<b>NO<sub>x</sub> Allowances - Seasonal</b>					
Quantity	485		-	-	485
Dollars	\$ 2,484.70	\$ -	\$ -	\$ -	\$ 2,484.70
\$/Allowance	\$ 5.123093	\$ -	\$ -	\$ -	\$ 5.123093
<b>Total Emission Allowances</b>					
Quantity	115,250	-	494	-	114,756
Dollars	\$ 24,008.14	\$ -	\$ 251.42	\$ -	\$ 23,756.72

(a) Note: The SO<sub>2</sub> Allowances exclude the CSSO<sub>2</sub>G1 Program Allowances as there is no dollar value associated with this program inventory. Thus, there is no expense booked to the ledger as a result of the program.

**ES FORM 2.50**

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

Environmental Reagent Expenses

For the Expense Month of January 2019

<b>Line No.</b>	<b>Expense Type</b>	<b>Account Number</b>	<b>East Bend Unit 2</b>	<b>Total</b>
1	Ammonia	502020	\$ 88,240	\$ 88,240
2	Lime	502040	881,259	881,259
3	Hydrated Lime	502040	88,010	88,010
4	Total		\$ 1,057,509	\$ 1,057,509

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

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

For the Expense Month of January 2019

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge (2) - (5)
Feb-18	\$ 11,744,958			\$ -	\$ 11,744,958
Mar-18	9,705,373			-	9,705,373
Apr-18	9,192,616			-	9,192,616
May-18	9,225,511			-	9,225,511
Jun-18	13,041,663			298,777	12,742,886
Jul-18	15,332,757			383,577	14,949,180
Aug-18	12,716,657			642,457	12,074,200
Sep-18	13,028,155			947,252	12,080,903
Oct-18	11,048,101			858,182	10,189,919
Nov-18	9,761,936			572,491	9,189,445
Dec-18	12,609,557			886,457	11,723,100
Jan-19	\$ 14,245,202			\$ 1,111,248	\$ 13,133,954
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 11,329,337
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 27,951,934
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					40.53%

Non-Residential - Kentucky Jurisdictional Revenues						
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Month	Total Revenues	Base Rate Fuel Component	Fuel Clause Revenues	Environmental Surcharge Revenues	Total Excluding Environmental Surcharge (2) - (5)	Total Non-Fuel Revenue (6) - (3) - (4)
Feb-18	\$ 14,714,026	\$ 4,857,707	\$ 37,207	\$ -	\$ 14,714,026	\$ 9,819,112
Mar-18	14,704,676	4,684,206	731,789	-	14,704,676	9,288,681
Apr-18	14,331,036	4,767,544	200,332	-	14,331,036	9,363,160
May-18	16,761,608	4,821,687	2,218,031	-	16,761,608	9,721,890
Jun-18	19,350,865	5,564,309	2,385,574	433,158	18,917,707	10,967,824
Jul-18	20,520,965	5,713,914	3,024,833	514,138	20,006,827	11,268,080
Aug-18	17,980,988	5,529,498	628,882	898,161	17,082,827	10,924,447
Sep-18	18,634,396	5,702,447	75,261	1,404,478	17,229,918	11,452,210
Oct-18	18,476,264	5,092,424	1,066,820	1,434,632	17,041,632	10,882,388
Nov-18	16,805,182	4,770,452	806,842	998,605	15,806,577	10,229,283
Dec-18	17,324,338	5,092,973	181,676	1,287,638	16,036,700	10,762,051
Jan-19	\$ 18,290,878	\$ 5,097,006	\$ 922,607	\$ 1,453,249	\$ 16,837,629	\$ 10,818,016
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 16,622,597	\$ 10,458,095
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 27,951,934	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					59.47%	



Source: MW\_RAC\_044

		Bill											
Class	Revcls	Period	Unbilled	Billed	Total	BaseFuel	DSM	FAC	PSM	ESM	BaseRev	TotalBilled	
Residential	0	5/1/2017	784,453	7,508,315	8,292,768	2,568,234	706,329	(801,494)	(135,356)	0	5,150,602	7,508,315	TRUE
Commercial	2	5/1/2017	223,617	8,137,894	8,361,511	3,344,724	295,277	(1,037,055)	(175,342)	0	5,710,290	8,137,894	TRUE
Industrial	4	5/1/2017	162,141	3,929,156	4,091,297	1,932,761	132,522	(590,393)	(101,113)	0	2,555,379	3,929,156	TRUE
Lighting	15	5/1/2017	0	127,100	127,100	36,138	260	(11,195)	(1,888)	0	103,785	127,100	TRUE
OPA	16	5/1/2017	63,810	1,560,496	1,624,306	665,147	50,452	(205,394)	(34,716)	0	1,085,007	1,560,496	TRUE
Residential	0	6/1/2017	940,089	9,659,183	10,599,272	3,378,933	923,266	(1,029,257)	(174,137)	0	6,560,376	9,659,183	TRUE
Commercial	2	6/1/2017	565,911	9,006,447	9,572,358	3,746,715	331,662	(1,143,025)	(193,511)	0	6,264,606	9,006,447	TRUE
Industrial	4	6/1/2017	278,841	4,218,650	4,497,491	2,014,732	139,633	(601,392)	(103,795)	0	2,769,472	4,218,650	TRUE
Lighting	15	6/1/2017	0	119,193	119,193	33,812	235	(10,337)	(1,739)	0	97,222	119,193	TRUE
OPA	16	6/1/2017	115,294	1,506,064	1,621,358	602,156	45,082	(189,775)	(31,869)	0	1,080,473	1,506,064	TRUE
Residential	0	7/1/2017	1,301,409	12,661,898	13,963,307	4,176,245	1,141,439	(415,742)	(215,265)	0	7,975,221	12,661,898	TRUE
Commercial	2	7/1/2017	224,801	10,326,875	10,551,676	3,991,980	353,441	(398,582)	(206,002)	0	6,568,038	10,326,875	TRUE
Industrial	4	7/1/2017	38,403	4,666,134	4,704,537	2,019,527	140,063	(196,673)	(104,031)	0	2,807,248	4,666,134	TRUE
Lighting	15	7/1/2017	0	142,099	142,099	38,263	253	(4,277)	(1,970)	0	109,840	142,099	TRUE
OPA	16	7/1/2017	30,351	1,922,746	1,953,097	748,931	57,734	(79,172)	(37,865)	0	1,232,918	1,922,746	TRUE
Residential	0	8/1/2017	(948,589)	12,185,554	11,236,965	4,074,108	1,113,648	(587,185)	(210,043)	0	7,795,026	12,185,554	TRUE
Commercial	2	8/1/2017	56,940	10,011,077	10,068,017	3,897,817	345,569	(563,132)	(201,306)	0	6,532,129	10,011,077	TRUE
Industrial	4	8/1/2017	108,915	4,705,420	4,814,335	2,089,197	144,525	(294,245)	(107,611)	0	2,873,554	4,705,420	TRUE
Lighting	15	8/1/2017	0	132,171	132,171	35,841	234	(5,180)	(1,845)	0	103,121	132,171	TRUE
OPA	16	8/1/2017	44,537	1,825,858	1,870,395	725,160	55,760	(104,233)	(37,282)	0	1,186,433	1,825,858	TRUE
Residential	0	9/1/2017	(443,981)	10,036,825	9,592,844	2,766,046	923,855	(164,082)	(52,807)	0	6,563,913	10,036,825	TRUE
Commercial	2	9/1/2017	(385,833)	9,450,649	9,064,816	3,075,967	332,194	(183,449)	(59,281)	0	6,285,218	9,450,649	TRUE
Industrial	4	9/1/2017	(252,900)	4,518,823	4,265,923	1,679,520	142,197	(96,993)	(32,054)	0	2,828,153	4,518,823	TRUE
Lighting	15	9/1/2017	0	131,617	131,617	29,778	284	(1,765)	(548)	0	103,868	131,617	TRUE
OPA	16	9/1/2017	(114,713)	1,801,940	1,687,227	586,243	55,416	(34,758)	(11,210)	0	1,204,249	1,801,940	TRUE
Residential	0	10/1/2017	(705,141)	8,738,562	8,033,441	2,503,044	835,843	(548,638)	(47,728)	0	5,996,061	8,738,562	TRUE
Commercial	2	10/1/2017	100,478	8,337,514	8,437,992	2,821,070	305,154	(617,548)	(54,006)	0	5,882,844	8,337,514	TRUE
Industrial	4	10/1/2017	202,345	3,986,829	4,189,174	1,597,329	134,004	(341,465)	(30,508)	0	2,627,469	3,986,829	TRUE
Lighting	15	10/1/2017	0	127,281	127,281	29,928	300	(6,562)	(551)	0	104,166	127,281	TRUE
OPA	16	10/1/2017	102,272	1,612,658	1,714,930	556,585	52,319	(121,297)	(10,475)	0	1,135,526	1,612,658	TRUE
Residential	0	11/1/2017	1,280,257	8,584,302	9,864,559	2,281,980	761,901	66,740	(43,566)	0	5,515,247	8,584,302	TRUE
Commercial	2	11/1/2017	82,729	8,455,289	8,538,018	2,634,821	284,718	51,465	(50,435)	0	5,534,689	8,455,289	TRUE
Industrial	4	11/1/2017	(77,061)	4,226,492	4,149,431	1,570,102	129,885	30,093	(28,995)	0	2,526,407	4,226,492	TRUE
Lighting	15	11/1/2017	0	135,387	135,387	30,389	349	573	(560)	0	104,636	135,387	TRUE
OPA	16	11/1/2017	(2,477)	1,639,889	1,637,412	541,306	49,810	10,636	(10,302)	0	1,048,440	1,639,889	TRUE
Residential	0	12/1/2017	2,163,729	10,686,318	12,850,047	2,938,285	981,309	(109,117)	(60,937)	0	6,936,778	10,686,318	TRUE
Commercial	2	12/1/2017	144,604	8,577,566	8,722,170	2,747,849	297,692	(96,837)	(56,814)	0	5,885,676	8,577,566	TRUE
Industrial	4	12/1/2017	(50,660)	4,176,862	4,126,202	1,612,481	134,777	(56,195)	(33,300)	0	2,519,099	4,176,862	TRUE
Lighting	15	12/1/2017	0	133,921	133,921	30,482	366	(1,098)	(607)	0	104,778	133,921	TRUE
OPA	16	12/1/2017	14,000	1,550,244	1,564,244	531,136	48,848	(18,747)	(10,928)	0	999,935	1,550,244	TRUE
Residential	0	1/1/2018	(2,009,512)	16,073,289	14,063,777	4,323,072	1,444,510	457,047	(89,396)	0	9,238,056	16,073,289	TRUE
Commercial	2	1/1/2018	(685,804)	9,911,332	9,225,528	3,072,865	334,780	323,406	(63,777)	0	6,244,058	9,911,332	TRUE
Industrial	4	1/1/2018	(344,589)	4,261,321	3,936,732	1,534,189	128,466	158,615	(31,692)	0	2,491,743	4,261,321	TRUE
Lighting	15	1/1/2018	0	114,155	114,155	24,356	389	3,447	(485)	0	86,448	114,155	TRUE
OPA	16	1/1/2018	(204,643)	1,782,835	1,578,192	586,934	53,911	61,406	(12,140)	0	1,092,724	1,782,835	TRUE
Residential	0	2/1/2018	(604,918)	11,744,958	11,140,040	3,259,164	894,041	24,178	(67,395)	0	7,634,970	11,744,958	TRUE
Commercial	2	2/1/2018	(198,544)	8,825,962	8,627,418	2,751,166	296,781	21,324	(57,105)	0	5,813,796	8,825,962	TRUE
Industrial	4	2/1/2018	(115,938)	4,105,599	3,989,661	1,525,627	128,601	11,637	(31,487)	0	2,471,221	4,105,599	TRUE
Lighting	15	2/1/2018	0	159,341	159,341	36,739	351	18	(731)	0	122,964	159,341	TRUE
OPA	16	2/1/2018	(47,975)	1,623,124	1,575,149	544,175	49,820	4,228	(11,176)	0	1,036,077	1,623,124	TRUE
Residential	0	3/1/2018	(1,147,167)	9,705,373	8,558,206	2,676,311	427,276	431,877	(202,284)	0	6,372,193	9,705,373	TRUE
Commercial	2	3/1/2018	(7,895)	8,705,679	8,697,784	2,627,513	280,930	413,109	(194,792)	0	5,578,819	8,705,679	TRUE
Industrial	4	3/1/2018	114,261	4,223,518	4,337,779	1,515,055	128,041	234,195	(112,078)	0	2,459,700	4,223,518	TRUE
Lighting	15	3/1/2018	0	136,841	136,841	29,960	306	4,713	(2,229)	0	104,091	136,841	TRUE
OPA	16	3/1/2018	19,951	1,638,638	1,658,589	511,078	46,387	79,772	(37,495)	0	1,036,896	1,638,638	TRUE
Residential	0	4/1/2018	(279,968)	9,192,616	8,912,648	2,613,999	421,995	114,337	(193,872)	0	6,236,157	9,192,616	TRUE
Commercial	2	4/1/2018	230,268	8,531,638	8,761,906	2,683,647	286,880	114,054	(199,453)	0	5,846,510	8,531,638	TRUE
Industrial	4	4/1/2018	174,937	4,072,833	4,247,770	1,527,323	128,368	62,914	(113,061)	0	2,467,289	4,072,833	TRUE
Lighting	15	4/1/2018	0	132,847	132,847	29,777	291	1,257	(2,216)	0	103,738	132,847	TRUE
OPA	16	4/1/2018	81,786	1,593,718	1,675,504	526,797	47,969	22,107	(38,735)	0	1,035,580	1,593,718	TRUE
Residential	0	5/1/2018	750,139	9,225,511	9,975,650	2,263,987	385,310	1,058,577	(168,009)	0	5,705,646	9,225,511	TRUE
Commercial	2	5/1/2018	706,147	9,918,317	10,624,464	2,710,151	289,793	1,254,578	(201,555)	0	5,865,550	9,918,317	TRUE
Industrial	4	5/1/2018	371,805	4,897,146	5,268,951	1,572,561	132,840	714,001	(116,393)	0	2,594,337	4,897,146	TRUE
Lighting	15	5/1/2018	0	144,432	144,432	29,449	246	13,627	(2,192)	0	103,302	144,432	TRUE
OPA	16	5/1/2018	176,325	1,801,713	1,978,038	509,526	46,753	235,825	(37,719)	0	1,047,328	1,801,713	TRUE
Residential	0	6/1/2018	792,224	13,041,663	13,833,887	3,251,112	525,305	1,402,488	(342,065)	298,777	7,906,046	13,041,663	TRUE
Commercial	2	6/1/2018	664,391	11,694,570	12,358,961	3,236,512	348,150	1,398,714	(341,397)	268,511	6,768,080	11,694,570	TRUE
Industrial	4	6/1/2018	58,512	5,408,731	5,467,243	1,721,810	145,464	719,816	(178,410)	112,445	2,887,606	5,408,731	TRUE
Lighting	15	6/1/2018	0	68,887	68,887	9,294	231	11,078	(2,138)	3,905	46,517	68,887	TRUE
OPA	16	6/1/2018	49,096	2,178,677	2,227,773	596,693	56,070	255,966	(62,491)	50,297	1,282,142	2,178,677	TRUE
Residential	0	7/1/2018	(632,839)	15,332,757	14,70								

Source: MW\_RAC\_044

		Bill											
Class	Revcls	Period	Unbilled	Billed	Total	BaseFuel	DSM	FAC	PSM	ESM	BaseRev	TotalBilled	
Lighting	15	10/1/2018	0	105,755	105,755	19,743	598	4,014	(935)	10,575	71,760	105,755	TRUE
OPA	16	10/1/2018	106,453	2,128,530	2,234,983	588,927	109,532	123,510	(34,603)	165,985	1,175,179	2,128,530	TRUE
Residential	0	11/1/2018	1,819,525	9,761,936	11,581,461	2,397,043	304,928	407,297	(141,488)	572,491	6,221,665	9,761,936	TRUE
Commercial	2	11/1/2018	(21,324)	9,835,049	9,813,725	2,625,633	551,032	448,383	(155,505)	602,739	5,762,768	9,835,049	TRUE
Industrial	4	11/1/2018	(49,065)	4,901,539	4,852,474	1,569,314	259,087	260,816	(92,505)	271,361	2,633,646	4,901,539	TRUE
Lighting	15	11/1/2018	0	178,681	178,681	37,027	892	6,799	(2,376)	11,890	124,649	178,681	TRUE
OPA	16	11/1/2018	59	1,889,913	1,889,972	536,476	97,371	91,044	(31,629)	112,595	1,082,054	1,889,913	TRUE
Residential	0	12/1/2018	(7,019,116)	12,609,557	5,590,441	3,256,513	414,458	116,898	(14,414)	866,457	7,949,645	12,609,557	TRUE
Commercial	2	12/1/2018	(5,137,769)	10,390,781	5,253,012	2,889,738	606,758	104,190	(13,286)	791,419	6,011,962	10,390,781	TRUE
Industrial	4	12/1/2018	(2,504,461)	4,892,247	2,387,786	1,616,590	270,742	56,629	(7,045)	342,166	2,613,165	4,892,247	TRUE
Lighting	15	12/1/2018	0	144,479	144,479	29,366	776	1,053	(121)	12,216	101,179	144,479	TRUE
OPA	16	12/1/2018	(1,296,037)	1,896,831	600,794	557,279	99,707	19,794	(2,420)	141,837	1,080,634	1,896,831	TRUE
Residential	0	1/1/2019	(84,742)	14,245,202	14,180,460	3,539,081	450,468	642,716	(15,568)	1,111,248	8,517,255	14,245,202	TRUE
Commercial	2	1/1/2019	(393,472)	10,980,544	10,587,072	2,899,548	610,721	528,982	(12,544)	894,884	8,058,953	10,980,544	TRUE
Industrial	4	1/1/2019	(253,110)	5,194,449	4,941,339	1,613,629	289,837	287,949	(7,031)	388,738	2,641,327	5,194,449	TRUE
Lighting	15	1/1/2019	0	150,252	150,252	29,338	796	5,348	(118)	13,727	101,161	150,252	TRUE
OPA	16	1/1/2019	(89,454)	1,965,633	1,876,179	554,491	100,049	100,328	(2,392)	155,900	1,057,257	1,965,633	TRUE

**Source: PSM Schedule 2**

Asset Energy = Non-native portion of DA Asset Energy (PJM BLI 1200, 1210, 1220) and RT Asset Energy (PJM BLI 1205, 1215, 1225, 1400, 1410, 1420)

<u>Bill Period</u>	<u>Amount</u>	<u>12 Month Average</u>	<u>PSM</u>	
5/1/2017	1,173,611.46		1,173,611.46	0.00
6/1/2017	593,771.89		593,771.89	0.00
7/1/2017	415,058.79		415,058.79	0.00
8/1/2017	447,589.45		447,589.45	0.00
9/1/2017	1,077,979.15		1,077,979.15	0.00
10/1/2017	2,400,518.78		2,400,518.78	0.00
11/1/2017	1,648,921.22		1,648,921.22	0.00
12/1/2017	647,230.19		647,230.19	0.00
1/1/2018	1,989,969.08		1,989,969.08	0.00
2/1/2018	220,839.74		220,839.74	0.00
3/1/2018	58,321.90		58,321.90	0.00
4/1/2018	0.00	889,484.00	0.00	0.00
5/1/2018	0.00	791,683.00	0.00	0.00
6/1/2018	573,409.20	789,986.00	573,409.20	0.00
7/1/2018	1,622,817.60	890,633.00	1,622,817.60	0.00
8/1/2018	466,200.77	892,184.00	466,200.77	0.00
9/1/2018	702,185.38	860,868.00	702,185.38	0.00
10/1/2018	1,249,439.54	764,945.00	1,249,439.54	0.00
11/1/2018	1,611,209.27	761,802.00	1,611,209.27	0.00
12/1/2018	1,614,041.23	842,369.00	1,614,041.23	0.00
1/1/2019	887,925.55	750,533.00	887,925.55	0.00

**Input:**  
Expense Month: February 2019  
Case No. 2017-00321

**Property Tax Rates**

ARO Account: 0.15000%  
Structures & Improvements 1.42740%

Adj. Jurisdictional E(m)  
Authorized for Dec-18  
Expense Month \$ 2,489,614.00

Effective Date for Billing: April 1, 2019  
Date Submitted: March 22, 2019

**Error Check:**  
To make sure that retail  
and SLSRSL are entered  
for the current expense month

**File:**  
Original & 2 copies

Jurisdictional E(m) Table											
Juris. E(m)					Juris. E(m) vs. Revenue Collected						
Form 1.10	Ln 9 (H30)	Ln 13 (H38)	Ln 7 (H26)	Ln 12 (H36)	Recovered		Recovery	ESM Billing Factor		Exp Month / Billing	
Expense	Retail	PSM	Total	Adj. Retail	(Over)/Under	in	vs.	Res	Non-Res		
Month				Recovery	Recovery	Rates	Allowed				
Feb-18	\$ -	\$ -	\$ -								
Mar-18	\$ -	\$ -	\$ -								
Apr-18	\$ 683,831	\$ 23,922	\$ 707,753	\$ 683,831	\$ -			2.67%	3.99%	Apr / June	
May-18	\$ 783,036	\$ 23,802	\$ 806,838	\$ 783,036	\$ -			3.01%	4.57%	May / July	
Jun-18	\$ 1,461,780	\$ 41,954	\$ 1,503,734	\$ 1,413,676	\$ (48,104)	\$ 731,935		5.31%	8.21%	June / August	
Jul-18	\$ 2,237,252	\$ 73,482	\$ 2,310,734	\$ 2,122,573	\$ (114,679)	\$ 897,715		7.84%	12.28%	July / September	
Aug-18	\$ 2,407,393	\$ 79,069	\$ 2,486,462	\$ 2,280,451	\$ (126,942)	\$ 1,540,618		8.41%	13.21%	August / October	
Sep-18	\$ 1,928,868	\$ 61,091	\$ 1,989,959	\$ 1,699,711	\$ (229,157)	\$ 2,351,730		6.21%	9.76%	September / November	
Oct-18	\$ 2,107,561	\$ 57,816	\$ 2,165,377	\$ 2,095,198	\$ (12,363)	\$ 2,292,814		7.55%	11.99%	October / December	
Nov-18	\$ 2,230,229	\$ 60,239	\$ 2,290,468	\$ 2,358,844	\$ 128,615	\$ 1,571,096		8.45%	13.44%	November / January	
Dec-18	\$ 2,568,511	\$ 76,984	\$ 2,645,495	\$ 2,489,614	\$ (78,897)	\$ 2,174,095		8.85%	14.07%	December / February	
Jan-19	\$ 2,219,734	\$ 59,488	\$ 2,279,222	\$ 2,014,081	\$ (205,653)	\$ 2,564,497		7.21%	11.45%	January / March	
Feb-19	\$ 2,423,854	\$ 64,191	\$ 2,488,045	\$ 2,262,505	\$ (161,349)	\$ 2,650,963		8.03%	12.77%	February / April	

ES FORM 1.00

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

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

For the Expense Month of February 2019

**Residential (Total Revenue)**

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	916,993
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	11,414,436
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		8.03%

**Non-Residential (Net Revenue)**

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,345,512
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	10,540,463
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		12.77%

Effective Date for Billing: April 1, 2019

Submitted by: Theodore H. Czupik Jr.

Title: Rates & Regulatory Strategy Manager

Date Submitted: March 22, 2019

ES FORM 1.10

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

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of February 2019

Line No.	<u>E(m) = RORB + OE - EAS + Prior Period Adjustment + (Over)/Under Recovery</u>	<u>Source</u>	<u>Environmental Compliance Plans</u>
1	Environmental Compliance Rate Base (RB)	ES Form 2.00	\$ 38,199,497
2	RB + 12 months	(1) + 12	\$ 3,183,291
3	Pretax Rate of Return (ROR)	ES Form 1.20	8.446%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 268,861
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 2,219,184
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 2,488,045
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	97.42%
9	Jurisdictional E(m)	(7) x (8)	\$ 2,423,854
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ (161,349)
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 2,262,505
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 64,191

**Calculation of Environmental Surcharge Billing Factors**

		<u>Residential</u> (Total Revenue)	<u>Non-Residential</u> (Net Revenue)
14	Revenues as a Percentage of 12 Month Average Total Revenues	ES Form 3.00	40.53% 59.47%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 916,993 \$ 1,345,512
16	<b>R(m)</b> Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	ES Form 3.00	\$ 11,414,438 \$ 10,540,463
17	Jurisdictional E(m) / R(m)	(15) + (16)	8.03% 12.77%

**Calculation of Jurisdictional Allocation Ratio - 12 Month Average**

18	Retail Revenue	ES Form 3.00	\$ 28,162,982	97.42%
19	Sales for Resale	Company Records	\$ 746,870	2.58%
20	Total Revenue		\$ 28,909,852	100.00%

Note: (A) Amounts determined by the Commission during six-month and two-year reviews.

ES FORM 1.20

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

Cost of Capital

<b>Line No.</b>	<b>Capital Structure</b>	<b>Ratio</b>	<b>Cost</b>	<b>Weighted Cost (A)</b>	<b>Gross up for Tax Rate (B)</b>	<b>Pre-Tax Rate of Return (A)x(B)</b>
1	Short-term Debt	9.772%	3.083%	0.301%		0.301%
2	Long-term Debt	40.977%	4.243%	1.739%		1.739%
3	Common Equity	49.251%	9.725%	4.790%	1.3373044	6.406%
4	Total	100.000%		6.830%		8.446%

Note: Capital structure, cost of debt and tax rate gross-up factor as approved in Case No. 2017-00321. These rates are to remain constant until the Commission sets base rates in Duke Kentucky's next base rate case proceeding.



ES FORM 2.00

DUKE ENERGY KENTUCKY, INC.  
 ENVIRONMENTAL SURCHARGE REPORT

Revenue Requirement of Environmental Compliance Costs

For the Expense Month of February 2019

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant)	ES Form 2.10	\$ 10,409,502
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	28,978,413
3	Subtotal		\$ 39,387,915
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 23,604
6	Subtotal		\$ 23,604
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 61,896
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	1,150,328
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 1,212,022
12	Environmental Compliance Rate Base		\$ 38,199,497
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 21,092
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 561,343
16	Monthly Amortization Expense	ES Form 2.20	\$ 353,337
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 153
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 1,283,259
19	Total Environmental Compliance Operating Expense		\$ 2,219,184
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO <sub>2</sub> Allowance Sales		\$ -
22	NO <sub>x</sub> Allowance Sales		\$ -
23	Total Emission Allowance Sales		\$ -
24	<u>(Over) / Under Recovery</u>		\$ 2,489,614
25	Adjusted Jurisdictional E(m) Authorized for Expense Month two Months Prior		2,650,963
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		\$ (161,349)
27	(Over) / Under Recovery		

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

ES FORM 2.10

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

Plant, Accumulated Depreciation, CWIP, ITC, ADIT  
 Depreciation Expense, Taxes Other Than Income Taxes

For the Expense Month of February 2019

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
Project No.	Description	Gross Plant in-Service as of February-19	Accumulated Depreciation as of February-19	Net Plant in-Service as of February-19 (2)-(3)	CWIP Excluding AFUDC as of February-19	Accumulated Deferred ITC as of February-19	Accumulated Deferred Tax Balance as of February-19	Monthly Depreciation Expense	Monthly Property Tax Expense
1	EB020290 Lined Retention Basin West	\$ 10,409,502	\$ 61,696	\$ 10,347,806	\$ -	\$ -	\$ 1,150,326	\$ 21,092	\$ 147,705
2	EB020745 Lined Retention Basin East	\$ -	\$ -	\$ -	\$ 208,329	\$ -	\$ -	\$ -	\$ 2,974
3	EB020298 East Bend SW/PW Reroute	\$ -	\$ -	\$ -	\$ 28,449,173	\$ -	\$ -	\$ -	\$ 406,083
4	EB021281 East Bend Landfill Cell 2	\$ -	\$ -	\$ -	\$ 320,911	\$ -	\$ -	\$ -	\$ 4,581
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 10,409,502	\$ 61,696	\$ 10,347,806	\$ 28,978,413	\$ -	\$ 1,150,326	\$ 21,092	\$ 561,343

ES FORM 2.20  
 Page 1 of 3

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

Amortization Calculation for Coal Ash ARO

Line No.	Period (1)	Cash Spend (2)	COR Credit (3)	Carrying Cost (4)	Recovery: 10-Yr Amort. (5)	Ending Balance (6)	Cash Spend (7)	Recovery: 2-Month Cycle (8)	Ending Balance (9)	Total Recovery (10) = (5) + (8)
1	2015 Total Actual	\$ 3,858,084	\$ (856,412)	\$ 20,378	\$ -	\$ 3,022,050	\$ -	\$ -	\$ -	\$ -
2	2016 Total Actual	\$ 4,486,812	\$ (107,052)	\$ 379,037	\$ -	\$ 7,780,847	\$ -	\$ -	\$ -	\$ -
3	Jan-17 Actual	\$ 358,148	\$ -	\$ 43,243	\$ -	\$ 8,182,238	\$ -	\$ -	\$ -	\$ -
4	Feb-17 Actual	\$ 424,021	\$ -	\$ 40,351	\$ -	\$ 8,646,610	\$ -	\$ -	\$ -	\$ -
5	Mar-17 Actual	\$ 692,184	\$ (26,763)	\$ 44,724	\$ -	\$ 9,356,755	\$ -	\$ -	\$ -	\$ -
6	Apr-17 Actual	\$ 254,067	\$ -	\$ 50,949	\$ -	\$ 9,661,771	\$ -	\$ -	\$ -	\$ -
7	May-17 Actual	\$ 608,377	\$ -	\$ 56,141	\$ -	\$ 10,326,289	\$ -	\$ -	\$ -	\$ -
8	Jun-17 Actual	\$ 265,619	\$ (26,763)	\$ 53,472	\$ -	\$ 10,618,617	\$ -	\$ -	\$ -	\$ -
9	Jul-17 Actual	\$ 220,636	\$ -	\$ 51,558	\$ -	\$ 10,890,811	\$ -	\$ -	\$ -	\$ -
10	Aug-17 Actual	\$ 272,053	\$ -	\$ 47,731	\$ -	\$ 11,210,595	\$ -	\$ -	\$ -	\$ -
11	Sep-17 Actual	\$ 233,743	\$ (26,763)	\$ 44,389	\$ -	\$ 11,461,964	\$ -	\$ -	\$ -	\$ -
12	Oct-17 Actual	\$ 444,793	\$ -	\$ 60,670	\$ -	\$ 11,967,427	\$ -	\$ -	\$ -	\$ -
13	Nov-17 Actual	\$ 525,770	\$ -	\$ 68,573	\$ -	\$ 12,561,770	\$ -	\$ -	\$ -	\$ -
14	Dec-17 Actual	\$ 2,482,493	\$ (26,763)	\$ 82,850	\$ -	\$ 15,100,350	\$ -	\$ -	\$ -	\$ -
15	Jan-18 Actual	\$ 510,525	\$ -	\$ 91,185	\$ -	\$ 15,702,060	\$ -	\$ -	\$ -	\$ -
16	Feb-18 Actual	\$ 89,648	\$ -	\$ 91,534	\$ -	\$ 15,883,242	\$ -	\$ -	\$ -	\$ -
17	Mar-18 Actual	\$ 396,977	\$ (26,763)	\$ 93,696	\$ -	\$ 16,347,152	\$ -	\$ -	\$ -	\$ -
18	Apr-18 Actual	\$ 132,294	\$ -	\$ 111,722	\$ -	\$ 16,591,168	\$ 173,000	\$ -	\$ 173,000	\$ -
19	May-18 Actual	\$ -	\$ -	\$ 112,480	\$ -	\$ 16,703,648	\$ 100,234	\$ -	\$ 273,234	\$ -
20	Jun-18 Actual	\$ -	\$ -	\$ 111,870	\$ (202,486)	\$ 16,613,032	\$ 150,901	\$ (173,000)	\$ 251,135	\$ (375,486)
21	Jul-18 Actual	\$ -	\$ -	\$ 111,255	\$ (202,486)	\$ 16,521,801	\$ 196,585	\$ (100,234)	\$ 347,486	\$ (302,720)
22	Aug-18 Actual	\$ -	\$ -	\$ 110,637	\$ (202,486)	\$ 16,429,952	\$ 321,815	\$ (150,901)	\$ 518,400	\$ (353,387)
23	Sep-18 Actual	\$ -	\$ -	\$ 110,014	\$ (202,486)	\$ 16,337,480	\$ 275,135	\$ (196,585)	\$ 596,950	\$ (399,071)
24	Oct-18 Actual	\$ -	\$ -	\$ 109,387	\$ (202,486)	\$ 16,244,381	\$ 69,886	\$ (321,815)	\$ 345,021	\$ (524,301)
25	Nov-18 Actual	\$ -	\$ -	\$ 108,756	\$ (202,486)	\$ 16,150,651	\$ 238,428	\$ (275,135)	\$ 308,314	\$ (477,621)
26	Dec-18 Actual	\$ -	\$ -	\$ 108,121	\$ (202,486)	\$ 16,056,286	\$ 263,037	\$ (69,886)	\$ 501,465	\$ (272,372)
27	Jan-19 Actual	\$ -	\$ -	\$ 107,481	\$ (202,486)	\$ 15,961,281	\$ 177,996	\$ (238,428)	\$ 441,033	\$ (440,914)
28	Feb-19 Actual	\$ -	\$ -	\$ 106,837	\$ (202,486)	\$ 15,865,632	\$ 150,851	\$ (263,037)	\$ 328,847	\$ (465,523)
29	Mar-19 Actual	\$ -	\$ -	\$ 106,188	\$ (202,486)	\$ 15,769,334	\$ -	\$ (177,996)	\$ 150,851	\$ (380,482)
30	Apr-19 Actual	\$ -	\$ -	\$ 105,535	\$ (202,486)	\$ 15,672,383	\$ -	\$ (150,851)	\$ -	\$ (353,337)
31	May-19 Actual	\$ -	\$ -	\$ 104,878	\$ (202,486)	\$ 15,574,775	\$ -	\$ -	\$ -	\$ (202,486)
32	Jun-19 Actual	\$ -	\$ -	\$ 104,216	\$ (202,486)	\$ 15,476,505	\$ -	\$ -	\$ -	\$ (202,486)
33	Jul-19 Actual	\$ -	\$ -	\$ 103,550	\$ (202,486)	\$ 15,377,569	\$ -	\$ -	\$ -	\$ (202,486)
34	Aug-19 Actual	\$ -	\$ -	\$ 102,880	\$ (202,486)	\$ 15,277,963	\$ -	\$ -	\$ -	\$ (202,486)
35	Sep-19 Actual	\$ -	\$ -	\$ 102,204	\$ (202,486)	\$ 15,177,681	\$ -	\$ -	\$ -	\$ (202,486)
36	Oct-19 Actual	\$ -	\$ -	\$ 101,524	\$ (202,486)	\$ 15,076,719	\$ -	\$ -	\$ -	\$ (202,486)
37	Nov-19 Actual	\$ -	\$ -	\$ 100,840	\$ (202,486)	\$ 14,975,073	\$ -	\$ -	\$ -	\$ (202,486)
38	Dec-19 Actual	\$ -	\$ -	\$ 100,151	\$ (202,486)	\$ 14,872,738	\$ -	\$ -	\$ -	\$ (202,486)
39	Jan-20 Actual	\$ -	\$ -	\$ 99,457	\$ (202,486)	\$ 14,769,709	\$ -	\$ -	\$ -	\$ (202,486)
40	Feb-20 Actual	\$ -	\$ -	\$ 98,759	\$ (202,486)	\$ 14,665,982	\$ -	\$ -	\$ -	\$ (202,486)
41	Mar-20 Actual	\$ -	\$ -	\$ 98,055	\$ (202,486)	\$ 14,561,551	\$ -	\$ -	\$ -	\$ (202,486)
42	Apr-20 Actual	\$ -	\$ -	\$ 97,347	\$ (202,486)	\$ 14,456,412	\$ -	\$ -	\$ -	\$ (202,486)
43	May-20 Actual	\$ -	\$ -	\$ 96,635	\$ (202,486)	\$ 14,350,561	\$ -	\$ -	\$ -	\$ (202,486)
44	Jun-20 Actual	\$ -	\$ -	\$ 95,917	\$ (202,486)	\$ 14,243,992	\$ -	\$ -	\$ -	\$ (202,486)
45	Jul-20 Actual	\$ -	\$ -	\$ 95,194	\$ (202,486)	\$ 14,136,700	\$ -	\$ -	\$ -	\$ (202,486)
46	Aug-20 Actual	\$ -	\$ -	\$ 94,467	\$ (202,486)	\$ 14,028,681	\$ -	\$ -	\$ -	\$ (202,486)
47	Sep-20 Actual	\$ -	\$ -	\$ 93,735	\$ (202,486)	\$ 13,919,930	\$ -	\$ -	\$ -	\$ (202,486)
48	Oct-20 Actual	\$ -	\$ -	\$ 92,997	\$ (202,486)	\$ 13,810,441	\$ -	\$ -	\$ -	\$ (202,486)
49	Nov-20 Actual	\$ -	\$ -	\$ 92,255	\$ (202,486)	\$ 13,700,210	\$ -	\$ -	\$ -	\$ (202,486)
50	Dec-20 Actual	\$ -	\$ -	\$ 91,508	\$ (202,486)	\$ 13,589,232	\$ -	\$ -	\$ -	\$ (202,486)

ES FORM 2.20  
 Page 2 of 3

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

Amortization Calculation for Coal Ash ARO

Line No.	Period (1)	Cash Spend (2)	COR Credit (3)	Carrying Cost (4)	Recovery: 10-Yr Amort. (5)	Ending Balance (6)	Cash Spend (7)	Recovery: 2-Month Cycle (8)	Ending Balance (9)	Total Recovery (10) = (5) + (8)
51	Jan-21	Actual	-	90,756	(202,486)	13,477,502	-	-	-	(202,486)
52	Feb-21	Actual	-	89,998	(202,486)	13,365,014	-	-	-	(202,486)
53	Mar-21	Actual	-	89,235	(202,486)	13,251,763	-	-	-	(202,486)
54	Apr-21	Actual	-	88,468	(202,486)	13,137,745	-	-	-	(202,486)
55	May-21	Actual	-	87,695	(202,486)	13,022,954	-	-	-	(202,486)
56	Jun-21	Actual	-	86,916	(202,486)	12,907,384	-	-	-	(202,486)
57	Jul-21	Actual	-	86,133	(202,486)	12,791,031	-	-	-	(202,486)
58	Aug-21	Actual	-	85,344	(202,486)	12,673,889	-	-	-	(202,486)
59	Sep-21	Actual	-	84,550	(202,486)	12,555,953	-	-	-	(202,486)
60	Oct-21	Actual	-	83,750	(202,486)	12,437,217	-	-	-	(202,486)
61	Nov-21	Actual	-	82,945	(202,486)	12,317,676	-	-	-	(202,486)
62	Dec-21	Actual	-	82,135	(202,486)	12,197,325	-	-	-	(202,486)
63	Jan-22	Actual	-	81,319	(202,486)	12,076,158	-	-	-	(202,486)
64	Feb-22	Actual	-	80,498	(202,486)	11,954,170	-	-	-	(202,486)
65	Mar-22	Actual	-	79,671	(202,486)	11,831,355	-	-	-	(202,486)
66	Apr-22	Actual	-	78,838	(202,486)	11,707,707	-	-	-	(202,486)
67	May-22	Actual	-	78,000	(202,486)	11,583,221	-	-	-	(202,486)
68	Jun-22	Actual	-	77,156	(202,486)	11,457,891	-	-	-	(202,486)
69	Jul-22	Actual	-	76,306	(202,486)	11,331,711	-	-	-	(202,486)
70	Aug-22	Actual	-	75,451	(202,486)	11,204,676	-	-	-	(202,486)
71	Sep-22	Actual	-	74,589	(202,486)	11,076,779	-	-	-	(202,486)
72	Oct-22	Actual	-	73,722	(202,486)	10,948,015	-	-	-	(202,486)
73	Nov-22	Actual	-	72,849	(202,486)	10,818,378	-	-	-	(202,486)
74	Dec-22	Actual	-	71,971	(202,486)	10,687,863	-	-	-	(202,486)
75	Jan-23	Actual	-	71,086	(202,486)	10,556,463	-	-	-	(202,486)
76	Feb-23	Actual	-	70,195	(202,486)	10,424,172	-	-	-	(202,486)
77	Mar-23	Actual	-	69,298	(202,486)	10,290,984	-	-	-	(202,486)
78	Apr-23	Actual	-	68,395	(202,486)	10,156,893	-	-	-	(202,486)
79	May-23	Actual	-	67,486	(202,486)	10,021,893	-	-	-	(202,486)
80	Jun-23	Actual	-	66,571	(202,486)	9,885,978	-	-	-	(202,486)
81	Jul-23	Actual	-	65,649	(202,486)	9,749,141	-	-	-	(202,486)
82	Aug-23	Actual	-	64,722	(202,486)	9,611,377	-	-	-	(202,486)
83	Sep-23	Actual	-	63,788	(202,486)	9,472,679	-	-	-	(202,486)
84	Oct-23	Actual	-	62,847	(202,486)	9,333,040	-	-	-	(202,486)
85	Nov-23	Actual	-	61,901	(202,486)	9,192,455	-	-	-	(202,486)
86	Dec-23	Actual	-	60,948	(202,486)	9,050,917	-	-	-	(202,486)
87	Jan-24	Actual	-	59,988	(202,486)	8,908,419	-	-	-	(202,486)
88	Feb-24	Actual	-	59,022	(202,486)	8,764,955	-	-	-	(202,486)
89	Mar-24	Actual	-	58,049	(202,486)	8,620,518	-	-	-	(202,486)
90	Apr-24	Actual	-	57,070	(202,486)	8,475,102	-	-	-	(202,486)
91	May-24	Actual	-	56,084	(202,486)	8,328,700	-	-	-	(202,486)
92	Jun-24	Actual	-	55,092	(202,486)	8,181,306	-	-	-	(202,486)
93	Jul-24	Actual	-	54,093	(202,486)	8,032,913	-	-	-	(202,486)
94	Aug-24	Actual	-	53,087	(202,486)	7,883,514	-	-	-	(202,486)
95	Sep-24	Actual	-	52,074	(202,486)	7,733,102	-	-	-	(202,486)
96	Oct-24	Actual	-	51,054	(202,486)	7,581,670	-	-	-	(202,486)
97	Nov-24	Actual	-	50,027	(202,486)	7,429,211	-	-	-	(202,486)
98	Dec-24	Actual	-	48,994	(202,486)	7,275,719	-	-	-	(202,486)
99	Jan-25	Actual	-	47,953	(202,486)	7,121,186	-	-	-	(202,486)

ES FORM 2.20  
 Page 3 of 3

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

Amortization Calculation for Coal Ash ARO

Line No.	Period (1)	Cash Spend (2)	COR Credit (3)	Carrying Cost (4)	Recovery: 10-Yr Amort. (5)	Ending Balance (6)	Cash Spend (7)	Recovery: 2-Month Cycle (8)	Ending Balance (9)	Total Recovery (10) = (5) + (8)
100	Feb-25 Actual		-	46,906	(202,486)	6,965,606	-	-	-	(202,486)
101	Mar-25 Actual		-	45,851	(202,486)	6,808,971	-	-	-	(202,486)
102	Apr-25 Actual		-	44,789	(202,486)	6,651,274	-	-	-	(202,486)
103	May-25 Actual		-	43,720	(202,486)	6,492,508	-	-	-	(202,486)
104	Jun-25 Actual		-	42,643	(202,486)	6,332,665	-	-	-	(202,486)
105	Jul-25 Actual		-	41,560	(202,486)	6,171,739	-	-	-	(202,486)
106	Aug-25 Actual		-	40,469	(202,486)	6,009,722	-	-	-	(202,486)
107	Sep-25 Actual		-	39,370	(202,486)	5,846,606	-	-	-	(202,486)
108	Oct-25 Actual		-	38,265	(202,486)	5,682,385	-	-	-	(202,486)
109	Nov-25 Actual		-	37,151	(202,486)	5,517,050	-	-	-	(202,486)
110	Dec-25 Actual		-	36,030	(202,486)	5,350,594	-	-	-	(202,486)
111	Jan-26 Actual		-	34,902	(202,486)	5,183,010	-	-	-	(202,486)
112	Feb-26 Actual		-	33,766	(202,486)	5,014,290	-	-	-	(202,486)
113	Mar-26 Actual		-	32,622	(202,486)	4,844,426	-	-	-	(202,486)
114	Apr-26 Actual		-	31,470	(202,486)	4,673,410	-	-	-	(202,486)
115	May-26 Actual		-	30,311	(202,486)	4,501,235	-	-	-	(202,486)
116	Jun-26 Actual		-	29,144	(202,486)	4,327,893	-	-	-	(202,486)
117	Jul-26 Actual		-	27,968	(202,486)	4,153,375	-	-	-	(202,486)
118	Aug-26 Actual		-	26,785	(202,486)	3,977,674	-	-	-	(202,486)
119	Sep-26 Actual		-	25,594	(202,486)	3,800,782	-	-	-	(202,486)
120	Oct-26 Actual		-	24,395	(202,486)	3,622,691	-	-	-	(202,486)
121	Nov-26 Actual		-	23,188	(202,486)	3,443,393	-	-	-	(202,486)
122	Dec-26 Actual		-	21,972	(202,486)	3,262,879	-	-	-	(202,486)
123	Jan-27 Actual		-	20,748	(202,486)	3,081,141	-	-	-	(202,486)
124	Feb-27 Actual		-	19,516	(202,486)	2,898,171	-	-	-	(202,486)
125	Mar-27 Actual		-	18,276	(202,486)	2,713,961	-	-	-	(202,486)
126	Apr-27 Actual		-	17,027	(202,486)	2,528,502	-	-	-	(202,486)
127	May-27 Actual		-	15,769	(202,486)	2,341,785	-	-	-	(202,486)
128	Jun-27 Actual		-	14,504	(202,486)	2,153,803	-	-	-	(202,486)
129	Jul-27 Actual		-	13,229	(202,486)	1,964,546	-	-	-	(202,486)
130	Aug-27 Actual		-	11,946	(202,486)	1,774,006	-	-	-	(202,486)
131	Sep-27 Actual		-	10,654	(202,486)	1,582,174	-	-	-	(202,486)
132	Oct-27 Actual		-	9,354	(202,486)	1,389,042	-	-	-	(202,486)
133	Nov-27 Actual		-	8,045	(202,486)	1,194,601	-	-	-	(202,486)
134	Dec-27 Actual		-	6,726	(202,486)	998,841	-	-	-	(202,486)
135	Jan-28 Actual		-	5,399	(202,486)	801,754	-	-	-	(202,486)
136	Feb-28 Actual		-	4,063	(202,486)	603,331	-	-	-	(202,486)
137	Mar-28 Actual		-	2,718	(202,486)	403,563	-	-	-	(202,486)
138	Apr-28 Actual		-	1,409	(202,486)	202,486	-	-	-	(202,486)
139	May-28 Actual		-	-	(202,486)	-	-	-	-	(202,486)
		\$ 16,256,244	\$ (1,097,279)	\$ 9,139,355	\$ (24,298,320)		\$ 2,117,868	\$ (2,117,868)		(26,416,188)

Monthly Amortization Amount

**(353,337)**

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending February 2019

<b>Total SO<sub>2</sub> and NO<sub>x</sub> Emission Allowances</b>					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
<b>SO<sub>2</sub> Allowances - Acid Rain Program (a)</b>					
Quantity	109,794	25,041	298	-	134,537
Dollars	\$ 17,086.11	\$ -	\$ 38.74	\$ -	\$ 17,047.37
\$/Allowance	\$ 0.155620	\$ -	\$ 0.130000	\$ -	\$ 0.126711
<b>NO<sub>x</sub> Allowances - Annual</b>					
Quantity	4,477	3,292	212	-	7,557
Dollars	\$ 4,185.91	\$ -	\$ 114.48	\$ -	\$ 4,071.43
\$/Allowance	\$ 0.934981	\$ -	\$ 0.540000	\$ -	\$ 0.538763
<b>NO<sub>x</sub> Allowances - Seasonal</b>					
Quantity	485	913	-	-	1,398
Dollars	\$ 2,484.70	\$ -	\$ -	\$ -	\$ 2,484.70
\$/Allowance	\$ 5.123093	\$ -	\$ -	\$ -	\$ 1.777325
<b>Total Emission Allowances</b>					
Quantity	114,756	29,246	510	-	143,492
Dollars	\$ 23,756.72	\$ -	\$ 153.22	\$ -	\$ 23,603.50

(a) Note: The SO<sub>2</sub> Allowances exclude the CSSO<sub>2</sub>G1 Program Allowances as there is no dollar value associated with this program inventory. Thus, there is no expense booked to the ledger as a result of the program.

**ES FORM 2.50**

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

Environmental Reagent Expenses

For the Expense Month of February 2019

<b>Line No.</b>	<b>Expense Type</b>	<b>Account Number</b>	<b>East Bend Unit 2</b>	<b>Total</b>
1	Ammonia	502020	\$ 58,042	\$ 58,042
2	Lime	502040	1,144,060	1,144,060
3	Hydrated Lime	502040	81,157	81,157
4	Total		\$ 1,283,259	\$ 1,283,259

ES FORM 3.00

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

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

For the Expense Month of February 2019

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge
					(2) - (5)
Mar-18	\$ 9,705,373			\$ -	\$ 9,705,373
Apr-18	9,192,616			-	9,192,616
May-18	9,225,511			-	9,225,511
Jun-18	13,041,663			298,777	12,742,886
Jul-18	15,332,757			383,577	14,949,180
Aug-18	12,716,657			642,457	12,074,200
Sep-18	13,028,155			947,252	12,080,903
Oct-18	11,048,101			858,182	10,189,919
Nov-18	9,761,936			572,491	9,189,445
Dec-18	12,609,557			886,457	11,723,100
Jan-19	14,245,202			1,111,248	13,133,954
Feb-19	\$ 13,898,083			\$ 1,131,936	\$ 12,766,147
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 11,414,436
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 28,162,982
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					40.53%

Non-Residential - Kentucky Jurisdictional Revenues						
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Month	Total Revenues	Base Rate Fuel Component	Fuel Clause Revenues	Environmental Surcharge Revenues	Total Excluding Environmental Surcharge	Total Non-Fuel Revenue
					(2) - (5)	(6) - (3) - (4)
Mar-18	\$ 14,704,676	\$ 4,684,206	\$ 731,789	\$ -	\$ 14,704,676	\$ 9,288,681
Apr-18	14,331,036	4,767,544	200,332	-	14,331,036	9,363,160
May-18	16,761,608	4,821,687	2,218,031	-	16,761,608	9,721,890
Jun-18	19,350,865	5,564,309	2,385,574	433,158	18,917,707	10,967,824
Jul-18	20,520,965	5,713,914	3,024,833	514,138	20,006,827	11,268,080
Aug-18	17,980,988	5,529,498	628,882	898,161	17,082,827	10,924,447
Sep-18	18,634,396	5,702,447	75,261	1,404,478	17,229,918	11,452,210
Oct-18	18,476,264	5,092,424	1,066,820	1,434,632	17,041,632	10,882,388
Nov-18	16,805,182	4,770,452	806,842	998,605	15,806,577	10,229,283
Dec-18	17,324,338	5,092,973	181,676	1,287,638	16,036,700	10,762,051
Jan-19	18,290,878	5,097,006	922,607	1,453,249	16,837,629	10,818,016
Feb-19	\$ 17,744,446	\$ 4,907,453	\$ 510,438	\$ 1,519,027	\$ 16,225,419	\$ 10,807,528
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 16,748,546	\$ 10,540,463
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 28,162,982	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					59.47%	



Source: MW\_RAC\_044

Class	Revcls	Bill		Total	BaseFuel	DSM	FAC	PSM	ESM	BaseRev	TotalBilled		
		Period	Unbilled										Billed
Residential	0	5/1/2017	784,453	7,508,315	8,292,768	2,588,234	708,329	(801,494)	(135,358)	0	5,150,602	7,508,315	TRUE
Commercial	2	5/1/2017	223,617	8,137,894	8,361,511	3,344,724	295,277	(1,037,055)	(175,342)	0	5,710,290	8,137,894	TRUE
Industrial	4	5/1/2017	182,141	3,929,156	4,091,297	1,932,761	132,522	(590,393)	(101,113)	0	2,555,379	3,929,156	TRUE
Lighting	15	5/1/2017	0	127,100	127,100	38,136	260	(11,195)	(1,886)	0	103,785	127,100	TRUE
OPA	16	5/1/2017	83,810	1,560,496	1,624,306	665,147	50,452	(205,394)	(34,716)	0	1,085,007	1,560,496	TRUE
Residential	0	6/1/2017	940,069	9,659,183	10,599,272	3,378,933	923,266	(1,029,257)	(174,137)	0	6,560,378	9,659,183	TRUE
Commercial	2	6/1/2017	565,911	9,006,447	9,572,358	3,746,715	331,662	(1,143,025)	(193,511)	0	6,264,606	9,006,447	TRUE
Industrial	4	6/1/2017	278,841	4,218,650	4,497,491	2,014,732	139,633	(601,392)	(103,795)	0	2,769,472	4,218,650	TRUE
Lighting	15	6/1/2017	0	119,193	119,193	33,812	235	(10,337)	(1,739)	0	97,222	119,193	TRUE
OPA	16	6/1/2017	115,294	1,506,064	1,621,358	602,156	45,082	(189,778)	(31,869)	0	1,080,473	1,506,064	TRUE
Residential	0	7/1/2017	1,301,409	12,661,898	13,963,307	4,176,245	1,141,439	(415,742)	(215,265)	0	7,975,221	12,661,898	TRUE
Commercial	2	7/1/2017	224,601	10,326,875	10,551,678	3,991,980	353,441	(398,582)	(208,002)	0	6,586,038	10,326,875	TRUE
Industrial	4	7/1/2017	38,403	4,686,134	4,704,537	2,019,527	140,063	(196,673)	(104,031)	0	2,807,248	4,686,134	TRUE
Lighting	15	7/1/2017	0	142,099	142,099	38,253	253	(4,277)	(1,970)	0	109,840	142,099	TRUE
OPA	16	7/1/2017	30,351	1,922,746	1,953,097	748,931	57,734	(79,172)	(37,665)	0	1,232,918	1,922,746	TRUE
Residential	0	8/1/2017	(948,589)	12,185,554	11,236,965	4,074,108	1,113,648	(587,185)	(210,043)	0	7,795,026	12,185,554	TRUE
Commercial	2	8/1/2017	56,940	10,011,077	10,068,017	3,897,817	345,569	(563,132)	(201,306)	0	6,532,129	10,011,077	TRUE
Industrial	4	8/1/2017	108,915	4,705,420	4,814,335	2,089,197	144,525	(294,245)	(107,811)	0	2,873,554	4,705,420	TRUE
Lighting	15	8/1/2017	0	132,171	132,171	35,841	234	(5,180)	(1,845)	0	103,121	132,171	TRUE
OPA	16	8/1/2017	44,537	1,825,858	1,870,395	725,180	55,760	(104,233)	(37,282)	0	1,186,433	1,825,858	TRUE
Residential	0	9/1/2017	(443,981)	10,038,825	9,592,844	2,788,046	923,855	(184,082)	(52,807)	0	6,563,913	10,038,825	TRUE
Commercial	2	9/1/2017	(385,833)	9,450,649	9,064,816	3,075,967	332,194	(183,449)	(59,281)	0	6,285,218	9,450,649	TRUE
Industrial	4	9/1/2017	(252,900)	4,518,823	4,265,923	1,679,520	142,197	(96,993)	(32,054)	0	2,826,153	4,518,823	TRUE
Lighting	15	9/1/2017	0	131,617	131,617	29,778	284	(1,765)	(548)	0	103,868	131,617	TRUE
OPA	16	9/1/2017	(114,713)	1,801,940	1,687,227	588,243	55,416	(34,758)	(11,210)	0	1,204,249	1,801,940	TRUE
Residential	0	10/1/2017	(705,141)	8,738,582	8,033,441	2,503,044	835,843	(548,638)	(47,728)	0	5,996,061	8,738,582	TRUE
Commercial	2	10/1/2017	100,478	8,337,514	8,437,992	2,821,070	305,154	(617,548)	(54,006)	0	5,882,844	8,337,514	TRUE
Industrial	4	10/1/2017	202,345	3,986,829	4,189,174	1,997,329	134,004	(341,465)	(30,508)	0	2,627,469	3,986,829	TRUE
Lighting	15	10/1/2017	0	127,281	127,281	29,928	300	(6,562)	(551)	0	104,166	127,281	TRUE
OPA	16	10/1/2017	102,272	1,612,658	1,714,930	556,585	52,319	(121,297)	(10,475)	0	1,135,526	1,612,658	TRUE
Residential	0	11/1/2017	1,280,257	8,584,302	9,864,559	2,281,880	781,901	(68,740)	(43,566)	0	5,515,247	8,584,302	TRUE
Commercial	2	11/1/2017	62,729	8,455,289	8,518,018	2,634,621	284,719	(51,495)	(50,435)	0	5,534,889	8,455,289	TRUE
Industrial	4	11/1/2017	(77,061)	4,226,492	4,149,431	1,570,102	129,885	(30,993)	(29,995)	0	2,526,407	4,226,492	TRUE
Lighting	15	11/1/2017	0	135,387	135,387	30,389	349	(573)	(560)	0	104,638	135,387	TRUE
OPA	16	11/1/2017	(2,477)	1,639,889	1,637,412	541,306	49,810	(10,635)	(10,302)	0	1,048,440	1,639,889	TRUE
Residential	0	12/1/2017	2,183,729	10,686,318	12,870,047	2,938,285	981,309	(109,117)	(60,937)	0	6,936,778	10,686,318	TRUE
Commercial	2	12/1/2017	144,604	8,577,566	8,722,170	2,747,849	297,692	(96,837)	(56,814)	0	5,685,676	8,577,566	TRUE
Industrial	4	12/1/2017	(50,660)	4,176,862	4,126,202	1,612,481	134,777	(56,195)	(33,300)	0	2,519,099	4,176,862	TRUE
Lighting	15	12/1/2017	0	133,921	133,921	30,482	366	(1,098)	(607)	0	104,778	133,921	TRUE
OPA	16	12/1/2017	14,000	1,550,244	1,564,244	531,136	48,848	(18,747)	(10,928)	0	999,935	1,550,244	TRUE
Residential	0	1/1/2018	(2,009,512)	16,073,289	14,063,777	4,323,072	1,444,510	(457,047)	(89,398)	0	9,938,058	16,073,289	TRUE
Commercial	2	1/1/2018	(685,804)	9,911,332	9,225,528	3,072,885	334,780	(323,406)	(83,777)	0	6,244,058	9,911,332	TRUE
Industrial	4	1/1/2018	(344,589)	4,281,321	3,936,732	1,534,189	128,468	(158,615)	(31,892)	0	2,491,743	4,281,321	TRUE
Lighting	15	1/1/2018	0	114,155	114,155	24,356	389	(3,447)	(485)	0	86,446	114,155	TRUE
OPA	16	1/1/2018	(204,643)	1,782,835	1,578,192	586,934	53,911	(61,406)	(12,140)	0	1,092,724	1,782,835	TRUE
Residential	0	2/1/2018	(604,918)	11,744,958	11,140,040	3,259,164	894,041	(24,178)	(67,395)	0	7,834,970	11,744,958	TRUE
Commercial	2	2/1/2018	(198,544)	8,825,962	8,627,418	2,751,166	296,781	(21,324)	(57,105)	0	5,813,798	8,825,962	TRUE
Industrial	4	2/1/2018	(115,938)	4,105,599	3,989,661	1,525,627	128,601	(11,637)	(31,487)	0	2,471,221	4,105,599	TRUE
Lighting	15	2/1/2018	0	159,341	159,341	36,739	351	(731)	(18)	0	122,964	159,341	TRUE
OPA	16	2/1/2018	(47,975)	1,623,124	1,575,149	544,175	49,820	(4,228)	(11,176)	0	1,036,077	1,623,124	TRUE
Residential	0	3/1/2018	(1,147,167)	9,705,373	8,558,206	2,676,311	427,276	(431,877)	(202,284)	0	6,372,193	9,705,373	TRUE
Commercial	2	3/1/2018	(7,895)	8,705,879	8,697,784	2,627,513	280,930	(413,109)	(194,792)	0	5,578,919	8,705,879	TRUE
Industrial	4	3/1/2018	114,261	4,223,518	4,337,779	1,515,655	126,041	(234,195)	(112,073)	0	2,459,700	4,223,518	TRUE
Lighting	15	3/1/2018	0	136,841	136,841	29,960	306	(4,713)	(2,229)	0	104,091	136,841	TRUE
OPA	16	3/1/2018	19,951	1,638,638	1,658,589	511,078	46,387	(79,772)	(37,495)	0	1,038,896	1,638,638	TRUE
Residential	0	4/1/2018	(279,968)	9,192,616	8,912,648	2,613,999	421,995	(114,337)	(193,872)	0	6,236,157	9,192,616	TRUE
Commercial	2	4/1/2018	230,268	8,531,638	8,761,906	2,683,647	286,880	(114,054)	(199,453)	0	5,646,510	8,531,638	TRUE
Industrial	4	4/1/2018	174,937	4,072,833	4,247,770	1,527,323	128,368	(62,914)	(113,061)	0	2,467,289	4,072,833	TRUE
Lighting	15	4/1/2018	0	132,847	132,847	29,777	291	(1,257)	(2,216)	0	103,738	132,847	TRUE
OPA	16	4/1/2018	81,786	1,593,718	1,675,504	526,797	47,969	(22,107)	(38,735)	0	1,035,580	1,593,718	TRUE
Residential	0	5/1/2018	750,139	9,225,511	9,975,650	2,283,987	365,310	(1,058,577)	(168,009)	0	5,705,646	9,225,511	TRUE
Commercial	2	5/1/2018	706,147	9,918,317	10,624,464	2,710,151	288,793	(1,254,578)	(201,555)	0	5,865,350	9,918,317	TRUE
Industrial	4	5/1/2018	371,605	4,897,146	5,268,751	1,572,561	132,640	(714,001)	(116,393)	0	2,584,337	4,897,146	TRUE
Lighting	15	5/1/2018	0	144,432	144,432	29,449	248	(13,627)	(2,192)	0	103,302	144,432	TRUE
OPA	16	5/1/2018	176,325	1,801,713	1,978,038	509,526	48,753	(235,825)	(37,719)	0	1,047,328	1,801,713	TRUE
Residential	0	6/1/2018	792,224	13,041,663	13,833,887	3,251,112	525,305	(1,402,488)	(342,065)	298,777	7,906,046	13,041,663	TRUE
Commercial	2	6/1/2018	664,391	11,694,570	12,358,961	3,236,512	348,150	(1,398,714)	(341,397)	266,511	6,786,080	11,694,570	TRUE
Industrial	4	6/1/2018	58,512	5,408,731	5,467,243	1,721,810	145,464	(719,816)	(178,410)	112,445	2,887,606	5,408,731	TRUE
Lighting	15	6/1/2018	0	68,887	68,887	9,294	231	(11,078)	(2,138)	3,905	46,517	68,887	TRUE
OPA	16	6/1/2018	49,096	2,178,677	2,227,773	596,693	56,070	(255,966)	(62,491)	50,297	1,282,142	2,178,677	TRUE
Residential	0	7/1/2018	(632,639)										

Commercial	2	11/1/2018	(21,324)	9,835,049	9,813,725	2,625,633	551,032	448,383	(155,506)	602,739	5,762,788	9,835,049	TRUE
Industrial	4	11/1/2018	(49,085)	4,901,539	4,852,474	1,569,314	259,087	260,616	(92,505)	271,381	2,633,646	4,901,539	TRUE
Lighting	15	11/1/2018	0	178,881	178,881	37,027	692	6,799	(2,376)	11,890	124,649	178,881	TRUE
OPA	16	11/1/2018	59	1,889,913	1,889,972	538,478	97,371	91,044	(31,629)	112,595	1,082,054	1,889,913	TRUE
Residential	0	12/1/2018	(7,019,116)	12,609,557	5,590,441	3,256,513	414,458	116,898	(14,414)	886,457	7,949,645	12,609,557	TRUE
Commercial	2	12/1/2018	(5,137,769)	10,390,781	5,253,012	2,889,738	605,758	104,190	(13,286)	791,419	6,011,962	10,390,781	TRUE
Industrial	4	12/1/2018	(2,504,461)	4,892,247	2,387,786	1,616,590	270,742	56,629	(7,045)	342,166	2,613,165	4,892,247	TRUE
Lighting	15	12/1/2018	0	144,479	144,479	29,366	776	1,063	(121)	12,216	101,179	144,479	TRUE
OPA	16	12/1/2018	(1,296,037)	1,898,831	600,794	557,279	99,707	19,794	(2,420)	141,637	1,080,634	1,898,831	TRUE
Residential	0	1/1/2019	(64,742)	14,245,202	14,180,480	3,539,081	450,468	642,716	(15,568)	1,111,248	8,517,255	14,245,202	TRUE
Commercial	2	1/1/2019	(393,472)	10,980,544	10,587,072	2,899,548	610,721	528,982	(12,544)	894,884	6,058,953	10,980,544	TRUE
Industrial	4	1/1/2019	(253,110)	5,194,449	4,941,339	1,613,629	289,837	287,949	(7,031)	388,738	2,641,327	5,194,449	TRUE
Lighting	15	1/1/2019	0	150,252	150,252	29,338	796	5,348	(118)	13,727	101,181	150,252	TRUE
OPA	16	1/1/2019	(89,454)	1,965,633	1,876,179	554,491	100,049	100,328	(2,392)	155,800	1,057,257	1,965,633	TRUE
Residential	0	2/1/2019	(1,625,527)	13,898,083	12,072,556	3,508,198	446,432	366,722	(15,327)	1,131,936	8,460,122	13,898,083	TRUE
Commercial	2	2/1/2019	(545,295)	10,692,622	10,147,327	2,798,669	588,925	293,381	(12,246)	937,278	6,086,615	10,692,622	TRUE
Industrial	4	2/1/2019	(269,627)	4,985,021	4,715,394	1,542,547	255,575	158,317	(6,708)	403,503	2,631,787	4,985,021	TRUE
Lighting	15	2/1/2019	0	147,026	147,026	28,823	663	3,001	(119)	14,241	100,417	147,026	TRUE
OPA	16	2/1/2019	(139,837)	1,919,777	1,779,940	537,414	96,097	55,739	(2,328)	164,005	1,068,850	1,919,777	TRUE

**Source: PSM Schedule 2**

Asset Energy = Non-native portion of DA Asset Energy (PJM BLI 1200, 1210, 1220) and RT Asset Energy (PJM BLI 1205, 1215, 1225, 1400, 1410, 1420)

<u>Bill Period</u>	<u>Amount</u>	<u>12 Month Average</u>	<u>PSM</u>	
5/1/2017	1,173,611.46		1,173,611.46	0.00
6/1/2017	593,771.89		593,771.89	0.00
7/1/2017	415,058.79		415,058.79	0.00
8/1/2017	447,589.45		447,589.45	0.00
9/1/2017	1,077,979.15		1,077,979.15	0.00
10/1/2017	2,400,518.78		2,400,518.78	0.00
11/1/2017	1,648,921.22		1,648,921.22	0.00
12/1/2017	647,230.19		647,230.19	0.00
1/1/2018	1,989,969.08		1,989,969.08	0.00
2/1/2018	220,839.74		220,839.74	0.00
3/1/2018	58,321.90		58,321.90	0.00
4/1/2018	0.00	889,484.00	0.00	0.00
5/1/2018	0.00	791,683.00	0.00	0.00
6/1/2018	573,409.20	789,986.00	573,409.20	0.00
7/1/2018	1,622,817.60	890,633.00	1,622,817.60	0.00
8/1/2018	466,200.77	892,184.00	466,200.77	0.00
9/1/2018	702,185.38	860,868.00	702,185.38	0.00
10/1/2018	978,400.48	742,358.00	978,400.48	0.00
11/1/2018	1,611,209.27	739,215.00	1,611,209.27	0.00
12/1/2018	1,614,041.23	819,783.00	1,614,041.23	0.00
1/1/2019	722,616.33	714,170.00	722,616.33	0.00
2/1/2019	613,235.43	746,870.00	613,235.43	0.00
3/1/2019		809,465.00		0.00
4/1/2019		890,412.00		0.00
5/1/2019		989,346.00		0.00
6/1/2019		1,041,338.00		0.00
7/1/2019		958,270.00		0.00
8/1/2019		1,040,281.00		0.00
9/1/2019		1,107,901.00		0.00
10/1/2019		1,140,276.00		0.00
11/1/2019		983,298.00		0.00
12/1/2019		667,926.00		0.00
1/1/2020		613,235.00		0.00

**Input:**  
Expense Month: March 2019  
Case No. 2017-00321

**Property Tax Rates**

ARO Account: 0.15000%  
Structures & Improvements 1.42740%

Adj. Jurisdictional E(m)  
Authorized for Jan-19  
Expense Month \$ 2,014,081.00

Effective Date for Billing: May 1, 2019  
Date Submitted: April 18, 2019

**Error Check:**  
To make sure that retail  
and SLSRSL are entered  
for the current expense month

**File:**  
Original & 2 copies

Jurisdictional E(m) Table											
Juris. E(m)					Juris. E(m) vs. Revenue Collected						
Form 1.10	Ln 9 (H30)	Ln 13 (H38)	Ln 7 (H26)	Ln 12 (H36)	Recovered		Recovery	ESM Billing Factor		Exp Month / Billing	
Expense	Retail	PSM	Total	Adj. Retail	(Over)/Under	in	vs.	Res	Non-Res		
Month				Recovery	Recovery	Rates	Allowed				
Feb-18	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -					
Mar-18	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -					
Apr-18	\$ 683,831	\$ 23,922	\$ 707,753	\$ 683,831	\$ -			2.67%	3.99%	Apr / June	
May-18	\$ 783,036	\$ 23,802	\$ 806,838	\$ 783,036	\$ -			3.01%	4.57%	May / July	
Jun-18	\$ 1,461,780	\$ 41,954	\$ 1,503,734	\$ 1,413,676	\$ (48,104)	\$ 731,935		5.31%	8.21%	June / August	
Jul-18	\$ 2,237,252	\$ 73,482	\$ 2,310,734	\$ 2,122,573	\$ (114,679)	\$ 897,715		7.84%	12.28%	July / September	
Aug-18	\$ 2,407,393	\$ 79,069	\$ 2,486,462	\$ 2,280,451	\$ (126,942)	\$ 1,540,618		8.41%	13.21%	August / October	
Sep-18	\$ 1,928,868	\$ 61,091	\$ 1,989,959	\$ 1,699,711	\$ (229,157)	\$ 2,351,730		6.21%	9.76%	September / November	
Oct-18	\$ 2,107,561	\$ 57,816	\$ 2,165,377	\$ 2,095,198	\$ (12,363)	\$ 2,292,814		7.55%	11.99%	October / December	
Nov-18	\$ 2,230,229	\$ 60,239	\$ 2,290,468	\$ 2,358,844	\$ 128,615	\$ 1,571,096		8.45%	13.44%	November / January	
Dec-18	\$ 2,568,511	\$ 76,984	\$ 2,645,495	\$ 2,489,614	\$ (78,897)	\$ 2,174,095		8.85%	14.07%	December / February	
Jan-19	\$ 2,219,734	\$ 59,488	\$ 2,279,222	\$ 2,014,081	\$ (205,653)	\$ 2,564,497		7.21%	11.45%	January / March	
Feb-19	\$ 2,423,854	\$ 64,191	\$ 2,488,045	\$ 2,262,505	\$ (161,349)	\$ 2,650,963		8.03%	12.77%	February / April	
Mar-19	\$ 2,592,539	\$ 76,055	\$ 2,668,594	\$ 2,660,087	\$ 67,548	\$ 1,946,533		9.41%	14.86%	March / May	

ES FORM 1.00

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

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

For the Expense Month of March 2019

**Residential (Total Revenue)**

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,082,123
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	11,497,201
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		9.41%

**Non-Residential (Net Revenue)**

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,577,964
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	10,620,061
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		14.86%

Effective Date for Billing: May 1, 2019

Submitted by: Theodore H. Czupik Jr.

Title: Rates & Regulatory Strategy Manager

Date Submitted: April 18, 2019

ES FORM 1.10

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

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of March 2019.

Line No.	<b>E(m) = RORB + OE - EAS + Prior Period Adjustment + (Over)/Under Recovery</b>	Source	Environmental Compliance Plans
1	Environmental Compliance Rate Base (RB)	ES Form 2.00	\$ 39,965,989
2	RB + 12 months	(1) - 12	\$ 3,330,499
3	Pretax Rate of Return (ROR)	ES Form 1.20	8.446%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 281,294
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 2,387,300
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 2,668,594
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	97.15%
9	Jurisdictional E(m)	(7) x (8)	\$ 2,592,539
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ 67,548
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 2,660,087
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 76,055

**Calculation of Environmental Surcharge Billing Factors**

		Residential (Total Revenue)	Non-Residential (Net Revenue)
14	Revenues as a Percentage of 12 Month Average Total Revenues	40.68%	59.32%
15	Adjusted Jurisdictional E(m) - Allocated	\$ 1,082,123	\$ 1,577,964
16	<b>R(m)</b> Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	\$ 11,497,201	\$ 10,620,061
17	Jurisdictional E(m) / R(m)	9.41%	14.86%

**Calculation of Jurisdictional Allocation Ratio - 12 Month Average**

18	Retail Revenue	ES Form 3.00	\$ 28,264,503	97.15%
19	Sales for Resale	Company Records	\$ 830,231	2.85%
20	Total Revenue		\$ 29,094,734	100.00%

Note: (A) Amounts determined by the Commission during six-month and two-year reviews.

ES FORM 1.20

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

Cost of Capital

Line No.	Capital Structure	Ratio	Cost	Weighted Cost (A)	Gross up for Tax Rate (B)	Pre-Tax Rate of Return (A)x(B)
1	Short-term Debt	9.772%	3.083%	0.301%		0.301%
2	Long-term Debt	40.977%	4.243%	1.739%		1.739%
3	Common Equity	49.251%	9.725%	4.790%	1.3373044	6.406%
4	Total	100.000%		6.830%		8.446%

Note: Capital structure, cost of debt and tax rate gross-up factor as approved in Case No. 2017-00321. These rates are to remain constant until the Commission sets base rates in Duke Kentucky's next base rate case proceeding.



ES FORM 2.00

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

Revenue Requirement of Environmental Compliance Costs  
 For the Expense Month of March 2019

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant)	ES Form 2.10	\$ 40,414,561
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	767,630
3	Subtotal		\$ 41,182,191
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 23,604
6	Subtotal		\$ 23,604
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 83,122
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	1,156,684
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 1,239,806
12	Environmental Compliance Rate Base		\$ 39,965,989
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 21,426
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 586,648
16	Monthly Amortization Expense	ES Form 2.20	\$ 611,095
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ -
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 1,168,131
19	Total Environmental Compliance Operating Expense		\$ 2,387,300
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO <sub>2</sub> Allowance Sales		\$ -
22	NO <sub>x</sub> Allowances Sales		\$ -
23	Total Emission Allowance Sales		\$ -
24	<u>(Over) / Under Recovery</u>		
25	Adjusted Jurisdictional E(m) Authorized for Expense Month two Months Prior		\$ 2,014,081
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		1,946,533
27	(Over) / Under Recovery		\$ 67,548

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

ES FORM 2.10

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

Plant, Accumulated Depreciation, CWIP, ITC, ADIT  
 Depreciation Expense, Taxes Other Than Income Taxes

For the Expense Month of March 2019

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project No.	Description	Gross Plant in-Service as of March-19	Accumulated Depreciation as of March-19	Net Plant in-Service as of March-19	CWIP Excluding AFUDC as of March-19	Accumulated Deferred ITC as of March-19	Accumulated Deferred Tax Balance as of March-19	Monthly Depreciation Expense	Monthly Property Tax Expense
				(2)-(3)					
1	EB020290 Lined Retention Basin West	\$ 10,467,790	\$ 83,122	\$ 10,384,668	\$ -	\$ -	\$ 1,156,684	\$ 21,426	\$ 148,231
2	EB020745 Lined Retention Basin East	\$ -	\$ -	\$ -	\$ 370,094	\$ -	\$ -	\$ -	\$ 5,283
3	EB020298 East Bend SW/PW Reroute	\$ 29,946,771	\$ -	\$ 29,946,771	\$ -	\$ -	\$ -	\$ -	\$ 427,460
4	EB021281 East Bend Landfill Cell 2	\$ -	\$ -	\$ -	\$ 397,536	\$ -	\$ -	\$ -	\$ 5,674
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 40,414,561	\$ 83,122	\$ 40,331,439	\$ 767,630	\$ -	\$ 1,156,684	\$ 21,426	\$ 586,648

ES FORM 2.20  
 Page 1 of 3

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

Amortization Calculation for Coal Ash ARO

For the Expense Month of March 2019

Line No.	Period (1)	Cash Spend (2)	COR Credit (3)	Carrying Cost (4)	Recovery: 10-Yr Amort. (5)	Ending Balance (6)	Cash Spend (7)	Recovery: 2-Month Cycle (8)	Ending Balance (9)	Total Recovery (10) = (5) + (8)
1	2015 Total Actual	\$ 3,858,084	\$ (856,412)	\$ 20,378	\$ -	\$ 3,022,050	\$ -	\$ -	\$ -	\$ -
2	2016 Total Actual	\$ 4,486,812	\$ (107,052)	\$ 379,037	\$ -	\$ 7,780,847	\$ -	\$ -	\$ -	\$ -
3	Jan-17 Actual	\$ 358,148	\$ -	\$ 43,243	\$ -	\$ 8,182,238	\$ -	\$ -	\$ -	\$ -
4	Feb-17 Actual	\$ 424,021	\$ -	\$ 40,351	\$ -	\$ 8,646,610	\$ -	\$ -	\$ -	\$ -
5	Mar-17 Actual	\$ 692,184	\$ (26,763)	\$ 44,724	\$ -	\$ 9,356,755	\$ -	\$ -	\$ -	\$ -
6	Apr-17 Actual	\$ 254,067	\$ -	\$ 50,949	\$ -	\$ 9,661,771	\$ -	\$ -	\$ -	\$ -
7	May-17 Actual	\$ 608,377	\$ -	\$ 56,141	\$ -	\$ 10,326,289	\$ -	\$ -	\$ -	\$ -
8	Jun-17 Actual	\$ 265,619	\$ (26,763)	\$ 53,472	\$ -	\$ 10,618,617	\$ -	\$ -	\$ -	\$ -
9	Jul-17 Actual	\$ 220,636	\$ -	\$ 51,558	\$ -	\$ 10,890,811	\$ -	\$ -	\$ -	\$ -
10	Aug-17 Actual	\$ 272,053	\$ -	\$ 47,731	\$ -	\$ 11,210,595	\$ -	\$ -	\$ -	\$ -
11	Sep-17 Actual	\$ 233,743	\$ (26,763)	\$ 44,389	\$ -	\$ 11,461,964	\$ -	\$ -	\$ -	\$ -
12	Oct-17 Actual	\$ 444,793	\$ -	\$ 60,670	\$ -	\$ 11,967,427	\$ -	\$ -	\$ -	\$ -
13	Nov-17 Actual	\$ 525,770	\$ -	\$ 68,573	\$ -	\$ 12,561,770	\$ -	\$ -	\$ -	\$ -
14	Dec-17 Actual	\$ 2,482,493	\$ (26,763)	\$ 82,850	\$ -	\$ 15,100,350	\$ -	\$ -	\$ -	\$ -
15	Jan-18 Actual	\$ 510,525	\$ -	\$ 91,185	\$ -	\$ 15,702,060	\$ -	\$ -	\$ -	\$ -
16	Feb-18 Actual	\$ 89,648	\$ -	\$ 91,534	\$ -	\$ 15,883,242	\$ -	\$ -	\$ -	\$ -
17	Mar-18 Actual	\$ 396,977	\$ (26,763)	\$ 93,696	\$ -	\$ 16,347,152	\$ -	\$ -	\$ -	\$ -
18	Apr-18 Actual	\$ 132,294	\$ -	\$ 111,722	\$ -	\$ 16,591,168	\$ 173,000	\$ -	\$ 173,000	\$ -
19	May-18 Actual	\$ -	\$ -	\$ 112,480	\$ -	\$ 16,703,648	\$ 100,234	\$ -	\$ 273,234	\$ -
20	Jun-18 Actual	\$ -	\$ -	\$ 111,870	\$ (202,486)	\$ 16,613,032	\$ 150,901	\$ (173,000)	\$ 251,135	\$ (375,486)
21	Jul-18 Actual	\$ -	\$ -	\$ 111,255	\$ (202,486)	\$ 16,521,801	\$ 196,585	\$ (100,234)	\$ 347,486	\$ (302,720)
22	Aug-18 Actual	\$ -	\$ -	\$ 110,637	\$ (202,486)	\$ 16,429,952	\$ 321,815	\$ (150,901)	\$ 518,400	\$ (353,387)
23	Sep-18 Actual	\$ -	\$ -	\$ 110,014	\$ (202,486)	\$ 16,337,480	\$ 275,135	\$ (196,585)	\$ 596,950	\$ (399,071)
24	Oct-18 Actual	\$ -	\$ -	\$ 109,387	\$ (202,486)	\$ 16,244,381	\$ 69,886	\$ (321,815)	\$ 345,021	\$ (524,301)
25	Nov-18 Actual	\$ -	\$ -	\$ 108,756	\$ (202,486)	\$ 16,150,651	\$ 238,428	\$ (275,135)	\$ 308,314	\$ (477,621)
26	Dec-18 Actual	\$ -	\$ -	\$ 108,121	\$ (202,486)	\$ 16,056,286	\$ 263,037	\$ (69,886)	\$ 501,465	\$ (272,372)
27	Jan-19 Actual	\$ -	\$ -	\$ 107,481	\$ (202,486)	\$ 15,961,281	\$ 177,996	\$ (238,428)	\$ 441,033	\$ (440,914)
28	Feb-19 Actual	\$ -	\$ -	\$ 106,837	\$ (202,486)	\$ 15,865,632	\$ 150,851	\$ (263,037)	\$ 328,847	\$ (465,523)
29	Mar-19 Actual	\$ -	\$ -	\$ 106,188	\$ (202,486)	\$ 15,769,334	\$ 408,609	\$ (177,996)	\$ 559,460	\$ (380,482)
30	Apr-19 Actual	\$ -	\$ -	\$ 105,535	\$ (202,486)	\$ 15,672,383	\$ -	\$ (150,851)	\$ 408,609	\$ (353,337)
31	May-19 Actual	\$ -	\$ -	\$ 104,878	\$ (202,486)	\$ 15,574,775	\$ -	\$ (408,609)	\$ -	\$ (611,095)
32	Jun-19 Actual	\$ -	\$ -	\$ 104,216	\$ (202,486)	\$ 15,476,505	\$ -	\$ -	\$ -	\$ (202,486)
33	Jul-19 Actual	\$ -	\$ -	\$ 103,550	\$ (202,486)	\$ 15,377,569	\$ -	\$ -	\$ -	\$ (202,486)
34	Aug-19 Actual	\$ -	\$ -	\$ 102,880	\$ (202,486)	\$ 15,277,963	\$ -	\$ -	\$ -	\$ (202,486)
35	Sep-19 Actual	\$ -	\$ -	\$ 102,204	\$ (202,486)	\$ 15,177,681	\$ -	\$ -	\$ -	\$ (202,486)
36	Oct-19 Actual	\$ -	\$ -	\$ 101,524	\$ (202,486)	\$ 15,076,719	\$ -	\$ -	\$ -	\$ (202,486)
37	Nov-19 Actual	\$ -	\$ -	\$ 100,840	\$ (202,486)	\$ 14,975,073	\$ -	\$ -	\$ -	\$ (202,486)
38	Dec-19 Actual	\$ -	\$ -	\$ 100,151	\$ (202,486)	\$ 14,872,738	\$ -	\$ -	\$ -	\$ (202,486)
39	Jan-20 Actual	\$ -	\$ -	\$ 99,457	\$ (202,486)	\$ 14,769,709	\$ -	\$ -	\$ -	\$ (202,486)
40	Feb-20 Actual	\$ -	\$ -	\$ 98,759	\$ (202,486)	\$ 14,665,982	\$ -	\$ -	\$ -	\$ (202,486)
41	Mar-20 Actual	\$ -	\$ -	\$ 98,055	\$ (202,486)	\$ 14,561,551	\$ -	\$ -	\$ -	\$ (202,486)
42	Apr-20 Actual	\$ -	\$ -	\$ 97,347	\$ (202,486)	\$ 14,456,412	\$ -	\$ -	\$ -	\$ (202,486)
43	May-20 Actual	\$ -	\$ -	\$ 96,635	\$ (202,486)	\$ 14,350,561	\$ -	\$ -	\$ -	\$ (202,486)
44	Jun-20 Actual	\$ -	\$ -	\$ 95,917	\$ (202,486)	\$ 14,243,992	\$ -	\$ -	\$ -	\$ (202,486)
45	Jul-20 Actual	\$ -	\$ -	\$ 95,194	\$ (202,486)	\$ 14,136,700	\$ -	\$ -	\$ -	\$ (202,486)
46	Aug-20 Actual	\$ -	\$ -	\$ 94,467	\$ (202,486)	\$ 14,028,681	\$ -	\$ -	\$ -	\$ (202,486)
47	Sep-20 Actual	\$ -	\$ -	\$ 93,735	\$ (202,486)	\$ 13,919,930	\$ -	\$ -	\$ -	\$ (202,486)
48	Oct-20 Actual	\$ -	\$ -	\$ 92,997	\$ (202,486)	\$ 13,810,441	\$ -	\$ -	\$ -	\$ (202,486)
49	Nov-20 Actual	\$ -	\$ -	\$ 92,255	\$ (202,486)	\$ 13,700,210	\$ -	\$ -	\$ -	\$ (202,486)
50	Dec-20 Actual	\$ -	\$ -	\$ 91,508	\$ (202,486)	\$ 13,589,232	\$ -	\$ -	\$ -	\$ (202,486)

ES FORM 2.20  
 Page 2 of 3

DUKE ENERGY KENTUCKY, INC.  
 ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of March 2019

Line No.	Period (1)	Cash Spend (2)	COR Credit (3)	Carrying Cost (4)	Recovery: 10-Yr Amort. (5)	Ending Balance (6)	Cash Spend (7)	Recovery: 2-Month Cycle (8)	Ending Balance (9)	Total Recovery (10) = (5) + (8)
51	Jan-21	Actual	-	90,756	(202,486)	13,477,502	-	-	-	(202,486)
52	Feb-21	Actual	-	89,998	(202,486)	13,365,014	-	-	-	(202,486)
53	Mar-21	Actual	-	89,235	(202,486)	13,251,763	-	-	-	(202,486)
54	Apr-21	Actual	-	88,468	(202,486)	13,137,745	-	-	-	(202,486)
55	May-21	Actual	-	87,695	(202,486)	13,022,954	-	-	-	(202,486)
56	Jun-21	Actual	-	86,916	(202,486)	12,907,384	-	-	-	(202,486)
57	Jul-21	Actual	-	86,133	(202,486)	12,791,031	-	-	-	(202,486)
58	Aug-21	Actual	-	85,344	(202,486)	12,673,889	-	-	-	(202,486)
59	Sep-21	Actual	-	84,550	(202,486)	12,555,953	-	-	-	(202,486)
60	Oct-21	Actual	-	83,750	(202,486)	12,437,217	-	-	-	(202,486)
61	Nov-21	Actual	-	82,945	(202,486)	12,317,676	-	-	-	(202,486)
62	Dec-21	Actual	-	82,135	(202,486)	12,197,325	-	-	-	(202,486)
63	Jan-22	Actual	-	81,319	(202,486)	12,076,158	-	-	-	(202,486)
64	Feb-22	Actual	-	80,498	(202,486)	11,954,170	-	-	-	(202,486)
65	Mar-22	Actual	-	79,671	(202,486)	11,831,355	-	-	-	(202,486)
66	Apr-22	Actual	-	78,838	(202,486)	11,707,707	-	-	-	(202,486)
67	May-22	Actual	-	78,000	(202,486)	11,583,221	-	-	-	(202,486)
68	Jun-22	Actual	-	77,156	(202,486)	11,457,891	-	-	-	(202,486)
69	Jul-22	Actual	-	76,306	(202,486)	11,331,711	-	-	-	(202,486)
70	Aug-22	Actual	-	75,451	(202,486)	11,204,676	-	-	-	(202,486)
71	Sep-22	Actual	-	74,589	(202,486)	11,076,779	-	-	-	(202,486)
72	Oct-22	Actual	-	73,722	(202,486)	10,948,015	-	-	-	(202,486)
73	Nov-22	Actual	-	72,849	(202,486)	10,818,378	-	-	-	(202,486)
74	Dec-22	Actual	-	71,971	(202,486)	10,687,863	-	-	-	(202,486)
75	Jan-23	Actual	-	71,086	(202,486)	10,556,463	-	-	-	(202,486)
76	Feb-23	Actual	-	70,195	(202,486)	10,424,172	-	-	-	(202,486)
77	Mar-23	Actual	-	69,298	(202,486)	10,290,984	-	-	-	(202,486)
78	Apr-23	Actual	-	68,395	(202,486)	10,156,893	-	-	-	(202,486)
79	May-23	Actual	-	67,486	(202,486)	10,021,893	-	-	-	(202,486)
80	Jun-23	Actual	-	66,571	(202,486)	9,885,978	-	-	-	(202,486)
81	Jul-23	Actual	-	65,649	(202,486)	9,749,141	-	-	-	(202,486)
82	Aug-23	Actual	-	64,722	(202,486)	9,611,377	-	-	-	(202,486)
83	Sep-23	Actual	-	63,788	(202,486)	9,472,679	-	-	-	(202,486)
84	Oct-23	Actual	-	62,847	(202,486)	9,333,040	-	-	-	(202,486)
85	Nov-23	Actual	-	61,901	(202,486)	9,192,455	-	-	-	(202,486)
86	Dec-23	Actual	-	60,948	(202,486)	9,050,917	-	-	-	(202,486)
87	Jan-24	Actual	-	59,988	(202,486)	8,908,419	-	-	-	(202,486)
88	Feb-24	Actual	-	59,022	(202,486)	8,764,955	-	-	-	(202,486)
89	Mar-24	Actual	-	58,049	(202,486)	8,620,518	-	-	-	(202,486)
90	Apr-24	Actual	-	57,070	(202,486)	8,475,102	-	-	-	(202,486)
91	May-24	Actual	-	56,084	(202,486)	8,328,700	-	-	-	(202,486)
92	Jun-24	Actual	-	55,092	(202,486)	8,181,306	-	-	-	(202,486)
93	Jul-24	Actual	-	54,093	(202,486)	8,032,913	-	-	-	(202,486)
94	Aug-24	Actual	-	53,087	(202,486)	7,883,514	-	-	-	(202,486)
95	Sep-24	Actual	-	52,074	(202,486)	7,733,102	-	-	-	(202,486)
96	Oct-24	Actual	-	51,054	(202,486)	7,581,670	-	-	-	(202,486)
97	Nov-24	Actual	-	50,027	(202,486)	7,429,211	-	-	-	(202,486)
98	Dec-24	Actual	-	48,994	(202,486)	7,275,719	-	-	-	(202,486)
99	Jan-25	Actual	-	47,953	(202,486)	7,121,186	-	-	-	(202,486)

ES FORM 2.20  
 Page 3 of 3

DUKE ENERGY KENTUCKY, INC.  
 ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of March 2019

Line No.	Period (1)	Cash Spend (2)	COR Credit (3)	Carrying Cost (4)	Recovery: 10-Yr Amort. (5)	Ending Balance (6)	Cash Spend (7)	Recovery: 2-Month Cycle (8)	Ending Balance (9)	Total Recovery (10) = (5) + (8)
100	Feb-25 Actual		-	46,906	(202,486)	6,965,606	-	-	-	(202,486)
101	Mar-25 Actual		-	45,851	(202,486)	6,808,971	-	-	-	(202,486)
102	Apr-25 Actual		-	44,789	(202,486)	6,651,274	-	-	-	(202,486)
103	May-25 Actual		-	43,720	(202,486)	6,492,508	-	-	-	(202,486)
104	Jun-25 Actual		-	42,643	(202,486)	6,332,665	-	-	-	(202,486)
105	Jul-25 Actual		-	41,560	(202,486)	6,171,739	-	-	-	(202,486)
106	Aug-25 Actual		-	40,469	(202,486)	6,009,722	-	-	-	(202,486)
107	Sep-25 Actual		-	39,370	(202,486)	5,846,606	-	-	-	(202,486)
108	Oct-25 Actual		-	38,265	(202,486)	5,682,385	-	-	-	(202,486)
109	Nov-25 Actual		-	37,151	(202,486)	5,517,050	-	-	-	(202,486)
110	Dec-25 Actual		-	36,030	(202,486)	5,350,594	-	-	-	(202,486)
111	Jan-26 Actual		-	34,902	(202,486)	5,183,010	-	-	-	(202,486)
112	Feb-26 Actual		-	33,766	(202,486)	5,014,290	-	-	-	(202,486)
113	Mar-26 Actual		-	32,622	(202,486)	4,844,426	-	-	-	(202,486)
114	Apr-26 Actual		-	31,470	(202,486)	4,673,410	-	-	-	(202,486)
115	May-26 Actual		-	30,311	(202,486)	4,501,235	-	-	-	(202,486)
116	Jun-26 Actual		-	29,144	(202,486)	4,327,893	-	-	-	(202,486)
117	Jul-26 Actual		-	27,968	(202,486)	4,153,375	-	-	-	(202,486)
118	Aug-26 Actual		-	26,785	(202,486)	3,977,674	-	-	-	(202,486)
119	Sep-26 Actual		-	25,594	(202,486)	3,800,782	-	-	-	(202,486)
120	Oct-26 Actual		-	24,395	(202,486)	3,622,691	-	-	-	(202,486)
121	Nov-26 Actual		-	23,188	(202,486)	3,443,393	-	-	-	(202,486)
122	Dec-26 Actual		-	21,972	(202,486)	3,262,879	-	-	-	(202,486)
123	Jan-27 Actual		-	20,748	(202,486)	3,081,141	-	-	-	(202,486)
124	Feb-27 Actual		-	19,516	(202,486)	2,898,171	-	-	-	(202,486)
125	Mar-27 Actual		-	18,276	(202,486)	2,713,961	-	-	-	(202,486)
126	Apr-27 Actual		-	17,027	(202,486)	2,528,502	-	-	-	(202,486)
127	May-27 Actual		-	15,769	(202,486)	2,341,785	-	-	-	(202,486)
128	Jun-27 Actual		-	14,504	(202,486)	2,153,803	-	-	-	(202,486)
129	Jul-27 Actual		-	13,229	(202,486)	1,964,546	-	-	-	(202,486)
130	Aug-27 Actual		-	11,946	(202,486)	1,774,006	-	-	-	(202,486)
131	Sep-27 Actual		-	10,654	(202,486)	1,582,174	-	-	-	(202,486)
132	Oct-27 Actual		-	9,354	(202,486)	1,389,042	-	-	-	(202,486)
133	Nov-27 Actual		-	8,045	(202,486)	1,194,601	-	-	-	(202,486)
134	Dec-27 Actual		-	6,726	(202,486)	998,841	-	-	-	(202,486)
135	Jan-28 Actual		-	5,399	(202,486)	801,754	-	-	-	(202,486)
136	Feb-28 Actual		-	4,063	(202,486)	603,331	-	-	-	(202,486)
137	Mar-28 Actual		-	2,718	(202,486)	403,563	-	-	-	(202,486)
138	Apr-28 Actual		-	1,409	(202,486)	202,486	-	-	-	(202,486)
139	May-28 Actual		-	-	(202,486)	-	-	-	-	(202,486)
		\$ 16,256,244	\$ (1,097,279)	\$ 9,139,355	\$ (24,298,320)		\$ 2,526,477	\$ (2,526,477)		(26,824,797)

Monthly Amortization Amount

(611,095)

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending March 2019

<b>Total SO<sub>2</sub> and NO<sub>x</sub> Emission Allowances</b>					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
<b>SO<sub>2</sub> Allowances - Acid Rain Program (a)</b>					
Quantity	134,537	-	-	-	134,537
Dollars	\$ 17,047.37	\$ -	\$ -	\$ -	\$ 17,047.37
\$/Allowance	\$ 0.126711	\$ -	\$ -	\$ -	\$ 0.126711
<b>NO<sub>x</sub> Allowances - Annual</b>					
Quantity	7,557	-	-	-	7,557
Dollars	\$ 4,071.43	\$ -	\$ -	\$ -	\$ 4,071.43
\$/Allowance	\$ 0.538763	\$ -	\$ -	\$ -	\$ 0.538763
<b>NO<sub>x</sub> Allowances - Seasonal</b>					
Quantity	1,398	-	-	-	1,398
Dollars	\$ 2,484.70	\$ -	\$ -	\$ -	\$ 2,484.70
\$/Allowance	\$ 1.777325	\$ -	\$ -	\$ -	\$ 1.777325
<b>Total Emission Allowances</b>					
Quantity	143,492	-	-	-	143,492
Dollars	\$ 23,603.50	\$ -	\$ -	\$ -	\$ 23,603.50

(a) Note: The SO<sub>2</sub> Allowances exclude the CSSO<sub>2</sub>G1 Program Allowances as there is no dollar value associated with this program inventory. Thus, there is no expense booked to the ledger as a result of the program.

ES FORM 2.50

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

Environmental Reagent Expenses

For the Expense Month of March 2019

<u>Line No.</u>	<u>Expense Type</u>	<u>Account Number</u>	<u>East Bend Unit 2</u>	<u>Total</u>
1	Ammonia	502020	\$ 58,407	\$ 58,407
2	Lime	502040	1,012,520	1,012,520
3	Hydrated Lime	502040	97,204	97,204
4	Total		\$ 1,168,131	\$ 1,168,131

ES FORM 3.00

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

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

For the Expense Month of March 2019

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge (2) - (5)
Apr-18	\$ 9,192,616			\$ -	\$ 9,192,616
May-18	9,225,511			-	9,225,511
Jun-18	13,041,663			298,777	12,742,886
Jul-18	15,332,757			383,577	14,949,180
Aug-18	12,716,657			642,457	12,074,200
Sep-18	13,028,155			947,252	12,080,903
Oct-18	11,048,101			858,182	10,189,919
Nov-18	9,761,936			572,491	9,189,445
Dec-18	12,609,557			886,457	11,723,100
Jan-19	14,245,202			1,111,248	13,133,954
Feb-19	13,898,083			1,131,936	12,766,147
Mar-19	\$ 11,471,832			\$ 773,284	\$ 10,698,548
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 11,497,201
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 28,264,503
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					40.68%

Non-Residential - Kentucky Jurisdictional Revenues						
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Month	Total Revenues	Base Rate Fuel Component	Fuel Clause Revenues	Environmental Surcharge Revenues	Total Excluding Environmental Surcharge (2) - (5)	Total Non-Fuel Revenue (6) - (3) - (4)
Apr-18	\$ 14,331,036	\$ 4,767,544	\$ 200,332	\$ -	\$ 14,331,036	\$ 9,363,160
May-18	16,761,608	4,821,687	2,218,031	-	16,761,608	9,721,890
Jun-18	19,350,865	5,564,309	2,385,574	433,158	18,917,707	10,967,824
Jul-18	20,520,965	5,713,914	3,024,833	514,138	20,006,827	11,268,080
Aug-18	17,980,988	5,529,498	628,882	898,161	17,082,827	10,924,447
Sep-18	18,634,396	5,702,447	75,261	1,404,478	17,229,918	11,452,210
Oct-18	18,476,264	5,092,424	1,066,820	1,434,632	17,041,632	10,882,388
Nov-18	16,805,182	4,770,452	806,842	998,605	15,806,577	10,229,283
Dec-18	17,324,338	5,092,973	181,676	1,287,638	16,036,700	10,762,051
Jan-19	18,290,878	5,097,006	922,607	1,453,249	16,837,629	10,818,016
Feb-19	17,744,446	4,907,453	510,438	1,519,027	16,225,419	10,807,528
Mar-19	\$ 16,102,997	\$ 4,721,932	\$ (36,039)	\$ 1,173,249	\$ 14,929,748	\$ 10,243,855
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 16,767,302	\$ 10,620,061
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 28,264,503	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					59.32%	



Source: MW\_RAC\_044

Class	Revscls	Bill Period	Unbilled	Billed	Total	BaseFuel	DSM	FAC	PSM	ESM	BaseRev	TotalBilled	
Residential	0	5/1/2017	784,453	7,508,315	8,292,768	2,588,234	706,329	(801,494)	(135,356)	0	5,150,602	7,508,315	TRUE
Commercial	2	5/1/2017	223,817	8,137,894	8,361,511	3,344,724	295,277	(1,037,055)	(175,342)	0	5,710,290	8,137,894	TRUE
Industrial	4	5/1/2017	182,141	3,929,156	4,091,297	1,932,761	132,522	(590,393)	(101,113)	0	2,555,379	3,929,156	TRUE
Lighting	15	5/1/2017	0	127,100	127,100	36,136	260	(11,195)	(1,886)	0	103,785	127,100	TRUE
OPA	16	5/1/2017	63,810	1,560,496	1,624,306	865,147	50,452	(205,394)	(34,716)	0	1,065,007	1,560,496	TRUE
Residential	0	6/1/2017	940,089	9,659,183	10,599,272	3,378,933	923,266	(1,029,257)	(174,137)	0	6,560,378	9,659,183	TRUE
Commercial	2	6/1/2017	585,911	9,006,447	9,572,358	3,746,715	331,662	(1,143,025)	(193,511)	0	6,264,606	9,006,447	TRUE
Industrial	4	6/1/2017	278,841	4,218,650	4,497,491	2,014,732	139,633	(601,392)	(103,795)	0	2,769,472	4,218,650	TRUE
Lighting	15	6/1/2017	0	119,193	119,193	33,812	235	(10,337)	(1,739)	0	97,222	119,193	TRUE
OPA	16	6/1/2017	115,294	1,506,064	1,621,358	602,156	45,082	(189,778)	(31,869)	0	1,080,473	1,506,064	TRUE
Residential	0	7/1/2017	1,301,409	12,661,698	13,963,307	4,176,245	1,141,439	(415,742)	(215,265)	0	7,975,221	12,661,698	TRUE
Commercial	2	7/1/2017	224,801	10,326,875	10,551,676	3,891,980	353,441	(398,582)	(206,002)	0	6,586,038	10,326,875	TRUE
Industrial	4	7/1/2017	38,403	4,666,134	4,704,537	2,019,527	140,063	(196,673)	(104,031)	0	2,807,248	4,666,134	TRUE
Lighting	15	7/1/2017	0	142,099	142,099	38,253	253	(4,277)	(1,970)	0	109,840	142,099	TRUE
OPA	16	7/1/2017	30,351	1,922,746	1,953,097	748,931	57,734	(79,172)	(37,665)	0	1,232,916	1,922,746	TRUE
Residential	0	8/1/2017	(948,589)	12,185,554	11,236,965	4,074,108	1,113,648	(587,185)	(210,043)	0	7,795,026	12,185,554	TRUE
Commercial	2	8/1/2017	56,940	10,011,077	10,068,017	3,897,817	345,569	(563,132)	(201,306)	0	6,532,129	10,011,077	TRUE
Industrial	4	8/1/2017	108,915	4,705,420	4,814,335	2,089,197	144,525	(294,245)	(107,611)	0	2,673,554	4,705,420	TRUE
Lighting	15	8/1/2017	0	132,171	132,171	35,841	234	(5,180)	(1,845)	0	103,121	132,171	TRUE
OPA	16	8/1/2017	44,537	1,825,858	1,870,395	725,160	55,780	(104,233)	(37,262)	0	1,186,433	1,825,858	TRUE
Residential	0	9/1/2017	(443,981)	10,036,825	9,592,844	2,768,046	923,855	(164,082)	(52,907)	0	6,563,913	10,036,825	TRUE
Commercial	2	9/1/2017	(385,633)	9,450,649	9,064,816	3,075,967	332,194	(183,449)	(59,281)	0	6,285,118	9,450,649	TRUE
Industrial	4	9/1/2017	(252,900)	4,518,823	4,265,923	1,679,520	142,197	(96,993)	(32,054)	0	2,626,153	4,518,823	TRUE
Lighting	15	9/1/2017	0	131,617	131,617	29,778	284	(1,765)	(548)	0	103,888	131,617	TRUE
OPA	16	9/1/2017	(114,713)	1,801,940	1,687,227	588,243	55,416	(34,758)	(11,210)	0	1,204,249	1,801,940	TRUE
Residential	0	10/1/2017	(705,141)	8,738,582	8,033,441	2,503,044	835,843	(548,638)	(47,728)	0	5,996,061	8,738,582	TRUE
Commercial	2	10/1/2017	100,478	8,337,514	8,437,992	2,821,070	305,154	(617,548)	(54,006)	0	5,882,844	8,337,514	TRUE
Industrial	4	10/1/2017	202,345	3,986,829	4,189,174	1,597,329	134,004	(341,465)	(30,508)	0	2,627,469	3,986,829	TRUE
Lighting	15	10/1/2017	0	127,281	127,281	29,928	300	(6,562)	(551)	0	104,166	127,281	TRUE
OPA	16	10/1/2017	102,272	1,812,658	1,714,930	556,585	52,319	(121,297)	(10,475)	0	1,135,526	1,812,658	TRUE
Residential	0	11/1/2017	1,260,257	8,584,302	9,844,559	2,281,980	761,901	68,740	(43,566)	0	5,515,247	8,584,302	TRUE
Commercial	2	11/1/2017	62,729	8,455,289	8,518,018	2,634,821	284,719	51,495	(50,435)	0	5,534,689	8,455,289	TRUE
Industrial	4	11/1/2017	(77,061)	4,226,482	4,149,431	1,570,102	129,885	30,093	(28,995)	0	2,526,407	4,226,482	TRUE
Lighting	15	11/1/2017	0	135,387	135,387	30,389	349	573	(580)	0	104,636	135,387	TRUE
OPA	16	11/1/2017	(2,477)	1,639,889	1,637,412	541,306	49,810	10,835	(10,302)	0	1,048,440	1,639,889	TRUE
Residential	0	12/1/2017	2,183,729	10,686,318	12,870,047	2,938,285	981,309	(109,117)	(60,937)	0	6,936,778	10,686,318	TRUE
Commercial	2	12/1/2017	144,604	8,577,566	8,722,170	2,747,849	297,692	(96,837)	(56,814)	0	5,685,676	8,577,566	TRUE
Industrial	4	12/1/2017	(50,660)	4,176,862	4,126,202	1,612,481	134,777	(56,195)	(33,300)	0	2,519,099	4,176,862	TRUE
Lighting	15	12/1/2017	0	133,921	133,921	30,482	366	(1,098)	(607)	0	104,778	133,921	TRUE
OPA	16	12/1/2017	14,000	1,550,244	1,564,244	531,136	48,848	(18,747)	(10,928)	0	999,935	1,550,244	TRUE
Residential	0	1/1/2018	(2,009,512)	16,073,289	14,063,777	4,323,072	1,444,510	457,047	(89,396)	0	9,938,056	16,073,289	TRUE
Commercial	2	1/1/2018	(686,804)	9,911,332	9,225,528	3,072,665	334,780	323,406	(63,777)	0	8,244,058	9,911,332	TRUE
Industrial	4	1/1/2018	(344,589)	4,281,321	3,936,732	1,534,189	128,466	158,615	(31,892)	0	2,491,743	4,281,321	TRUE
Lighting	15	1/1/2018	0	114,155	114,155	24,356	389	3,447	(465)	0	86,448	114,155	TRUE
OPA	16	1/1/2018	(204,643)	1,782,835	1,578,192	586,934	53,911	61,406	(12,140)	0	1,092,724	1,782,835	TRUE
Residential	0	2/1/2018	(604,918)	11,744,958	11,140,040	3,259,164	894,041	24,178	(67,395)	0	7,634,970	11,744,958	TRUE
Commercial	2	2/1/2018	(198,544)	8,825,962	8,627,418	2,751,166	296,781	21,324	(57,105)	0	5,813,796	8,825,962	TRUE
Industrial	4	2/1/2018	(115,938)	4,105,599	3,989,661	1,525,627	128,601	11,637	(31,487)	0	2,471,221	4,105,599	TRUE
Lighting	15	2/1/2018	0	159,341	159,341	36,739	351	18	(731)	0	122,964	159,341	TRUE
OPA	16	2/1/2018	(47,975)	1,623,124	1,575,149	544,175	49,820	4,228	(11,176)	0	1,036,077	1,623,124	TRUE
Residential	0	3/1/2018	(1,147,187)	9,705,373	8,558,206	2,876,311	427,278	431,877	(202,284)	0	6,372,193	9,705,373	TRUE
Commercial	2	3/1/2018	(7,895)	8,705,679	8,697,784	2,627,513	280,930	413,109	(194,792)	0	5,578,919	8,705,679	TRUE
Industrial	4	3/1/2018	114,261	4,223,518	4,337,779	1,515,655	126,041	234,195	(112,073)	0	2,459,700	4,223,518	TRUE
Lighting	15	3/1/2018	0	138,841	138,841	29,980	308	4,713	(2,229)	0	104,091	138,841	TRUE
OPA	16	3/1/2018	19,951	1,838,638	1,858,589	511,078	46,387	79,772	(37,495)	0	1,038,896	1,838,638	TRUE
Residential	0	4/1/2018	(279,966)	9,192,616	8,912,648	2,613,999	421,995	114,337	(193,872)	0	6,236,157	9,192,616	TRUE
Commercial	2	4/1/2018	230,268	8,531,638	8,761,906	2,683,647	286,860	114,054	(199,453)	0	5,646,510	8,531,638	TRUE
Industrial	4	4/1/2018	174,937	4,072,833	4,247,770	1,527,323	128,368	62,914	(113,061)	0	2,467,289	4,072,833	TRUE
Lighting	15	4/1/2018	0	132,847	132,847	29,777	291	1,257	(2,216)	0	103,738	132,847	TRUE
OPA	16	4/1/2018	81,786	1,593,718	1,675,504	526,797	47,969	22,107	(38,735)	0	1,035,580	1,593,718	TRUE
Residential	0	5/1/2018	750,139	9,225,511	9,975,650	2,263,987	385,310	1,058,577	(168,009)	0	5,705,648	9,225,511	TRUE
Commercial	2	5/1/2018	706,147	9,918,317	10,624,464	2,710,151	289,793	1,254,578	(201,555)	0	5,865,350	9,918,317	TRUE
Industrial	4	5/1/2018	371,605	4,897,148	5,268,751	1,572,561	132,640	714,001	(116,393)	0	2,594,337	4,897,148	TRUE
Lighting	15	5/1/2018	0	144,432	144,432	29,449	246	13,627	(2,192)	0	103,302	144,432	TRUE
OPA	16	5/1/2018	176,325	1,801,713	1,978,038	508,526	46,753	235,825	(37,719)	0	1,047,326	1,801,713	TRUE
Residential	0	6/1/2018	792,224	12,742,886	13,535,110	3,251,112	525,305	1,402,488	(342,065)	298,777	7,906,046	13,041,663	FALSE
Commercial	2	6/1/2018	664,391	11,428,059	12,092,450	3,236,512	346,150	1,398,714	(341,397)	266,511	6,786,080	11,694,570	FALSE
Industrial	4	6/1/2018	58,512	5,296,286	5,354,798	1,721,810	145,464	719,816	(178,410)	112,445	2,887,605	5,408,731	FALSE
Lighting	15	6/1/2018	0	64,982	64,982	9,294	231	11,078	(2,138)	3,905	46,517	68,887	FALSE
OPA	16	6/1/2018	49,096	2,128,380	2,177,476	596,693	56,070	255,968	(62,491)	50,297	1,282,142	2,178,777	FALSE
Residential	0	7/1/2018	(632,639)	15,332,757	14,700,118	3,770,604	609						

Source: MW\_RAC\_044

Bill												
Class	Revcls	Period	Unbilled	Billed	Total	BaseFuel	DSM	FAC	PSM	ESM	BaseRev	TotalBilled
Lighting	15	10/1/2018	0	105,755	105,755	19,743	598	4,014	(935)	10,575	71,760	105,755
OPA	16	10/1/2018	106,453	2,128,530	2,234,983	588,927	109,532	123,510	(34,603)	165,985	1,175,179	2,128,530
Residential	0	11/1/2018	1,819,525	9,781,938	11,581,461	2,397,043	304,926	407,297	(141,486)	572,491	6,221,885	9,781,938
Commercial	2	11/1/2018	(21,324)	9,835,049	9,813,725	2,625,633	551,032	448,383	(155,506)	602,739	5,762,768	9,835,049
Industrial	4	11/1/2018	(49,065)	4,901,539	4,852,474	1,569,314	259,087	260,616	(92,505)	271,381	2,633,646	4,901,539
Lighting	15	11/1/2018	0	178,681	178,681	37,027	892	6,799	(2,376)	11,890	124,649	178,681
OPA	16	11/1/2018	59	1,889,913	1,889,972	538,478	97,371	91,044	(31,629)	112,595	1,082,054	1,889,913
Residential	0	12/1/2018	(7,019,116)	12,609,557	5,590,441	3,256,513	414,458	116,898	(14,414)	886,457	7,949,645	12,609,557
Commercial	2	12/1/2018	(5,137,769)	10,390,781	5,253,012	2,889,738	606,758	104,190	(13,286)	791,419	6,011,962	10,390,781
Industrial	4	12/1/2018	(2,504,461)	4,892,247	2,387,786	1,616,590	270,742	56,629	(7,045)	342,166	2,613,165	4,892,247
Lighting	15	12/1/2018	0	144,479	144,479	29,366	776	1,063	(121)	12,216	101,179	144,479
OPA	16	12/1/2018	(1,296,037)	1,896,831	600,794	557,279	99,707	19,794	(2,420)	141,837	1,080,634	1,896,831
Residential	0	1/1/2019	(64,742)	14,245,202	14,180,460	3,539,081	450,468	642,716	(15,566)	1,111,248	8,517,255	14,245,202
Commercial	2	1/1/2019	(393,472)	10,980,544	10,587,072	2,899,548	610,721	526,982	(12,544)	894,684	6,058,953	10,980,544
Industrial	4	1/1/2019	(253,110)	5,194,449	4,941,339	1,613,829	269,637	287,949	(7,031)	388,738	2,841,327	5,194,449
Lighting	15	1/1/2019	0	150,252	150,252	29,338	796	5,348	(118)	13,727	101,161	150,252
OPA	16	1/1/2019	(89,454)	1,965,633	1,876,179	554,481	100,049	100,328	(2,392)	155,900	1,057,257	1,965,633
Residential	0	2/1/2019	(1,825,527)	13,898,083	12,072,556	3,508,198	446,432	366,722	(15,327)	1,131,936	8,460,122	13,898,083
Commercial	2	2/1/2019	(545,295)	10,692,622	10,147,327	2,798,669	588,925	293,381	(12,246)	937,278	6,086,615	10,692,622
Industrial	4	2/1/2019	(269,627)	4,985,021	4,715,394	1,542,547	255,575	158,317	(6,708)	403,503	2,631,787	4,985,021
Lighting	15	2/1/2019	0	147,026	147,026	28,823	663	3,001	(119)	14,241	100,417	147,026
OPA	16	2/1/2019	(139,837)	1,919,777	1,779,940	537,414	96,097	55,739	(2,328)	164,005	1,068,850	1,919,777
Residential	0	3/1/2019	(580,276)	11,471,832	10,891,556	3,016,541	383,818	(23,454)	(151,059)	773,284	7,472,704	11,471,832
Commercial	2	3/1/2019	196,793	9,578,093	9,774,886	2,641,548	554,049	(20,641)	(132,811)	714,894	5,821,054	9,578,093
Industrial	4	3/1/2019	188,835	4,631,943	4,820,778	1,536,174	255,611	(11,144)	(76,646)	318,891	2,609,057	4,831,943
Lighting	15	3/1/2019	0	138,927	138,927	28,522	600	(216)	(1,428)	11,399	100,050	138,927
OPA	16	3/1/2019	63,847	1,754,034	1,817,881	615,668	92,999	(4,038)	(25,648)	126,065	1,046,988	1,754,034

**Source: PSM Schedule 2**

Asset Energy = Non-native portion of DA Asset Energy (PJM BLI 1200, 1210, 1220) and RT Asset Energy (PJM BLI 1205, 1215, 1225, 1400, 1410, 1420)

<u>Bill Period</u>	<u>Amount</u>	<u>12 Month Average</u>	<u>PSM</u>	
5/1/2017	1,173,611.46		1,173,611.46	0.00
6/1/2017	593,771.89		593,771.89	0.00
7/1/2017	415,058.79		415,058.79	0.00
8/1/2017	447,589.45		447,589.45	0.00
9/1/2017	1,077,979.15		1,077,979.15	0.00
10/1/2017	2,400,518.78		2,400,518.78	0.00
11/1/2017	1,648,921.22		1,648,921.22	0.00
12/1/2017	647,230.19		647,230.19	0.00
1/1/2018	1,989,969.08		1,989,969.08	0.00
2/1/2018	220,839.74		220,839.74	0.00
3/1/2018	58,321.90		58,321.90	0.00
4/1/2018	0.00	889,484.00	0.00	0.00
5/1/2018	0.00	791,683.00	0.00	0.00
6/1/2018	573,409.20	789,986.00	573,409.20	0.00
7/1/2018	1,622,817.60	890,633.00	1,622,817.60	0.00
8/1/2018	466,200.77	892,184.00	466,200.77	0.00
9/1/2018	702,185.38	860,868.00	702,185.38	0.00
10/1/2018	978,400.48	742,358.00	978,400.48	0.00
11/1/2018	1,402,229.61	721,800.00	1,402,229.61	0.00
12/1/2018	1,614,041.23	802,368.00	1,614,041.23	0.00
1/1/2019	722,616.33	696,755.00	722,616.33	0.00
2/1/2019	595,112.90	727,945.00	595,112.90	0.00
3/1/2019	1,285,752.85	830,231.00	1,285,752.85	0.00

**Duke Energy Kentucky  
Case No. 2019-00391  
Staff First Set Data Requests  
Date Received: November 8, 2019**

**STAFF-DR-01-002**

**REQUEST:**

For the period under review, state whether Duke Kentucky believes any additional over- or under-recovery amount needs to be recognized. If so, provide a calculation and propose an amortization period. Provide any schedules and all supporting calculations and documentation in Excel Spreadsheet format, with formulas intact and unprotected and all rows and columns accessible.

**RESPONSE:**

Duke Energy Kentucky does not believe that any additional over- or under-recovery amounts need to be recognized for the period under review. As shown on the bottom of Form 2.00 of each monthly filing, any over-recovery of net jurisdictional E(m) is deducted from the current expense month net jurisdictional E(m) and any under-recovery of net jurisdictional E(m) is added to the current expense month net jurisdictional E(m). This over- or under- recovery is reflected on Line 11 of Form 1.10 of each monthly filing.

**PERSON RESPONSIBLE:** Theodore H. Czupik Jr.

**Duke Energy Kentucky  
Case No. 2019-00391  
Staff First Set Data Requests  
Date Received: November 8, 2019**

**STAFF-DR-01-003**

**REQUEST:**

Provide the actual average residential customer's monthly usage for the 12 months ending May 31, 2019. If Duke Kentucky identified any additional over- or under-recovery in Item 2 above, provide the dollar impact on the average residential customer's monthly bill for the requested amortization period. Provide all supporting calculations in Excel spreadsheet format with all formulas intact and unprotected and all rows and columns accessible.

**RESPONSE:**

The average residential customer used an average of 1,008 kWh per month for the 12 months ending May 2019. As indicated in the response to STAFF-DR-01-002, Duke Energy Kentucky does not believe that there is any additional over- or under-recovery during the review period. Therefore, there is no impact on the bill of the average residential customer.

**PERSON RESPONSIBLE:** Theodore H. Czupik Jr.

**STAFF-DR-01-004**

**REQUEST:**

Refer to ES Form 2.30, Inventory and Expense of Emission Allowances, for each of the expense months covered by the applicable billing period.

- a. For the sulfur dioxide emission allowance inventory, explain the reason(s) for any purchases of allowances reported during these expense months.
- b. For the nitrogen oxide emission allowance inventory, explain the reason(s) for any purchases of allowances reported during these expense months.
- c. For each month in the six-month review period, explain how any purchases of allowances comply with Duke Kentucky's emissions allowance strategy plan.
- d. Provide an explanation for any fluctuations greater than plus or minus 10 percent in the monthly average cost of allowances for each month in the six-month review period.

**RESPONSE:**

- a. Duke Energy Kentucky did not purchase any sulfur dioxide emission allowances during the expense months of the review period. The 25,041 sulfur dioxide emission allowances shown as "Allocations / Purchases" during the expense month of February 2019 were moved from future vintage to current vintage.

- b. Duke Energy Kentucky did not purchase any nitrogen oxide emission allowances during the expense months of the review period. The 3,292 nitrogen oxide emission allowances shown as "Allocations / Purchases" during the expense month of February 2019 were moved from future vintage to current vintage.
- c. Duke Energy Kentucky did not purchase any allowances during the expense months of the review period.
- d. There have not been any fluctuations in the monthly average cost of allowances.

**PERSON RESPONSIBLE:** Theodore H. Czupik Jr.