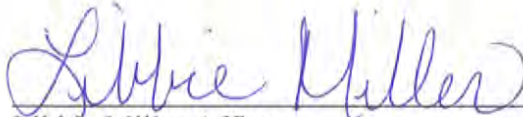


VERIFICATION

STATE OF OHIO)
)
COUNTY OF HAMILTON) SS:

The undersigned, Libbie Miller, Rates & Regulatory Strategy Manager, being duly sworn, deposes and says that she has personal knowledge of the matters set forth in the foregoing revised data request, and that the answers contained therein are true and correct to the best of her knowledge, information, and belief.



Libbie Miller Affiant

Subscribed and sworn to before me by Libbie Miller on this 24th day of December, 2023.



NOTARY PUBLIC

My Commission Expires: July 8, 2027



EMILIE SUNDERMAN
Notary Public
State of Ohio
My Comm. Expires
July 8, 2027

KyPSC Case No. 2023-00374
TABLE OF CONTENTS

<u>DATA REQUEST</u>	<u>WITNESS</u>	<u>TAB NO.</u>
STAFF-DR-01-001	Libbie Miller	1
STAFF-DR-01-002	Libbie Miller	2
STAFF-DR-01-003	Libbie Miller	3
STAFF-DR-01-004	Krista Markel	4
STAFF-DR-01-005	Libbie Miller	5

Duke Energy Kentucky
Case No. 2023-00374
STAFF First Set of Data Requests
Date Received: December 8, 2023

STAFF-DR-01-001

REQUEST:

Provide a summary schedule showing the calculation of E(m) and the surcharge factor for the expense months covered by the billing periods under review. Use ES Form 1.10 as a model for this summary. Include two expense months subsequent to the review period in order to show the over- and under-recovery adjustments for the months included for the billing periods. The summary schedule is to incorporate any corrections or revision 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 all formulas, columns, and rows unprotected and fully accessible.

RESPONSE:

Please 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. Detailed calculations are available in the Excel files provided for each expense month.

The Excel files for the expense months in the review period are attached, please see below:

- STAFF-DR-01-001 Attachment 2 – 042018 DEK ESM Filing for 062018
- STAFF-DR-01-001 Attachment 3 – 052018 DEK ESM Filing for 072018
- STAFF-DR-01-001 Attachment 4 – 062018 DEK ESM Filing for 082018
- STAFF-DR-01-001 Attachment 5 – 072018 DEK ESM Filing for 092018
- STAFF-DR-01-001 Attachment 6 – 082018 DEK ESM Filing for 102018
- STAFF-DR-01-001 Attachment 7 – 092018 DEK ESM Filing for 112018
- STAFF-DR-01-001 Attachment 8 – 102018 DEK ESM Filing for 122018
- STAFF-DR-01-001 Attachment 9 – 112018 DEK ESM Filing for 012019
- STAFF-DR-01-001 Attachment 10 – 122018 DEK ESM Filing for 022019

- STAFF-DR-01-001 Attachment 11 – 012019 DEK ESM Filing for 032019
- STAFF-DR-01-001 Attachment 12 – 022019 DEK ESM Filing for 042019
- STAFF-DR-01-001 Attachment 13 – 032019 DEK ESM Filing for 052019
- STAFF-DR-01-001 Attachment 14 – 042019 DEK ESM Filing for 062019
- STAFF-DR-01-001 Attachment 15 – 052019 DEK ESM Filing for 072019
- STAFF-DR-01-001 Attachment 16 – 062019 DEK ESM Filing for 082019
- STAFF-DR-01-001 Attachment 17 – 072019 DEK ESM Filing for 092019
- STAFF-DR-01-001 Attachment 18 – 082019 DEK ESM Filing for 102019
- STAFF-DR-01-001 Attachment 19 – 092019 DEK ESM Filing for 112019
- STAFF-DR-01-001 Attachment 20 – 102019 DEK ESM Filing for 122019
- STAFF-DR-01-001 Attachment 21 – 112019 DEK ESM Filing for 012020
- STAFF-DR-01-001 Attachment 22 – 122019 DEK ESM Filing for 022020
- STAFF-DR-01-001 Attachment 23 – 012020 DEK ESM Filing for 032020
- STAFF-DR-01-001 Attachment 24 – 022020 DEK ESM Filing for 042020
- STAFF-DR-01-001 Attachment 25 – 032020 DEK ESM Filing for 052020
- STAFF-DR-01-001 Attachment 26 – 042020 DEK ESM Filing for 062020
- STAFF-DR-01-001 Attachment 27 – 052020 DEK ESM Filing for 072020
- STAFF-DR-01-001 Attachment 28 – 062020 DEK ESM Filing for 082020
- STAFF-DR-01-001 Attachment 29 – 072020 DEK ESM Filing for 092020
- STAFF-DR-01-001 Attachment 30 – 082020 DEK ESM Filing for 102020
- STAFF-DR-01-001 Attachment 31 – 092020 DEK ESM Filing for 112020
- STAFF-DR-01-001 Attachment 32 – 102020 DEK ESM Filing for 122020
- STAFF-DR-01-001 Attachment 33 – 112020 DEK ESM Filing for 012021
- STAFF-DR-01-001 Attachment 34 – 122020 DEK ESM Filing for 022021
- STAFF-DR-01-001 Attachment 35 – 012021 DEK ESM Filing for 032021
- STAFF-DR-01-001 Attachment 36 – 022021 DEK ESM Filing for 042021
- STAFF-DR-01-001 Attachment 37 – 032021 DEK ESM Filing for 052021
- STAFF-DR-01-001 Attachment 38 – 042021 DEK ESM Filing for 062021
- STAFF-DR-01-001 Attachment 39 – 052021 DEK ESM Filing for 072021
- STAFF-DR-01-001 Attachment 40 – 062021 DEK ESM Filing for 082021
- STAFF-DR-01-001 Attachment 41 – 072021 DEK ESM Filing for 092021
- STAFF-DR-01-001 Attachment 42 – 082021 DEK ESM Filing for 102021
- STAFF-DR-01-001 Attachment 43 – 092021 DEK ESM Filing for 112021
- STAFF-DR-01-001 Attachment 44 – 102021 DEK ESM Filing for 122021
- STAFF-DR-01-001 Attachment 45 – 112021 DEK ESM Filing for 012022
- STAFF-DR-01-001 Attachment 46 – 122021 DEK ESM Filing for 022022
- STAFF-DR-01-001 Attachment 47 – 012022 DEK ESM Filing for 032022
- STAFF-DR-01-001 Attachment 48 – 022022 DEK ESM Filing for 042022
- STAFF-DR-01-001 Attachment 49 – 032022 DEK ESM Filing for 052022
- STAFF-DR-01-001 Attachment 50 – 042022 DEK ESM Filing for 062022
- STAFF-DR-01-001 Attachment 51 – 052022 DEK ESM Filing for 072022
- STAFF-DR-01-001 Attachment 52 – 062022 DEK ESM Filing for 082022
- STAFF-DR-01-001 Attachment 53 – 072022 DEK ESM Filing for 092022
- STAFF-DR-01-001 Attachment 54 – 082022 DEK ESM Filing for 102022

- STAFF-DR-01-001 Attachment 55 – 092022 DEK ESM Filing for 112022
- STAFF-DR-01-001 Attachment 56 – 102022 DEK ESM Filing for 122022
- STAFF-DR-01-001 Attachment 57 – 112022 DEK ESM Filing for 012023
- STAFF-DR-01-001 Attachment 58 – 122022 DEK ESM Filing for 022023
- STAFF-DR-01-001 Attachment 59 – 012023 DEK ESM Filing for 032023
- STAFF-DR-01-001 Attachment 60 – 022023 DEK ESM Filing for 042023
- STAFF-DR-01-001 Attachment 61 – 032023 DEK ESM Filing for 052023
- STAFF-DR-01-001 Attachment 62 – 042023 DEK ESM Filing for 062023
- STAFF-DR-01-001 Attachment 63 – 052023 DEK ESM Filing for 072023

PERSON RESPONSIBLE: Libbie S. Miller

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

Calculation of Current Month Environmental Surcharge Factors

Summary of Environmental Compliance Plans

Line No.	E(m) = RORB + OE - EAS + Prior Period Adjustment + (Over)/Under Recovery	Source	Expense Month					
			April 2018	May 2018	June 2018	July 2018	August 2018	
1	Environmental Compliance Rate Base (RB)	ES Form 2.00	\$ 21,981,161	\$ 23,672,358	\$ 27,774,098	\$ 29,432,481	\$ 32,024,247	
2	RB ÷ 12 months	(1) ÷ 12	\$ 1,831,763	\$ 1,972,697	\$ 2,314,508	\$ 2,452,707	\$ 2,668,687	
3	Pretax Rate of Return (ROR)	ES Form 1.20	8.446%	8.446%	8.446%	8.446%	8.446%	
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 154,711	\$ 166,614	\$ 195,483	\$ 207,156	\$ 225,397	
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 553,042	\$ 640,224	\$ 1,308,251	\$ 2,103,578	\$ 2,261,065	
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -	\$ -	\$ -	\$ -	\$ -	
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 707,753	\$ 806,838	\$ 1,503,734	\$ 2,310,734	\$ 2,486,462	
8	Jurisdictional Allocation Ratio for Expense Month	Line 17	96.62%	97.05%	97.21%	96.82%	96.82%	
9	Jurisdictional E(m)	(7) x (8)	\$ 683,831	\$ 783,036	\$ 1,461,780	\$ 2,237,252	\$ 2,407,393	
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -	\$ -	\$ -	\$ -	\$ -	
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ -	\$ -	\$ (48,104)	\$ (114,679)	\$ (126,942)	
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 683,831	\$ 783,036	\$ 1,413,676	\$ 2,122,573	\$ 2,280,451	
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 23,922	\$ 23,802	\$ 41,954	\$ 73,482	\$ 79,069	
14	<u>Revenues as a Percentage of 12 Month Average Total Revenues</u>							
15	Residential	ES Form 3.00	41.19%	41.11%	41.16%	41.20%	41.13%	
16	Non-Residential	ES Form 3.00	58.81%	58.89%	58.84%	58.80%	58.87%	
17	<u>Adjusted Jurisdictional E(m) - Allocated</u>							
18	Residential	(12) * (15)	\$ 281,670	\$ 321,906	\$ 581,869	\$ 874,500	\$ 937,949	
19	Non-Residential	(12) * (16)	\$ 402,161	\$ 461,130	\$ 831,807	\$ 1,248,073	\$ 1,342,502	
20	<u>R(m)</u>							
21	Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue)	ES Form 3.00	\$ 10,564,768	\$ 10,707,867	\$ 10,964,843	\$ 11,155,450	\$ 11,146,170	
22	Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM)	ES Form 3.00	\$ 10,076,152	\$ 10,084,650	\$ 10,132,179	\$ 10,159,697	\$ 10,162,293	
23	<u>Environmental Surcharge Billing Factor</u>							
24	Residential	(18) / (21)	2.67%	3.01%	5.31%	7.84%	8.41%	
25	Non-Residential	(19) / (22)	3.99%	4.57%	8.21%	12.28%	13.21%	

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

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

Calculation of Current Month Environmental Surcharge Factors

[Summary of Environmental Compliance Plans](#)

<u>Line No.</u>	<u>E(m) = RORB + OE - EAS + Prior Period Adjustment + (Over)/Under Recovery</u>	<u>Source</u>	<u>September 2018</u>
1	Environmental Compliance Rate Base (RB)	ES Form 2.00	\$ 35,134,603
2	RB ÷ 12 months	(1) ÷ 12	\$ 2,927,884
3	Pretax Rate of Return (ROR)	ES Form 1.20	8.446%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 247,289
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 1,742,670
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 1,989,959
8	Jurisdictional Allocation Ratio for Expense Month	Line 17	96.93%
9	Jurisdictional E(m)	(7) x (8)	\$ 1,928,868
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ (229,157)
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 1,699,711
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 61,091
14	<u>Revenues as a Percentage of 12 Month Average Total Revenues</u>		
15	Residential	ES Form 3.00	41.33%
16	Non-Residential	ES Form 3.00	58.67%
17	<u>Adjusted Jurisdictional E(m) - Allocated</u>		
18	Residential	(12) * (15)	\$ 702,491
19	Non-Residential	(12) * (16)	\$ 997,220
20	<u>R(m)</u>		
21	Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue)	ES Form 3.00	\$ 11,316,510
22	Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM)	ES Form 3.00	\$ 10,212,770
23	<u>Environmental Surcharge Billing Factor</u>		
24	Residential	(18) / (21)	6.21%
25	Non-Residential	(19) / (22)	9.76%

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

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

Calculation of Current Month Environmental Surcharge Factors

Summary of Environmental Compliance Plans

Line No.	E(m) = RORB + OE - EAS + Prior Period Adjustment + (Over)/Under Recovery	Source	Expense Month					
			October 2018	November 2018	December 2018	January 2019	February 2019	
1	Environmental Compliance Rate Base (RB)	ES Form 2.00	\$ 35,579,059	\$ 37,128,715	\$ 37,099,972	\$ 37,725,269	\$ 38,199,497	
2	RB ÷ 12 months	(1) ÷ 12	\$ 2,964,922	\$ 3,094,060	\$ 3,091,664	\$ 3,143,772	\$ 3,183,291	
3	Pretax Rate of Return (ROR)	ES Form 1.20	8.446%	8.446%	8.446%	8.446%	8.446%	
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 250,417	\$ 261,324	\$ 261,122	\$ 265,523	\$ 268,861	
5	Environmental Operating Expenses (OE)	ES Form 2.00 +	\$ 1,914,960	\$ 2,029,144	\$ 2,384,373	\$ 2,013,699	\$ 2,219,184	
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00 -	\$ -	\$ -	\$ -	\$ -	\$ -	
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 2,165,377	\$ 2,290,468	\$ 2,645,495	\$ 2,279,222	\$ 2,488,045	
8	Jurisdictional Allocation Ratio for Expense Month	Line 17	97.33%	97.37%	97.09%	97.39%	97.42%	
9	Jurisdictional E(m)	(7) x (8)	\$ 2,107,561	\$ 2,230,229	\$ 2,568,511	\$ 2,219,734	\$ 2,423,853	
10	Prior Period Adjustment (if necessary)	(A) +	\$ -	\$ -	\$ -	\$ -	\$ -	
11	Adjustment for (Over)/Under Recovery	ES Form 2.00 +	\$ (12,363)	\$ 128,615	\$ (78,897)	\$ (205,653)	\$ (161,349)	
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 2,095,198	\$ 2,358,844	\$ 2,489,614	\$ 2,014,081	\$ 2,262,504	
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 57,816	\$ 60,239	\$ 76,984	\$ 59,488	\$ 64,192	
14	<u>Revenues as a Percentage of 12 Month Average Total Revenues</u>							
15	Residential	ES Form 3.00	41.21%	41.15%	41.14%	40.53%	40.53%	
16	Non-Residential	ES Form 3.00	58.79%	58.85%	58.86%	59.47%	59.47%	
17	<u>Adjusted Jurisdictional E(m) - Allocated</u>							
18	Residential	(12) * (15)	\$ 863,431	\$ 970,664	\$ 1,024,227	\$ 816,307	\$ 916,993	
19	Non-Residential	(12) * (16)	\$ 1,231,767	\$ 1,388,180	\$ 1,465,387	\$ 1,197,774	\$ 1,345,511	
20	<u>R(m)</u>							
21	Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue)	ES Form 3.00	\$ 11,437,455	\$ 11,487,883	\$ 11,574,282	\$ 11,329,337	\$ 11,414,436	
22	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	
23	<u>Environmental Surcharge Billing Factor</u>							
24	Residential	(18) / (21)	7.55%	8.45%	8.85%	7.21%	8.03%	
25	Non-Residential	(19) / (22)	11.99%	13.44%	14.07%	11.45%	12.77%	

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

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

Calculation of Current Month Environmental Surcharge Factors

Summary of Environmental Compliance Plans

<u>Line No.</u>	<u>E(m) = RORB + OE - EAS + Prior Period Adjustment + (Over)/Under Recovery</u>	<u>Source</u>	<u>March 2019</u>
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 17	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
14	<u>Revenues as a Percentage of 12 Month Average Total Revenues</u>		
15	Residential	ES Form 3.00	40.68%
16	Non-Residential	ES Form 3.00	59.32%
17	<u>Adjusted Jurisdictional E(m) - Allocated</u>		
18	Residential	(12) * (15)	\$ 1,082,123
19	Non-Residential	(12) * (16)	\$ 1,577,964
20	<u>R(m)</u>		
21	Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue)	ES Form 3.00	\$ 11,497,201
22	Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM)	ES Form 3.00	\$ 10,620,061
23	<u>Environmental Surcharge Billing Factor</u>		
24	Residential	(18) / (21)	9.41%
25	Non-Residential	(19) / (22)	14.86%

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

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

Calculation of Current Month Environmental Surcharge Factors

Summary of Environmental Compliance Plans

Line No.	E(m) = RORB + OE - EAS + Prior Period Adjustment + (Over)/Under Recovery	Source	Expense Month					
			April 2019	May 2019	June 2019	July 2019	August 2019	
1	Environmental Compliance Rate Base (RB)	ES Form 2.00	\$ 40,448,174	\$ 41,423,724	\$ 42,653,919	\$ 45,064,757	\$ 47,240,866	
2	RB ÷ 12 months	(1) ÷ 12	\$ 3,370,681	\$ 3,451,977	\$ 3,554,493	\$ 3,755,396	\$ 3,936,739	
3	Pretax Rate of Return (ROR)	ES Form 1.20	8.446%	8.446%	8.446%	8.446%	8.446%	
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 284,688	\$ 291,554	\$ 300,212	\$ 317,181	\$ 332,497	
5	Environmental Operating Expenses (OE)	ES Form 2.00 +	\$ 2,636,180	\$ 2,899,513	\$ 3,068,519	\$ 3,122,911	\$ 2,218,294	
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00 -	\$ -	\$ -	\$ -	\$ -	\$ -	
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 2,920,868	\$ 3,191,067	\$ 3,368,731	\$ 3,440,092	\$ 2,550,791	
8	Jurisdictional Allocation Ratio for Expense Month	Line 17	97.20%	96.97%	96.93%	97.10%	97.11%	
9	Jurisdictional E(m)	(7) x (8)	\$ 2,839,084	\$ 3,094,378	\$ 3,265,311	\$ 3,340,329	\$ 2,477,073	
10	Prior Period Adjustment (if necessary)	(A) +	\$ -	\$ (1,885,759)	\$ (1,805,080)	\$ (1,805,080)	\$ -	
11	Adjustment for (Over)/Under Recovery	ES Form 2.00 +	\$ 267,920	\$ 395,017	\$ 355	\$ (255,592)	\$ (122,124)	
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 3,107,004	\$ 1,603,636	\$ 1,460,586	\$ 1,279,657	\$ 2,354,949	
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 81,784	\$ 96,689	\$ 103,420	\$ 99,763	\$ 73,718	
14	<u>Revenues as a Percentage of 12 Month Average Total Revenues</u>							
15	Residential	ES Form 3.00	40.50%	40.45%	40.14%	39.92%	39.87%	
16	Non-Residential	ES Form 3.00	59.50%	59.55%	59.86%	60.08%	60.13%	
17	<u>Adjusted Jurisdictional E(m) - Allocated</u>							
18	Residential	(12) * (15)	\$ 1,258,337	\$ 648,671	\$ 586,279	\$ 510,839	\$ 938,918	
19	Non-Residential	(12) * (16)	\$ 1,848,667	\$ 954,965	\$ 874,307	\$ 768,818	\$ 1,416,031	
20	<u>R(m)</u>							
21	Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue)	ES Form 3.00	\$ 11,455,973	\$ 11,344,727	\$ 11,145,185	\$ 10,965,259	\$ 10,929,700	
22	Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM)	ES Form 3.00	\$ 10,685,000	\$ 10,745,168	\$ 10,764,919	\$ 10,862,354	\$ 10,950,909	
23	<u>Environmental Surcharge Billing Factor</u>							
24	Residential	(18) / (21)	10.98%	5.72%	5.26%	4.66%	8.59%	
25	Non-Residential	(19) / (22)	17.30%	8.89%	8.12%	7.08%	12.93%	

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

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

Calculation of Current Month Environmental Surcharge Factors

Summary of Environmental Compliance Plans

Line No.	E(m) = RORB + OE - EAS + Prior Period Adjustment + (Over)/Under Recovery	Source	Expense Month					
			September 2019	October 2019	November 2019	December 2019	January 2020	
1	Environmental Compliance Rate Base (RB)	ES Form 2.00	\$ 51,650,762	\$ 56,374,664	\$ 59,187,736	\$ 62,436,439	\$ 63,311,794	
2	RB ÷ 12 months	(1) ÷ 12	\$ 4,304,230	\$ 4,697,889	\$ 4,932,311	\$ 5,203,037	\$ 5,275,983	
3	Pretax Rate of Return (ROR)	ES Form 1.20	8.446%	8.446%	8.446%	8.446%	8.446%	
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 363,535	\$ 396,784	\$ 416,583	\$ 439,449	\$ 445,610	
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 1,577,093	\$ 669,937	\$ 858,672	\$ 1,843,959	\$ 1,504,266	
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -	\$ -	\$ -	\$ -	\$ -	
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 1,940,628	\$ 1,066,721	\$ 1,275,255	\$ 2,283,408	\$ 1,949,876	
8	Jurisdictional Allocation Ratio for Expense Month	Line 17	96.98%	97.24%	97.63%	97.90%	98.02%	
9	Jurisdictional E(m)	(7) x (8)	\$ 1,882,021	\$ 1,037,280	\$ 1,245,031	\$ 2,235,456	\$ 1,911,268	
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -	\$ -	\$ -	\$ -	\$ -	
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ (103,250)	\$ 27,057	\$ 224,197	\$ (37,795)	\$ (57,501)	
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 1,778,771	\$ 1,064,337	\$ 1,469,228	\$ 2,197,661	\$ 1,853,767	
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 58,607	\$ 29,441	\$ 30,224	\$ 47,952	\$ 38,608	
14	<u>Revenues as a Percentage of 12 Month Average Total Revenues</u>							
15	Residential	ES Form 3.00	39.73%	39.60%	39.46%	39.28%	39.04%	
16	Non-Residential	ES Form 3.00	60.27%	60.40%	60.54%	60.72%	60.96%	
17	<u>Adjusted Jurisdictional E(m) - Allocated</u>							
18	Residential	(12) * (15)	\$ 706,706	\$ 421,477	\$ 579,757	\$ 863,241	\$ 723,711	
19	Non-Residential	(12) * (16)	\$ 1,072,065	\$ 642,860	\$ 889,471	\$ 1,334,420	\$ 1,130,056	
20	<u>R(m)</u>							
21	Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue)	ES Form 3.00	\$ 10,886,958	\$ 10,844,863	\$ 10,763,176	\$ 10,813,485	\$ 10,768,718	
22	Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM)	ES Form 3.00	\$ 10,997,970	\$ 11,078,771	\$ 11,078,631	\$ 11,070,346	\$ 11,046,646	
23	<u>Environmental Surcharge Billing Factor</u>							
24	Residential	(18) / (21)	6.49%	3.89%	5.39%	7.98%	6.72%	
25	Non-Residential	(19) / (22)	9.75%	5.80%	8.03%	12.05%	10.23%	

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

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

Calculation of Current Month Environmental Surcharge Factors

Summary of Environmental Compliance Plans

Line No.	E(m) = RORB + OE - EAS + Prior Period Adjustment + (Over)/Under Recovery	Source	Expense					
			February 2020	March 2020	April 2020	May 2020	June 2020	
1	Environmental Compliance Rate Base (RB)	ES Form 2.00	\$ 63,702,395	\$ 63,555,476	\$ 63,691,663	\$ 63,724,831	\$ 63,619,777	
2	RB ÷ 12 months	(1) ÷ 12	\$ 5,308,533	\$ 5,296,290	\$ 5,307,639	\$ 5,310,403	\$ 5,301,648	
3	Pretax Rate of Return (ROR)	ES Form 1.20	8.446%	8.446%	7.905%	7.905%	7.905%	
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 448,359	\$ 447,325	\$ 419,569	\$ 419,787	\$ 419,095	
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 1,058,108	\$ 1,370,063	\$ 521,123	\$ 507,284	\$ 1,795,787	
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -	\$ -	\$ -	\$ -	\$ -	
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 1,506,467	\$ 1,817,388	\$ 940,692	\$ 927,071	\$ 2,214,882	
8	Jurisdictional Allocation Ratio for Expense Month	Line 17	98.16%	98.45%	98.60%	98.85%	98.91%	
9	Jurisdictional E(m)	(7) x (8)	\$ 1,478,748	\$ 1,789,218	\$ 927,523	\$ 916,410	\$ 2,190,739	
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -	\$ -	\$ -	\$ -	\$ -	
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ 142,292	\$ 153,853	\$ 279,474	\$ 387,049	\$ (14,440)	
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 1,621,040	\$ 1,943,071	\$ 1,206,997	\$ 1,303,459	\$ 2,176,299	
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 27,719	\$ 28,170	\$ 13,169	\$ 10,661	\$ 24,143	
14	<u>Revenues as a Percentage of 12 Month Average Total Revenues</u>							
15	Residential	ES Form 3.00	38.72%	38.51%	38.62%	39.02%	39.46%	
16	Non-Residential	ES Form 3.00	61.28%	61.49%	61.38%	60.98%	60.54%	
17	<u>Adjusted Jurisdictional E(m) - Allocated</u>							
18	Residential	(12) * (15)	\$ 627,667	\$ 748,277	\$ 466,142	\$ 508,610	\$ 858,768	
19	Non-Residential	(12) * (16)	\$ 993,373	\$ 1,194,794	\$ 740,855	\$ 794,849	\$ 1,317,531	
20	<u>R(m)</u>							
21	Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue)	ES Form 3.00	\$ 10,548,229	\$ 10,457,363	\$ 10,431,514	\$ 10,475,102	\$ 10,527,115	
22	Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM)	ES Form 3.00	\$ 11,008,686	\$ 11,010,314	\$ 10,940,442	\$ 10,799,315	\$ 10,761,696	
23	<u>Environmental Surcharge Billing Factor</u>							
24	Residential	(18) / (21)	5.95%	7.16%	4.47%	4.86%	8.16%	
25	Non-Residential	(19) / (22)	9.02%	10.85%	6.77%	7.36%	12.24%	

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

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

Calculation of Current Month Environmental Surcharge Factors

Summary of Environmental Compliance Plans

Line No.	E(m) = RORB + OE - EAS + Prior Period Adjustment + (Over)/Under Recovery	Source	Month					
			July 2020	August 2020	September 2020	October 2020	November 2020	
1	Environmental Compliance Rate Base (RB)	ES Form 2.00	\$ 63,476,421	\$ 61,257,898	\$ 61,513,066	\$ 61,368,526	\$ 61,223,965	
2	RB ÷ 12 months	(1) ÷ 12	\$ 5,289,702	\$ 5,104,825	\$ 5,126,089	\$ 5,114,044	\$ 5,101,997	
3	Pretax Rate of Return (ROR)	ES Form 1.20	7.905%	7.905%	7.905%	7.905%	7.905%	
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 418,151	\$ 403,536	\$ 405,217	\$ 404,265	\$ 403,313	
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 2,161,384	\$ 1,934,781	\$ 1,553,858	\$ 649,434	\$ 1,104,648	
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -	\$ -	\$ -	\$ -	\$ -	
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 2,579,535	\$ 2,338,317	\$ 1,959,075	\$ 1,053,699	\$ 1,507,961	
8	Jurisdictional Allocation Ratio for Expense Month	Line 17	98.95%	98.93%	99.18%	99.17%	99.14%	
9	Jurisdictional E(m)	(7) x (8)	\$ 2,552,450	\$ 2,313,297	\$ 1,943,010	\$ 1,044,953	\$ 1,494,993	
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -	\$ (380,992)	\$ -	\$ 222,247	\$ -	
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ (222,017)	\$ (296,067)	\$ (277,325)	\$ 165,940	\$ 188,830	
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 2,330,433	\$ 1,636,238	\$ 1,665,685	\$ 1,433,140	\$ 1,683,823	
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 27,085	\$ 25,020	\$ 16,065	\$ 8,746	\$ 12,968	
14	<u>Revenues as a Percentage of 12 Month Average Total Revenues</u>							
15	Residential	ES Form 3.00	39.80%	40.08%	40.27%	40.40%	40.61%	
16	Non-Residential	ES Form 3.00	60.20%	59.92%	59.73%	59.60%	59.39%	
17	<u>Adjusted Jurisdictional E(m) - Allocated</u>							
18	Residential	(12) * (15)	\$ 927,512	\$ 655,804	\$ 670,771	\$ 578,989	\$ 683,801	
19	Non-Residential	(12) * (16)	\$ 1,402,921	\$ 980,434	\$ 994,914	\$ 854,151	\$ 1,000,022	
20	<u>R(m)</u>							
21	Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue)	ES Form 3.00	\$ 10,572,557	\$ 10,645,247	\$ 10,706,841	\$ 10,620,612	\$ 10,640,943	
22	Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM)	ES Form 3.00	\$ 10,715,490	\$ 10,698,642	\$ 10,667,495	\$ 10,527,714	\$ 10,517,152	
23	<u>Environmental Surcharge Billing Factor</u>							
24	Residential	(18) / (21)	8.77%	6.16%	6.26%	5.45%	6.43%	
25	Non-Residential	(19) / (22)	13.09%	9.16%	9.33%	8.11%	9.51%	

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

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

Calculation of Current Month Environmental Surcharge Factors

Summary of Environmental Compliance Plans

Line No.	E(m) = RORB + OE - EAS + Prior Period Adjustment + (Over)/Under Recovery	Source	Expense Month					
			December 2020	January 2021	February 2021	March 2021	April 2021	
1	Environmental Compliance Rate Base (RB)	ES Form 2.00	\$ 61,079,347	\$ 60,909,021	\$ 60,738,685	\$ 60,568,351	\$ 60,398,019	
2	RB ÷ 12 months	(1) ÷ 12	\$ 5,089,946	\$ 5,075,752	\$ 5,061,557	\$ 5,047,363	\$ 5,033,168	
3	Pretax Rate of Return (ROR)	ES Form 1.20	7.905%	7.905%	7.905%	7.905%	7.905%	
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 402,360	\$ 401,238	\$ 400,116	\$ 398,994	\$ 397,872	
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 2,687,904	\$ 1,758,145	\$ 2,035,004	\$ 2,007,830	\$ 1,635,699	
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -	\$ -	\$ -	\$ -	\$ -	
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 3,090,264	\$ 2,159,383	\$ 2,435,120	\$ 2,406,824	\$ 2,033,571	
8	Jurisdictional Allocation Ratio for Expense Month	Line 17	98.67%	98.44%	98.07%	97.89%	97.49%	
9	Jurisdictional E(m)	(7) x (8)	\$ 3,049,163	\$ 2,125,697	\$ 2,388,122	\$ 2,356,040	\$ 1,982,528	
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -	\$ -	\$ -	\$ -	\$ -	
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ (91,835)	\$ (212,262)	\$ (244,512)	\$ 22,632	\$ 190,336	
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 2,957,328	\$ 1,913,435	\$ 2,143,610	\$ 2,378,672	\$ 2,172,864	
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 41,101	\$ 33,686	\$ 46,998	\$ 50,784	\$ 51,043	
14	<u>Revenues as a Percentage of 12 Month Average Total Revenues</u>							
15	Residential	ES Form 3.00	40.89%	41.45%	42.04%	42.37%	42.30%	
16	Non-Residential	ES Form 3.00	59.11%	58.55%	57.96%	57.63%	57.70%	
17	<u>Adjusted Jurisdictional E(m) - Allocated</u>							
18	Residential	(12) * (15)	\$ 1,209,251	\$ 793,119	\$ 901,174	\$ 1,007,843	\$ 919,121	
19	Non-Residential	(12) * (16)	\$ 1,748,077	\$ 1,120,316	\$ 1,242,436	\$ 1,370,829	\$ 1,253,743	
20	<u>R(m)</u>							
21	Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue)	ES Form 3.00	\$ 10,630,970	\$ 10,735,346	\$ 10,993,693	\$ 11,108,072	\$ 11,152,574	
22	Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM)	ES Form 3.00	\$ 10,506,069	\$ 10,505,187	\$ 10,515,235	\$ 10,469,933	\$ 10,540,183	
23	<u>Environmental Surcharge Billing Factor</u>							
24	Residential	(18) / (21)	11.37%	7.39%	8.20%	9.07%	8.24%	
25	Non-Residential	(19) / (22)	16.64%	10.66%	11.82%	13.09%	11.89%	

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

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

Calculation of Current Month Environmental Surcharge Factors

Summary of Environmental Compliance Plans

Line No.	E(m) = RORB + OE - EAS + Prior Period Adjustment + (Over)/Under Recovery	Source	Expense Month					
			May 2021	June 2021	July 2021	August 2021	September 2021	
1	Environmental Compliance Rate Base (RB)	ES Form 2.00	\$ 60,227,663	\$ 60,057,277	\$ 59,886,890	\$ 59,716,513	\$ 59,546,141	
2	RB ÷ 12 months	(1) ÷ 12	\$ 5,018,972	\$ 5,004,773	\$ 4,990,574	\$ 4,976,376	\$ 4,962,178	
3	Pretax Rate of Return (ROR)	ES Form 1.20	7.905%	7.905%	7.905%	7.905%	7.905%	
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 396,750	\$ 395,627	\$ 394,505	\$ 393,383	\$ 392,260	
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 1,783,691	\$ 2,135,431	\$ 2,055,586	\$ 1,616,977	\$ 874,094	
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -	\$ -	\$ -	\$ -	\$ -	
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 2,180,441	\$ 2,531,058	\$ 2,450,091	\$ 2,010,360	\$ 1,266,354	
8	Jurisdictional Allocation Ratio for Expense Month	Line 17	97.03%	96.86%	97.04%	96.92%	96.92%	
9	Jurisdictional E(m)	(7) x (8)	\$ 2,115,682	\$ 2,451,583	\$ 2,377,568	\$ 1,948,441	\$ 1,227,350	
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -	\$ -	\$ -	\$ -	\$ -	
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ 277,339	\$ (96,845)	\$ (429,508)	\$ (371,083)	\$ (319,100)	
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 2,393,021	\$ 2,354,738	\$ 1,948,060	\$ 1,577,358	\$ 908,250	
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 64,759	\$ 79,475	\$ 72,523	\$ 61,919	\$ 39,004	
14	<u>Revenues as a Percentage of 12 Month Average Total Revenues</u>							
15	Residential	ES Form 3.00	42.15%	42.15%	42.14%	42.23%	42.40%	
16	Non-Residential	ES Form 3.00	57.85%	57.85%	57.86%	57.77%	57.60%	
17	<u>Adjusted Jurisdictional E(m) - Allocated</u>							
18	Residential	(12) * (15)	\$ 1,008,658	\$ 992,522	\$ 820,912	\$ 666,118	\$ 385,098	
19	Non-Residential	(12) * (16)	\$ 1,384,363	\$ 1,362,216	\$ 1,127,148	\$ 911,240	\$ 523,152	
20	<u>R(m)</u>							
21	Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue)	ES Form 3.00	\$ 11,202,031	\$ 11,260,692	\$ 11,336,023	\$ 11,441,763	\$ 11,573,605	
22	Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM)	ES Form 3.00	\$ 10,626,015	\$ 10,643,126	\$ 10,635,821	\$ 10,636,276	\$ 10,652,865	
23	<u>Environmental Surcharge Billing Factor</u>							
24	Residential	(18) / (21)	9.00%	8.81%	7.24%	5.82%	3.33%	
25	Non-Residential	(19) / (22)	13.03%	12.80%	10.60%	8.57%	4.91%	

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

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

Calculation of Current Month Environmental Surcharge Factors

Summary of Environmental Compliance Plans

Line No.	E(m) = RORB + OE - EAS + Prior Period Adjustment + (Over)/Under Recovery	Source	Expense Month					
			October 2021	November 2021	December 2021	January 2022	February 2022	
1	Environmental Compliance Rate Base (RB)	ES Form 2.00	\$ 59,375,936	\$ 59,205,658	\$ 59,035,372	\$ 58,736,165	\$ 58,561,104	
2	RB ÷ 12 months	(1) ÷ 12	\$ 4,947,995	\$ 4,933,805	\$ 4,919,614	\$ 4,894,680	\$ 4,880,092	
3	Pretax Rate of Return (ROR)	ES Form 1.20	7.905%	7.905%	7.905%	7.905%	7.905%	
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 391,139	\$ 390,017	\$ 388,895	\$ 386,924	\$ 385,771	
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 437,295	\$ 412,317	\$ 646,817	\$ 1,346,411	\$ 2,673,836	
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -	\$ -	\$ -	\$ -	\$ -	
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 828,434	\$ 802,334	\$ 1,035,712	\$ 1,733,335	\$ 3,059,607	
8	Jurisdictional Allocation Ratio for Expense Month	Line 17	96.93%	96.98%	97.26%	97.54%	97.83%	
9	Jurisdictional E(m)	(7) x (8)	\$ 803,001	\$ 778,104	\$ 1,007,333	\$ 1,690,695	\$ 2,993,214	
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -	\$ -	\$ -	\$ -	\$ -	
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ 93,301	\$ 49,948	\$ (104,585)	\$ (238,487)	\$ (193,993)	
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 896,302	\$ 828,052	\$ 902,748	\$ 1,452,208	\$ 2,799,221	
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 25,433	\$ 24,230	\$ 28,379	\$ 42,640	\$ 66,393	
14	<u>Revenues as a Percentage of 12 Month Average Total Revenues</u>							
15	Residential	ES Form 3.00	42.60%	42.60%	42.62%	42.82%	43.03%	
16	Non-Residential	ES Form 3.00	57.40%	57.40%	57.38%	57.18%	56.97%	
17	<u>Adjusted Jurisdictional E(m) - Allocated</u>							
18	Residential	(12) * (15)	\$ 381,825	\$ 352,750	\$ 384,751	\$ 621,835	\$ 1,204,505	
19	Non-Residential	(12) * (16)	\$ 514,477	\$ 475,302	\$ 517,997	\$ 830,373	\$ 1,594,716	
20	<u>R(m)</u>							
21	Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue)	ES Form 3.00	\$ 11,700,594	\$ 11,930,444	\$ 12,204,152	\$ 12,775,625	\$ 13,269,497	
22	Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM)	ES Form 3.00	\$ 10,672,705	\$ 10,647,233	\$ 10,614,090	\$ 10,583,486	\$ 10,579,616	
23	<u>Environmental Surcharge Billing Factor</u>							
24	Residential	(18) / (21)	3.26%	2.96%	3.15%	4.87%	9.08%	
25	Non-Residential	(19) / (22)	4.82%	4.46%	4.88%	7.85%	15.07%	

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

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

Calculation of Current Month Environmental Surcharge Factors

Summary of Environmental Compliance Plans

Line No.	E(m) = RORB + OE - EAS + Prior Period Adjustment + (Over)/Under Recovery	Source	Expense Month					
			March 2022	April 2022	May 2022	June 2022	July 2022	
1	Environmental Compliance Rate Base (RB)	ES Form 2.00	\$ 58,386,105	\$ 58,211,159	\$ 58,036,145	\$ 57,860,995	\$ 57,680,537	
2	RB ÷ 12 months	(1) ÷ 12	\$ 4,865,509	\$ 4,850,930	\$ 4,836,345	\$ 4,821,750	\$ 4,806,711	
3	Pretax Rate of Return (ROR)	ES Form 1.20	7.905%	7.905%	7.905%	7.905%	7.905%	
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 384,618	\$ 383,466	\$ 382,313	\$ 381,159	\$ 379,971	
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 2,271,237	\$ 1,707,449	\$ 2,382,451	\$ 2,632,315	\$ 2,334,912	
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -	\$ -	\$ -	\$ 2,584,475	\$ -	
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 2,655,855	\$ 2,090,915	\$ 2,764,764	\$ 428,999	\$ 2,714,883	
8	Jurisdictional Allocation Ratio for Expense Month	Line 17	97.81%	97.86%	97.57%	96.96%	97.01%	
9	Jurisdictional E(m)	(7) x (8)	\$ 2,597,691	\$ 2,046,169	\$ 2,697,580	\$ 415,957	\$ 2,633,708	
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -	\$ -	\$ -	\$ 2,237	\$ -	
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ 150,057	\$ 960,109	\$ 311,404	\$ 582,615	\$ (1,642,240)	
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 2,747,748	\$ 3,006,278	\$ 3,008,984	\$ 1,000,809	\$ 991,468	
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 58,164	\$ 44,746	\$ 67,184	\$ 13,042	\$ 81,175	
14	<u>Revenues as a Percentage of 12 Month Average Total Revenues</u>							
15	Residential	ES Form 3.00	43.09%	44.20%	44.33%	46.00%	44.44%	
16	Non-Residential	ES Form 3.00	56.91%	55.80%	55.67%	54.00%	55.56%	
17	<u>Adjusted Jurisdictional E(m) - Allocated</u>							
18	Residential	(12) * (15)	\$ 1,184,005	\$ 1,328,775	\$ 1,333,883	\$ 460,372	\$ 440,608	
19	Non-Residential	(12) * (16)	\$ 1,563,743	\$ 1,677,503	\$ 1,675,101	\$ 540,437	\$ 550,860	
20	<u>R(m)</u>							
21	Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue)	ES Form 3.00	\$ 13,276,617	\$ 13,456,112	\$ 13,593,772	\$ 13,978,747	\$ 14,200,838	
22	Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM)	ES Form 3.00	\$ 10,548,050	\$ 10,155,496	\$ 9,976,457	\$ 9,451,001	\$ 10,038,423	
23	<u>Environmental Surcharge Billing Factor</u>							
24	Residential	(18) / (21)	8.92%	9.87%	9.81%	3.29%	3.10%	
25	Non-Residential	(19) / (22)	14.82%	16.52%	16.79%	5.72%	5.49%	

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

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

Calculation of Current Month Environmental Surcharge Factors

Summary of Environmental Compliance Plans

Line No.	E(m) = RORB + OE - EAS + Prior Period Adjustment + (Over)/Under Recovery	Source	Expense					
			August 2022	September 2022	October 2022	November 2022	December 2022	
1	Environmental Compliance Rate Base (RB)	ES Form 2.00	\$ 57,511,023	\$ 57,336,010	\$ 57,161,054	\$ 56,986,036	\$ 56,811,006	
2	RB ÷ 12 months	(1) ÷ 12	\$ 4,792,585	\$ 4,778,001	\$ 4,763,421	\$ 4,748,836	\$ 4,734,251	
3	Pretax Rate of Return (ROR)	ES Form 1.20	7.905%	7.905%	7.905%	7.905%	7.905%	
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 378,854	\$ 377,701	\$ 376,548	\$ 375,395	\$ 374,243	
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 1,827,117	\$ 2,403,754	\$ 2,183,393	\$ 3,384,845	\$ 3,977,862	
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -	\$ 2,345,000	\$ -	\$ -	\$ -	
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 2,205,971	\$ 436,455	\$ 2,559,941	\$ 3,760,240	\$ 4,352,105	
8	Jurisdictional Allocation Ratio for Expense Month	Line 17	97.17%	97.15%	97.11%	96.98%	94.23%	
9	Jurisdictional E(m)	(7) x (8)	\$ 2,143,542	\$ 424,016	\$ 2,485,959	\$ 3,646,681	\$ 4,100,989	
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -	\$ -	\$ -	\$ -	\$ -	
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ (854,209)	\$ (281,737)	\$ 88,311	\$ (63,459)	\$ (51,430)	
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 1,289,333	\$ 142,279	\$ 2,574,270	\$ 3,583,222	\$ 4,049,559	
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 62,429	\$ 12,439	\$ 73,982	\$ 113,559	\$ 251,116	
14	<u>Revenues as a Percentage of 12 Month Average Total Revenues</u>							
15	Residential	ES Form 3.00	44.20%	43.79%	43.41%	43.37%	43.60%	
16	Non-Residential	ES Form 3.00	55.80%	56.21%	56.59%	56.63%	56.40%	
17	<u>Adjusted Jurisdictional E(m) - Allocated</u>							
18	Residential	(12) * (15)	\$ 569,885	\$ 62,304	\$ 1,117,491	\$ 1,554,043	\$ 1,765,608	
19	Non-Residential	(12) * (16)	\$ 719,448	\$ 79,975	\$ 1,456,779	\$ 2,029,179	\$ 2,283,951	
20	<u>R(m)</u>							
21	Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue)	ES Form 3.00	\$ 14,537,828	\$ 14,650,960	\$ 14,966,852	\$ 15,023,029	\$ 15,486,991	
22	Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM)	ES Form 3.00	\$ 10,197,467	\$ 10,259,794	\$ 10,186,744	\$ 10,070,279	\$ 10,028,818	
23	<u>Environmental Surcharge Billing Factor</u>							
24	Residential	(18) / (21)	3.92%	0.43%	7.47%	10.34%	11.40%	
25	Non-Residential	(19) / (22)	7.06%	0.78%	14.30%	20.15%	22.77%	

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

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

Calculation of Current Month Environmental Surcharge Factors

Summary of Environmental Compliance Plans

Line No.	E(m) = RORB + OE - EAS + Prior Period Adjustment + (Over)/Under Recovery	Source	Month			Expense Month		
			January 2023	February 2023	March 2023	April 2023	May 2023	
1	Environmental Compliance Rate Base (RB)	ES Form 2.00	\$ 56,642,150	\$ 56,472,491	\$ 56,302,831	\$ 56,133,157	\$ 55,963,471	
2	RB ÷ 12 months	(1) ÷ 12	\$ 4,720,179	\$ 4,706,041	\$ 4,691,903	\$ 4,677,763	\$ 4,663,623	
3	Pretax Rate of Return (ROR)	ES Form 1.20	7.905%	7.905%	7.905%	7.905%	7.905%	
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 373,130	\$ 372,013	\$ 370,895	\$ 369,777	\$ 368,659	
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 4,490,045	\$ 3,131,898	\$ 1,232,394	\$ 2,264,060	\$ 2,415,156	
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -	\$ -	\$ -	\$ -	\$ -	
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 4,863,175	\$ 3,503,911	\$ 1,603,289	\$ 2,633,837	\$ 2,783,815	
8	Jurisdictional Allocation Ratio for Expense Month	Line 17	94.46%	94.45%	94.59%	94.68%	95.16%	
9	Jurisdictional E(m)	(7) x (8)	\$ 4,593,755	\$ 3,309,444	\$ 1,516,551	\$ 2,493,717	\$ 2,649,078	
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -	\$ -	\$ -	\$ -	\$ -	
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ (336,536)	\$ 590,922	\$ 934,768	\$ 1,557,328	\$ (29,808)	
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 4,257,219	\$ 3,900,366	\$ 2,451,319	\$ 4,051,045	\$ 2,619,270	
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 269,420	\$ 194,467	\$ 86,738	\$ 140,120	\$ 134,737	
14	<u>Revenues as a Percentage of 12 Month Average Total Revenues</u>							
15	Residential	ES Form 3.00	43.27%	42.88%	42.77%	42.80%	41.80%	
16	Non-Residential	ES Form 3.00	56.73%	57.12%	57.23%	57.20%	58.20%	
17	<u>Adjusted Jurisdictional E(m) - Allocated</u>							
18	Residential	(12) * (15)	\$ 1,842,099	\$ 1,672,477	\$ 1,048,429	\$ 1,733,847	\$ 1,094,855	
19	Non-Residential	(12) * (16)	\$ 2,415,120	\$ 2,227,889	\$ 1,402,890	\$ 2,317,198	\$ 1,524,415	
20	<u>R(m)</u>							
21	Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue)	ES Form 3.00	\$ 15,347,351	\$ 14,823,942	\$ 14,756,845	\$ 14,605,838	\$ 14,469,260	
22	Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM)	ES Form 3.00	\$ 10,037,668	\$ 9,928,525	\$ 9,889,774	\$ 9,774,292	\$ 10,199,452	
23	<u>Environmental Surcharge Billing Factor</u>							
24	Residential	(18) / (21)	12.00%	11.28%	7.10%	11.87%	7.57%	
25	Non-Residential	(19) / (22)	24.06%	22.44%	14.19%	23.71%	14.95%	

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

ES FORM 1.10

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

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of April 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	\$ 21,981,161
2	RB ÷ 12 months	(1) ÷ 12	\$ 1,831,763
3	Pretax Rate of Return (ROR)	ES Form 1.20	8.446%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 154,711
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 553,042
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 707,753
8	Jurisdictional Allocation Ratio for Expense Month	Line 17	96.62%
9	Jurisdictional E(m)	(7) x (8)	\$ 683,831
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ -
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 683,831
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (12)	\$ 23,922

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	41.19%	58.81%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 281,670	\$ 402,161
16	R(m) 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	\$ 10,564,768	\$ 10,076,152
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	2.67%	3.99%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

17	Retail Revenue	ES Form 3.00	\$ 25,651,412	96.62%
18	Sales for Resale	Company Records	\$ 897,651	3.38%
19	Total Revenue		\$ 26,549,063	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 April 2018

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant)	ES Form 2.10	\$ -
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	21,951,356
3	Subtotal		\$ 21,951,356
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 29,805
6	Subtotal		\$ 29,805
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		\$ 21,981,161
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	177,556
16	Monthly Amortization Expense	ES Form 2.20	375,486
17	Monthly Emission Allowance Expense	ES Form 2.30	-
18	Monthly Environmental Reagent Expense	ES Form 2.50	-
19	Total Environmental Compliance Operating Expense		\$ 553,042
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x Allowances Sales		-
23	Total Emission Allowance Sales		\$ -
24	<u>(Over) / Under Recovery</u>		
25	Net Jurisdictional E(m) Authorized for Expense Month two Months Prior		\$ -
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		-
27	(Over) / Under Recovery		\$ -

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

ES FORM 2.10

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 April 2018

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project No.	Description	Gross Plant in-Service as of April-18	Accumulated Depreciation as of April-18	Net Plant in-Service as of April-18 (2)-(3)	CWIP Excluding AFUDC as of April-18	Accumulated Deferred ITC as of April-18	Accumulated Deferred Tax Balance as of April-18	Monthly Depreciation Expense	Monthly Property Tax Expense
1	EB020290 Lined Retention Basin West	\$ -	\$ -	\$ -	\$ 3,063,512	\$ -	\$ -	\$ -	\$ 43,729
2	EB020745 Lined Retention Basin East	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
3	EB020298 East Bend SW/PW Reroute	\$ -	\$ -	\$ -	\$ 18,887,844	\$ -	\$ -	\$ -	\$ 269,605
4				\$ -					
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ -	\$ -	\$ -	\$ 21,951,356	\$ -	\$ -	\$ -	\$ 313,334
								Prorated for April 14-April 30	\$ 177,556

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

Line No.	Period (1)	Cash Spend (2)	COR Credit (3)	Carrying Cost (4)	Recovery: 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	\$ -	\$ -	\$ 173,000	\$ -
20	Jun-18	Actual \$ -	\$ -	\$ 111,870	\$ (202,486)	\$ 16,613,032	\$ -	\$ (173,000)	\$ -	\$ (375,486)
21	Jul-18	Actual \$ -	\$ -	\$ 111,255	\$ (202,486)	\$ 16,521,801	\$ -	\$ -	\$ -	\$ (202,486)
22	Aug-18	Actual \$ -	\$ -	\$ 110,637	\$ (202,486)	\$ 16,429,952	\$ -	\$ -	\$ -	\$ (202,486)
23	Sep-18	Actual \$ -	\$ -	\$ 110,014	\$ (202,486)	\$ 16,337,480	\$ -	\$ -	\$ -	\$ (202,486)
24	Oct-18	Actual \$ -	\$ -	\$ 109,387	\$ (202,486)	\$ 16,244,381	\$ -	\$ -	\$ -	\$ (202,486)
25	Nov-18	Actual \$ -	\$ -	\$ 108,756	\$ (202,486)	\$ 16,150,651	\$ -	\$ -	\$ -	\$ (202,486)
26	Dec-18	Actual \$ -	\$ -	\$ 108,121	\$ (202,486)	\$ 16,056,286	\$ -	\$ -	\$ -	\$ (202,486)
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

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)	12,673,899	-	-	-	(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

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)		\$ 173,000	\$ (173,000)		(24,471,320)

Monthly Amortization Amount

(375,486)

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month of April 2018

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances					
Quantity	111,265	-	-	-	111,265
Dollars	\$ 17,322	\$ -	\$ -	\$ -	\$ 17,322
\$/Allowance	\$ 0.155682	\$ -	\$ -	\$ -	\$ 0.155682
NO_x Allowances - Annual					
Quantity	5,861	-	-	-	5,861
Dollars	\$ 5,543	\$ -	\$ -	\$ -	\$ 5,543
\$/Allowance	\$ 0.945743	\$ -	\$ -	\$ -	\$ 0.945743
NO_x Allowances - Seasonal					
Quantity	1,356	-	-	-	1,356
Dollars	\$ 6,940	\$ -	\$ -	\$ -	\$ 6,940
\$/Allowance	\$ 5.117994	\$ -	\$ -	\$ -	\$ 5.117994
Total Emission Allowances					
Quantity	118,482	-	-	-	118,482
Dollars	\$ 29,805	\$ -	\$ -	\$ -	\$ 29,805

Note: The SO₂ 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 April 2018

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

ES FORM 3.00

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

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

For the Expense Month of April 2018

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge
					(2) - (5)
May-17	\$ 7,508,315			\$ -	\$ 7,508,315
Jun-17	9,659,183			-	9,659,183
Jul-17	12,661,898			-	12,661,898
Aug-17	12,185,554			-	12,185,554
Sep-17	10,036,825			-	10,036,825
Oct-17	8,738,582			-	8,738,582
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
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 10,564,768
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 25,651,412
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					41.19%

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)
May-17	\$ 13,754,646	\$ 5,978,768	\$ (1,844,037)	\$ -	\$ 13,754,646	\$ 9,619,915
Jun-17	14,850,354	6,397,415	(1,944,532)	-	14,850,354	10,397,471
Jul-17	17,057,854	6,798,691	(678,704)	-	17,057,854	10,937,867
Aug-17	16,674,526	6,748,015	(966,790)	-	16,674,526	10,893,301
Sep-17	15,903,029	5,373,508	(316,965)	-	15,903,029	10,846,486
Oct-17	14,064,282	5,004,912	(1,086,872)	-	14,064,282	10,146,242
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
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 15,086,644	\$ 10,076,152
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 25,651,412	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					58.81%	

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 May 2018

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	321,906
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	10,707,867
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		3.01%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	461,130
Jurisdictional R(m)	ES Form 1.10, Line 16		\$	10,084,650
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		4.57%

Effective Date for Billing: June 29, 2018

Submitted by: Theodore H. Czupik Jr.

Title: Rates & Regulatory Strategy Manager

Date Submitted: June 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 May 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	\$ 23,672,358
2	RB ÷ 12 months	(1) ÷ 12	\$ 1,972,697
3	Pretax Rate of Return (ROR)	ES Form 1.20	8.446%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 166,614
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 640,224
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 806,838
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	97.05%
9	Jurisdictional E(m)	(7) x (8)	\$ 783,036
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ -
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 783,036
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (12)	\$ 23,802

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	41.11%	58.89%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 321,906	\$ 461,130
16	R(m) 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	\$ 10,707,867	\$ 10,084,650
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	3.01%	4.57%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 26,045,091	97.05%
19	Sales for Resale	Company Records	\$ 792,789	2.95%
20	Total Revenue		\$ 26,837,880	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 May 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	23,642,583
3	Subtotal		\$ 23,642,583
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 29,775
6	Subtotal		\$ 29,775
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		\$ 23,672,358
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	\$ 337,475
16	Monthly Amortization Expense	ES Form 2.20	\$ 302,720
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 29
18	Monthly Environmental Reagent Expense	ES Form 2.50	-
19	Total Environmental Compliance Operating Expense		\$ 640,224
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x Allowances Sales		-
23	Total Emission Allowance Sales		\$ -
24	<u>(Over) / Under Recovery</u>		
25	Net Jurisdictional E(m) Authorized for Expense Month two Months Prior		\$ -
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		-
27	(Over) / Under Recovery		\$ -

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

ES FORM 2.10

**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 May 2018

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project No.	Description	Gross Plant in-Service as of May-18	Accumulated Depreciation as of May-18	Net Plant in-Service as of May-18 (2)-(3)	CWIP Excluding AFUDC as of May-18	Accumulated Deferred ITC as of May-18	Accumulated Deferred Tax Balance as of May-18	Monthly Depreciation Expense	Monthly Property Tax Expense
1	EB020290 Lined Retention Basin West	\$ -	\$ -	\$ -	\$ 3,194,165	\$ -	\$ -	\$ -	\$ 45,594
2	EB020745 Lined Retention Basin East	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
3	EB020298 East Bend SW/PW Reroute	\$ -	\$ -	\$ -	\$ 20,448,418	\$ -	\$ -	\$ -	\$ 291,881
4				\$ -					
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ -	\$ -	\$ -	\$ 23,642,583	\$ -	\$ -	\$ -	\$ 337,475

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

Line No.	Period (1)	Cash Spend (2)	COR Credit (3)	Carrying Cost (4)	Recovery: 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	\$ -	\$ (173,000)	\$ 100,234	\$ (375,486)
21	Jul-18	Actual \$ -	\$ -	\$ 111,255	\$ (202,486)	\$ 16,521,801	\$ -	\$ (100,234)	\$ -	\$ (302,720)
22	Aug-18	Actual \$ -	\$ -	\$ 110,637	\$ (202,486)	\$ 16,429,952	\$ -	\$ -	\$ -	\$ (202,486)
23	Sep-18	Actual \$ -	\$ -	\$ 110,014	\$ (202,486)	\$ 16,337,480	\$ -	\$ -	\$ -	\$ (202,486)
24	Oct-18	Actual \$ -	\$ -	\$ 109,387	\$ (202,486)	\$ 16,244,381	\$ -	\$ -	\$ -	\$ (202,486)
25	Nov-18	Actual \$ -	\$ -	\$ 108,756	\$ (202,486)	\$ 16,150,651	\$ -	\$ -	\$ -	\$ (202,486)
26	Dec-18	Actual \$ -	\$ -	\$ 108,121	\$ (202,486)	\$ 16,056,286	\$ -	\$ -	\$ -	\$ (202,486)
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)	\$ 14,350,581	\$ -	\$ -	\$ -	\$ (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

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)	12,673,899	-	-	-	(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

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)		\$ 273,234	\$ (273,234)		(24,571,554)

Monthly Amortization Amount

(302,720)

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending May 2018

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized (b)	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	111,265	-	(24)	-	111,289
Dollars	\$ 17,321.63	\$ -	\$ (3.84)	\$ -	\$ 17,325.47
\$/Allowance	\$ 0.155679	\$ -	\$ 0.160000	\$ -	\$ 0.155680
NO_x Allowances - Annual					
Quantity	5,861	-	35	-	5,826
Dollars	\$ 5,542.64	\$ -	\$ 33.25	\$ -	\$ 5,509.39
\$/Allowance	\$ 0.945682	\$ -	\$ 0.950000	\$ -	\$ 0.945656
NO_x Allowances - Seasonal					
Quantity	1,356	-	-	-	1,356
Dollars	\$ 6,939.67	\$ -	\$ -	\$ -	\$ 6,939.67
\$/Allowance	\$ 5.117751	\$ -	\$ -	\$ -	\$ 5.117751
Total Emission Allowances					
Quantity	118,482	-	11	-	118,471
Dollars	\$ 29,803.94	\$ -	\$ 29.41	\$ -	\$ 29,774.53

(a) Note: The SO₂ 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.

(b) Note: This month's consumption expense includes the annual compliance true-up calculation.

ES FORM 2.50

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

Environmental Reagent Expenses

For the Expense Month of May 2018

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

ES FORM 3.00

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

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

For the Expense Month of May 2018

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge
					(2) - (5)
Jun-17	\$ 9,659,183			\$ -	\$ 9,659,183
Jul-17	12,661,898			-	12,661,898
Aug-17	12,185,554			-	12,185,554
Sep-17	10,036,825			-	10,036,825
Oct-17	8,738,582			-	8,738,582
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
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 10,707,867
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 26,045,091
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					41.11%

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)
Jun-17	\$ 14,850,354	\$ 6,397,415	\$ (1,944,532)	\$ -	\$ 14,850,354	\$ 10,397,471
Jul-17	17,057,854	6,798,691	(678,704)	-	17,057,854	10,937,867
Aug-17	16,674,526	6,748,015	(966,790)	-	16,674,526	10,893,301
Sep-17	15,903,029	5,373,508	(316,965)	-	15,903,029	10,846,486
Oct-17	14,064,282	5,004,912	(1,086,872)	-	14,064,282	10,146,242
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
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 15,337,224	\$ 10,084,650
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 26,045,091	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					58.89%	

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 June 2018

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	581,869
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	10,964,843
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		5.31%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	831,807
Jurisdictional R(m)	ES Form 1.10, Line 16		\$	10,132,179
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		8.21%

Effective Date for Billing: July 31, 2018

Submitted by: Theodore H. Czupik Jr.

Title: Rates & Regulatory Strategy Manager

Date Submitted: July 20, 2018

ES FORM 1.10

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of June 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	\$ 27,774,098
2	RB ÷ 12 months	(1) ÷ 12	\$ 2,314,508
3	Pretax Rate of Return (ROR)	ES Form 1.20	8.446%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 195,483
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 1,308,251
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 1,503,734
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	97.21%
9	Jurisdictional E(m)	(7) x (8)	\$ 1,461,780
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ (48,104)
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 1,413,676
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 41,954

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	41.16%	58.84%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 581,869	\$ 831,807
16	R(m) 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	\$ 10,964,843	\$ 10,132,179
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	5.31%	8.21%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 26,641,013	97.21%
19	Sales for Resale	Company Records	\$ 765,244	2.79%
20	Total Revenue		\$ 27,406,257	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 June 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	27,744,365
3	Subtotal		\$ 27,744,365
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 29,733
6	Subtotal		\$ 29,733
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		\$ 27,774,098
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	\$ 396,023
16	Monthly Amortization Expense	ES Form 2.20	\$ 353,387
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 41
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 558,800
19	Total Environmental Compliance Operating Expense		\$ 1,308,251
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x Allowances Sales		-
23	Total Emission Allowance Sales		\$ -
24	<u>(Over) / Under Recovery</u>		
25	Net Jurisdictional E(m) Authorized for Expense Month two Months Prior		\$ 683,831
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		731,935
27	(Over) / Under Recovery		\$ (48,104)

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 June 2018

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project No.	Description	Gross Plant in-Service as of June-18	Accumulated Depreciation as of June-18	Net Plant in-Service as of June-18 (2)-(3)	CWIP Excluding AFUDC as of June-18	Accumulated Deferred ITC as of June-18	Accumulated Deferred Tax Balance as of June-18	Monthly Depreciation Expense	Monthly Property Tax Expense
1	EB020290 Lined Retention Basin West	\$ -	\$ -	\$ -	\$ 5,066,656	\$ -	\$ -	\$ -	\$ 72,321
2	EB020745 Lined Retention Basin East	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
3	EB020298 East Bend SW/PW Reroute	\$ -	\$ -	\$ -	\$ 22,677,709	\$ -	\$ -	\$ -	\$ 323,702
4				\$ -					
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ -	\$ -	\$ -	\$ 27,744,365	\$ -	\$ -	\$ -	\$ 396,023

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

Line No.	Period (1)	Cash Spend (2)	COR Credit (3)	Carrying Cost (4)	Recovery: 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	\$ -	\$ (100,234)	\$ 150,901	\$ (302,720)
22	Aug-18	Actual \$ -	\$ -	\$ 110,637	\$ (202,486)	\$ 16,429,952	\$ -	\$ (150,901)	\$ -	\$ (353,387)
23	Sep-18	Actual \$ -	\$ -	\$ 110,014	\$ (202,486)	\$ 16,337,480	\$ -	\$ -	\$ -	\$ (202,486)
24	Oct-18	Actual \$ -	\$ -	\$ 109,387	\$ (202,486)	\$ 16,244,381	\$ -	\$ -	\$ -	\$ (202,486)
25	Nov-18	Actual \$ -	\$ -	\$ 108,756	\$ (202,486)	\$ 16,150,651	\$ -	\$ -	\$ -	\$ (202,486)
26	Dec-18	Actual \$ -	\$ -	\$ 108,121	\$ (202,486)	\$ 16,056,286	\$ -	\$ -	\$ -	\$ (202,486)
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

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

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)	\$ 424,135	\$ (424,135)		(24,722,455)

Monthly Amortization Amount

(353,387)

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized (b)	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	111,289	1	1	-	111,289
Dollars	\$ 17,325.47	\$ -	\$ 0.16	\$ -	\$ 17,325.31
\$/Allowance	\$ 0.155680	\$ -	\$ 0.160000	\$ -	\$ 0.155679
NO_x Allowances - Annual					
Quantity	5,826	60	(16)	-	5,902
Dollars	\$ 5,509.39	\$ -	\$ (15.20)	\$ -	\$ 5,524.59
\$/Allowance	\$ 0.945656	\$ -	\$ 0.950000	\$ -	\$ 0.936054
NO_x Allowances - Seasonal					
Quantity	1,356	(1)	11	-	1,344
Dollars	\$ 6,939.67	\$ -	\$ 56	\$ -	\$ 6,883.35
\$/Allowance	\$ 5.117751	\$ -	\$ 5.120000	\$ -	\$ 5.121540
Total Emission Allowances					
Quantity	118,471	60	(4)	-	118,535
Dollars	\$ 29,774.53	\$ -	\$ 41.28	\$ -	\$ 29,733.25

(a) Note: The SO₂ 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.

(b) Note: This month's consumption expense includes the annual compliance true-up calculation.

ES FORM 2.50

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

Environmental Reagent Expenses

<u>Line No.</u>	<u>Expense Type</u>	<u>Account Number</u>	<u>East Bend Unit 2</u>	<u>Total</u>
1	Ammonia	502020	\$ 33,894	\$ 33,894
2	Lime	502040	242,470	242,470
3	Hydrated Lime	502040	282,436	282,436
4	Total		\$ 558,800	\$ 558,800

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 June 2018

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge
					(2) - (5)
Jul-17	\$ 12,661,898			\$ -	\$ 12,661,898
Aug-17	12,185,554			-	12,185,554
Sep-17	10,036,825			-	10,036,825
Oct-17	8,738,582			-	8,738,582
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
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 10,964,843
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 26,641,013
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					41.16%

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)
Jul-17	\$ 17,057,854	\$ 6,798,691	\$ (678,704)	\$ -	\$ 17,057,854	\$ 10,937,867
Aug-17	16,674,526	6,748,015	(966,790)	-	16,674,526	10,893,301
Sep-17	15,903,029	5,373,508	(316,965)	-	15,903,029	10,846,486
Oct-17	14,064,282	5,004,912	(1,086,872)	-	14,064,282	10,146,242
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
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 15,676,170	\$ 10,132,179
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 26,641,013	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					58.84%	

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 July 2018

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	874,500
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	11,155,450
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		7.84%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,248,073
Jurisdictional R(m)	ES Form 1.10, Line 16		\$	10,159,697
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		12.28%

Effective Date for Billing: August 29, 2018

Submitted by: Theodore H. Czupik Jr.

Title: Rates & Regulatory Strategy Manager

Date Submitted: August 17, 2018

ES FORM 1.10

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

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of July 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	\$ 29,432,481
2	RB ÷ 12 months	(1) ÷ 12	\$ 2,452,707
3	Pretax Rate of Return (ROR)	ES Form 1.20	8.446%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 207,156
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 2,103,578
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 2,310,734
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	96.82%
9	Jurisdictional E(m)	(7) x (8)	\$ 2,237,252
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ (114,679)
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 2,122,573
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 73,482

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	41.20%	58.80%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 874,500	\$ 1,248,073
16	R(m) 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	\$ 11,155,450	\$ 10,159,697
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	7.84%	12.28%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 27,077,368	96.82%
19	Sales for Resale	Company Records	\$ 890,567	3.18%
20	Total Revenue		\$ 27,967,935	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 July 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	29,403,954
3	Subtotal		\$ 29,403,954
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 28,527
6	Subtotal		\$ 28,527
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		\$ 29,432,481
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	\$ 419,712
16	Monthly Amortization Expense	ES Form 2.20	\$ 399,071
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 1,207
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 1,283,588
19	Total Environmental Compliance Operating Expense		\$ 2,103,578
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x Allowances Sales		-
23	Total Emission Allowance Sales		\$ -
24	<u>(Over) / Under Recovery</u>		
25	Net Jurisdictional E(m) Authorized for Expense Month two Months Prior		\$ 783,036
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		897,715
27	(Over) / Under Recovery		\$ (114,679)

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 July 2018

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project No.	Description	Gross Plant in-Service as of July-18	Accumulated Depreciation as of July-18	Net Plant in-Service as of July-18	CWIP Excluding AFUDC as of July-18	Accumulated Deferred ITC as of July-18	Accumulated Deferred Tax Balance as of July-18	Monthly Depreciation Expense	Monthly Property Tax Expense
				(2)-(3)					
1	EB020290 Lined Retention Basin West	\$ -	\$ -	\$ -	\$ 5,823,140	\$ -	\$ -	\$ -	\$ 83,119
2	EB020745 Lined Retention Basin East	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
3	EB020298 East Bend SW/PW Reroute	\$ -	\$ -	\$ -	\$ 23,580,814	\$ -	\$ -	\$ -	\$ 336,593
4				\$ -					
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ -	\$ -	\$ -	\$ 29,403,954	\$ -	\$ -	\$ -	\$ 419,712

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

Line No.	Period (1)	Cash Spend (2)	COR Credit (3)	Carrying Cost (4)	Recovery: 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	\$ -	\$ (150,901)	\$ 196,585	\$ (353,387)
23	Sep-18	Actual \$ -	\$ -	\$ 110,014	\$ (202,486)	\$ 16,337,480	\$ -	\$ (196,585)	\$ -	\$ (399,071)
24	Oct-18	Actual \$ -	\$ -	\$ 109,387	\$ (202,486)	\$ 16,244,381	\$ -	\$ -	\$ -	\$ (202,486)
25	Nov-18	Actual \$ -	\$ -	\$ 108,756	\$ (202,486)	\$ 16,150,651	\$ -	\$ -	\$ -	\$ (202,486)
26	Dec-18	Actual \$ -	\$ -	\$ 108,121	\$ (202,486)	\$ 16,056,286	\$ -	\$ -	\$ -	\$ (202,486)
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

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

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)	\$ 620,720	\$ (620,720)		(24,919,040)

Monthly Amortization Amount

(399,071)

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending July 2018

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	111,289		161	-	111,128
Dollars	\$ 17,325.31	\$ -	\$ 25.76	\$ -	\$ 17,299.55
\$/Allowance	\$ 0.155679	\$ -	\$ 0.160000	\$ -	\$ 0.155672
NO_x Allowances - Annual					
Quantity	5,902		194	-	5,708
Dollars	\$ 5,524.59	\$ -	\$ 182.36	\$ -	\$ 5,342.23
\$/Allowance	\$ 0.936054	\$ -	\$ 0.940000	\$ -	\$ 0.935920
NO_x Allowances - Seasonal					
Quantity	1,344		195	-	1,149
Dollars	\$ 6,883.35	\$ -	\$ 998	\$ -	\$ 5,884.95
\$/Allowance	\$ 5.121540	\$ -	\$ 5.120000	\$ -	\$ 5.121802
Total Emission Allowances					
Quantity	118,535	-	550	-	117,985
Dollars	\$ 29,733.25	\$ -	\$ 1,206.52	\$ -	\$ 28,526.73

(a) Note: The SO₂ 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 July 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	\$ 49,452	\$ 49,452
2	Lime	502040	1,196,830	1,196,830
3	Hydrated Lime	502040	37,306	37,306
4	Total		\$ 1,283,588	\$ 1,283,588

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 July 2018

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge
					(2) - (5)
Aug-17	\$ 12,185,554			\$ -	\$ 12,185,554
Sep-17	10,036,825			-	10,036,825
Oct-17	8,738,582			-	8,738,582
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
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 11,155,450
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 27,077,368
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					41.20%

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)
Aug-17	\$ 16,674,526	\$ 6,748,015	\$ (966,790)	\$ -	\$ 16,674,526	\$ 10,893,301
Sep-17	15,903,029	5,373,508	(316,965)	-	15,903,029	10,846,486
Oct-17	14,064,282	5,004,912	(1,086,872)	-	14,064,282	10,146,242
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
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 15,921,918	\$ 10,159,697
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 27,077,368	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					58.80%	

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 August 2018

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	937,949
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	11,146,170
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		8.41%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,342,502
Jurisdictional R(m)	ES Form 1.10, Line 16		\$	10,162,293
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		13.21%

Effective Date for Billing: September 28, 2018

Submitted by: Theodore H. Czupik Jr.

Title: Rates & Regulatory Strategy Manager

Date Submitted: September 18, 2018

ES FORM 1.10

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

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of August 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	\$ 32,024,247
2	RB ÷ 12 months	(1) ÷ 12	\$ 2,668,687
3	Pretax Rate of Return (ROR)	ES Form 1.20	8.446%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 225,397
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 2,261,065
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 2,486,462
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	96.82%
9	Jurisdictional E(m)	(7) x (8)	\$ 2,407,393
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ (126,942)
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 2,280,451
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 79,069

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	41.13%	58.87%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 937,949	\$ 1,342,502
16	R(m) 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	\$ 11,146,170	\$ 10,162,293
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	8.41%	13.21%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 27,102,113	96.82%
19	Sales for Resale	Company Records	\$ 890,752	3.18%
20	Total Revenue		\$ 27,992,865	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 August 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	31,997,129
3	Subtotal		\$ 31,997,129
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 27,118
6	Subtotal		\$ 27,118
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		\$ 32,024,247
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	\$ 456,727
16	Monthly Amortization Expense	ES Form 2.20	\$ 524,301
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 1,409
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 1,278,628
19	Total Environmental Compliance Operating Expense		\$ 2,261,065
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x 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		\$ 1,413,676
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		1,540,618
27	(Over) / Under Recovery		\$ (126,942)

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 August 2018

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project No.	Description	Gross Plant in-Service as of August-18	Accumulated Depreciation as of August-18	Net Plant in-Service as of August-18 (2)-(3)	CWIP Excluding AFUDC as of August-18	Accumulated Deferred ITC as of August-18	Accumulated Deferred Tax Balance as of August-18	Monthly Depreciation Expense	Monthly Property Tax Expense
1	EB020290 Lined Retention Basin West	\$ -	\$ -	\$ -	\$ 7,080,766	\$ -	\$ -	\$ -	\$ 101,071
2	EB020745 Lined Retention Basin East	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
3	EB020298 East Bend SW/PW Reroute	\$ -	\$ -	\$ -	\$ 24,916,363	\$ -	\$ -	\$ -	\$ 355,656
4				\$ -					
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ -	\$ -	\$ -	\$ 31,997,129	\$ -	\$ -	\$ -	\$ 456,727

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

Line No.	Period (1)	Cash Spend (2)	COR Credit (3)	Carrying Cost (4)	Recovery: 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	\$ -	\$ (196,585)	\$ 321,815	\$ (399,071)
24	Oct-18	Actual \$ -	\$ -	\$ 109,387	\$ (202,486)	\$ 16,244,381	\$ -	\$ (321,815)	\$ -	\$ (524,301)
25	Nov-18	Actual \$ -	\$ -	\$ 108,756	\$ (202,486)	\$ 16,150,651	\$ -	\$ -	\$ -	\$ (202,486)
26	Dec-18	Actual \$ -	\$ -	\$ 108,121	\$ (202,486)	\$ 16,056,286	\$ -	\$ -	\$ -	\$ (202,486)
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)	\$ 14,350,581	\$ -	\$ -	\$ -	\$ (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

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

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)	\$ 942,535	\$ (942,535)		(25,240,855)

Monthly Amortization Amount

(524,301)

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending August 2018

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	111,128		207	-	110,921
Dollars	\$ 17,299.55	\$ -	\$ 33.12	\$ -	\$ 17,266.43
\$/Allowance	\$ 0.155672	\$ -	\$ 0.160000	\$ -	\$ 0.155664
NO_x Allowances - Annual					
Quantity	5,708		227	-	5,481
Dollars	\$ 5,342.23	\$ -	\$ 213.38	\$ -	\$ 5,128.85
\$/Allowance	\$ 0.935920	\$ -	\$ 0.940000	\$ -	\$ 0.935751
NO_x Allowances - Seasonal					
Quantity	1,149		227	-	922
Dollars	\$ 5,884.95	\$ -	\$ 1,162	\$ -	\$ 4,722.71
\$/Allowance	\$ 5.121802	\$ -	\$ 5.120000	\$ -	\$ 5.122245
Total Emission Allowances					
Quantity	117,985	-	661	-	117,324
Dollars	\$ 28,526.73	\$ -	\$ 1,408.74	\$ -	\$ 27,117.99

(a) Note: The SO₂ 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 August 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	\$ 50,645	\$ 50,645
2	Lime	502040	1,154,185	1,154,185
3	Hydrated Lime	502040	73,798	73,798
4	Total		\$ 1,278,628	\$ 1,278,628

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 August 2018

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge
					(2) - (5)
Sep-17	\$ 10,036,825			\$ -	\$ 10,036,825
Oct-17	8,738,582			-	8,738,582
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
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 11,146,170
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 27,102,113
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					41.13%

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)
Sep-17	\$ 15,903,029	\$ 5,373,508	\$ (316,965)	\$ -	\$ 15,903,029	\$ 10,846,486
Oct-17	14,064,282	5,004,912	(1,086,872)	-	14,064,282	10,146,242
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
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 15,955,943	\$ 10,162,293
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 27,102,113	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					58.87%	

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 September 2018

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	702,491
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	11,316,510
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		6.21%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	997,220
Jurisdictional R(m)	ES Form 1.10, Line 16		\$	10,212,770
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		9.76%

Effective Date for Billing: October 29, 2018

Submitted by: Theodore H. Czupik Jr.

Title: Rates & Regulatory Strategy Manager

Date Submitted: October 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 September 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	\$ 35,134,603
2	RB ÷ 12 months	(1) ÷ 12	\$ 2,927,884
3	Pretax Rate of Return (ROR)	ES Form 1.20	8.446%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 247,289
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 1,742,670
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 1,989,959
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	96.93%
9	Jurisdictional E(m)	(7) x (8)	\$ 1,928,868
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ (229,157)
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 1,699,711
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 61,091

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	41.33%	58.67%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 702,491	\$ 997,220
16	R(m) 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	\$ 11,316,510	\$ 10,212,770
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	6.21%	9.76%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 27,383,027	96.93%
19	Sales for Resale	Company Records	\$ 867,673	3.07%
20	Total Revenue		\$ 28,250,700	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 September 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	35,109,007
3	Subtotal		\$ 35,109,007
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 25,596
6	Subtotal		\$ 25,596
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		\$ 35,134,603
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	\$ 501,146
16	Monthly Amortization Expense	ES Form 2.20	\$ 477,621
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 1,522
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 762,381
19	Total Environmental Compliance Operating Expense		\$ 1,742,670
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x 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		\$ 2,122,573
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		2,351,730
27	(Over) / Under Recovery		\$ (229,157)

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 September 2018

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project No.	Description	Gross Plant in-Service as of September-18	Accumulated Depreciation as of September-18	Net Plant in-Service as of September-18 (2)-(3)	CWIP Excluding AFUDC as of September-18	Accumulated Deferred ITC as of September-18	Accumulated Deferred Tax Balance as of September-18	Monthly Depreciation Expense	Monthly Property Tax Expense
1	EB020290 Lined Retention Basin West	\$ -	\$ -	\$ -	\$ 8,874,718	\$ -	\$ -	\$ -	\$ 126,678
2	EB020745 Lined Retention Basin East	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
3	EB020298 East Bend SW/PW Reroute	\$ -	\$ -	\$ -	\$ 26,234,290	\$ -	\$ -	\$ -	\$ 374,468
4				\$ -					
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ -	\$ -	\$ -	\$ 35,109,007	\$ -	\$ -	\$ -	\$ 501,146

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

Line No.	Period (1)	Cash Spend (2)	COR Credit (3)	Carrying Cost (4)	Recovery: 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	\$ -	\$ (321,815)	\$ 275,135	\$ (524,301)
25	Nov-18	Actual \$ -	\$ -	\$ 108,756	\$ (202,486)	\$ 16,150,651	\$ -	\$ (275,135)	\$ -	\$ (477,621)
26	Dec-18	Actual \$ -	\$ -	\$ 108,121	\$ (202,486)	\$ 16,056,286	\$ -	\$ -	\$ -	\$ (202,486)
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

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

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)	\$ 1,217,670	\$ (1,217,670)		(25,515,990)

Monthly Amortization Amount

(477,621)

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending September 2018

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	110,921		204	-	110,717
Dollars	\$ 17,266.43	\$ -	\$ 32.64	\$ -	\$ 17,233.79
\$/Allowance	\$ 0.155664	\$ -	\$ 0.160000	\$ -	\$ 0.155656
NO_x Allowances - Annual					
Quantity	5,481		245	-	5,236
Dollars	\$ 5,128.85	\$ -	\$ 230.30	\$ -	\$ 4,898.55
\$/Allowance	\$ 0.935751	\$ -	\$ 0.940000	\$ -	\$ 0.935552
NO_x Allowances - Seasonal					
Quantity	922		246	-	676
Dollars	\$ 4,722.71	\$ -	\$ 1,259.52	\$ -	\$ 3,463.19
\$/Allowance	\$ 5.122245	\$ -	\$ 5.120000	\$ -	\$ 5.123062
Total Emission Allowances					
Quantity	117,324	-	695	-	116,629
Dollars	\$ 27,117.99	\$ -	\$ 1,522.46	\$ -	\$ 25,595.53

(a) Note: The SO₂ 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 September 2018

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
1	Ammonia	502020	\$ 39,726	\$ 39,726
2	Lime	502040	681,514	681,514
3	Hydrated Lime	502040	41,141	41,141
4	Total		\$ 762,381	\$ 762,381

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 September 2018

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge
					(2) - (5)
Oct-17	\$ 8,738,582			\$ -	\$ 8,738,582
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
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 11,316,510
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 27,383,027
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					41.33%

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)
Oct-17	\$ 14,064,282	\$ 5,004,912	\$ (1,086,872)	\$ -	\$ 14,064,282	\$ 10,146,242
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
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 16,066,517	\$ 10,212,770
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 27,383,027	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					58.67%	

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	ES Form 3.00	41.21%	58.79%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 863,431	\$ 1,231,767
16	R(m) Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	ES Form 3.00 ES Form 3.00	\$ 11,437,455	\$ 10,274,115
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	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	\$ 507,506
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 ₂ Allowance Sales		\$ -
22	NO _x 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		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
No.	Description			(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

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	\$ -	\$ (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

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

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)		\$ 1,287,556	\$ (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

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	110,717		188	-	110,529
Dollars	\$ 17,233.79	\$ -	\$ 30.08	\$ -	\$ 17,203.71
\$/Allowance	\$ 0.155656	\$ -	\$ 0.160000	\$ -	\$ 0.155649
NO_x Allowances - Annual					
Quantity	5,236		185	-	5,051
Dollars	\$ 4,898.55	\$ -	\$ 173.08	\$ -	\$ 4,725.47
\$/Allowance	\$ 0.935552	\$ -	\$ 0.935568	\$ -	\$ 0.935551
NO_x Allowances - Seasonal					
Quantity	676		185	-	491
Dollars	\$ 3,463.19	\$ -	\$ 947.77	\$ -	\$ 2,515.42
\$/Allowance	\$ 5.123062	\$ -	\$ 5.123081	\$ -	\$ 5.123055
Total Emission Allowances					
Quantity	116,629	-	558	-	116,071
Dollars	\$ 25,595.53	\$ -	\$ 1,150.93	\$ -	\$ 24,444.60

(a) Note: The SO₂ 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 October 2018

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
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	\$ 1,066,820	\$ 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%	

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.	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	\$ 37,128,715
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

			<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	41.15%	58.85%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 970,664	\$ 1,388,180
16	<u>R(m)</u> 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 ₂ Allowance Sales		\$ -
22	NO _x 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 (2)-(3)	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
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

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	\$ -	\$ 10,326,299	\$ -	\$ -	\$ -	\$ -
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)	\$ 14,350,581	\$ -	\$ -	\$ -	\$ (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

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

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)	\$ 1,525,984	\$ (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

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	110,529		229	-	110,300
Dollars	\$ 17,203.71	\$ -	\$ 36.64	\$ -	\$ 17,167.07
\$/Allowance	\$ 0.155649	\$ -	\$ 0.160000	\$ -	\$ 0.155640
NO_x Allowances - Annual					
Quantity	5,051		196	-	4,855
Dollars	\$ 4,725.47	\$ -	\$ 184.24	\$ -	\$ 4,541.23
\$/Allowance	\$ 0.935551	\$ -	\$ 0.940000	\$ -	\$ 0.935372
NO_x Allowances - Seasonal					
Quantity	491		6	-	485
Dollars	\$ 2,515.42	\$ -	\$ 30.72	\$ -	\$ 2,484.70
\$/Allowance	\$ 5.123055	\$ -	\$ 5.120000	\$ -	\$ 5.123093
Total Emission Allowances					
Quantity	116,071	-	431	-	115,640
Dollars	\$ 24,444.60	\$ -	\$ 251.60	\$ -	\$ 24,193.00

(a) Note: The SO₂ 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

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
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 (2) - (5)	Total Non-Fuel Revenue (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%	

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

ES FORM 1.10

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

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of December 2018

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	\$ 37,099,972
2	RB ÷ 12 months	(1) ÷ 12	\$ 3,091,664
3	Pretax Rate of Return (ROR)	ES Form 1.20	<u>8.446%</u>
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)	<u>\$ 2,489,614</u>
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	<u>\$ 76,984</u>

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	41.14%	58.86%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 1,024,227	\$ 1,465,387
16	<u>R(m)</u> 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 ₂ Allowance Sales		\$ -
22	NOx 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		\$ 2,095,198
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		2,174,095
27	(Over) / Under Recovery		\$ (78,897)

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		Gross Plant in-Service as of December-18	Accumulated Depreciation as of December-18	Net Plant in-Service as of December-18	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
No.	Description			(2)-(3)					
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

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	\$ -	\$ (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)	\$ 15,377,569	\$ -	\$ -	\$ -	\$ (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

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

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

(465,523)

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending December 2018

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	110,300		233	-	110,067
Dollars	\$ 17,167.07	\$ -	\$ 37.28	\$ -	\$ 17,129.79
\$/Allowance	\$ 0.155640	\$ -	\$ 0.160000	\$ -	\$ 0.155631
NO_x Allowances - Annual					
Quantity	4,855		157	-	4,698
Dollars	\$ 4,541.23	\$ -	\$ 147.58	\$ -	\$ 4,393.65
\$/Allowance	\$ 0.935372	\$ -	\$ 0.940000	\$ -	\$ 0.935217
NO_x Allowances - Seasonal					
Quantity	485		-	-	485
Dollars	\$ 2,484.70	\$ -	\$ -	\$ -	\$ 2,484.70
\$/Allowance	\$ 5.123093	\$ -	\$ -	\$ -	\$ 5.123093
Total Emission Allowances					
Quantity	115,640	-	390	-	115,250
Dollars	\$ 24,193.00	\$ -	\$ 184.86	\$ -	\$ 24,008.14

(a) Note: The SO₂ 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 December 2018

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
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		\$ 1,353,541	\$ 1,353,541

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 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	Total Non-Fuel Revenue
					(2) - (5)	(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%	

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

ES FORM 1.10

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	40.53%	59.47%
15	Adjusted Jurisdictional E(m) - Allocated	\$ 816,307	\$ 1,197,774
16	R(m) Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	\$ 11,329,337	\$ 10,458,095
17	Jurisdictional E(m) / R(m)	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	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
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	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NOx Allowances Sales		-
23	Total Emission Allowance Sales		\$ -
24	<u>(Over) / Under Recovery</u>		
25	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		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
No.	Description			(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

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	\$ -	\$ (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

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

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

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	110,067		273	-	109,794
Dollars	\$ 17,129.79	\$ -	\$ 43.68	\$ -	\$ 17,086.11
\$/Allowance	\$ 0.155631	\$ -	\$ 0.160000	\$ -	\$ 0.155620
NO_x Allowances - Annual					
Quantity	4,698		221	-	4,477
Dollars	\$ 4,393.65	\$ -	\$ 207.74	\$ -	\$ 4,185.91
\$/Allowance	\$ 0.935217	\$ -	\$ 0.940000	\$ -	\$ 0.934981
NO_x Allowances - Seasonal					
Quantity	485		-	-	485
Dollars	\$ 2,484.70	\$ -	\$ -	\$ -	\$ 2,484.70
\$/Allowance	\$ 5.123093	\$ -	\$ -	\$ -	\$ 5.123093
Total Emission Allowances					
Quantity	115,250	-	494	-	114,756
Dollars	\$ 24,008.14	\$ -	\$ 251.42	\$ -	\$ 23,756.72

(a) Note: The SO₂ 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 January 2019

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
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

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 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	Total Non-Fuel Revenue
					(2) - (5)	(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%	

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.	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	\$ 38,199,497
2	RB ÷ 12 months	(1) ÷ 12	\$ 3,183,291
3	Pretax Rate of Return (ROR)	ES Form 1.20	<u>8.446%</u>
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)	<u>\$ 2,262,505</u>
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	<u>\$ 64,191</u>

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)	\$ 916,993 \$ 1,345,512
16	<u>R(m)</u> 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	\$ 11,414,436 \$ 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

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 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	\$ 61,696
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	1,150,326
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 ₂ Allowance Sales		\$ -
22	NO _x 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		\$ 2,489,614
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		2,650,963
27	(Over) / Under Recovery		\$ (161,349)

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		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
No.	Description								
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

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)	\$ 441,465	\$ (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

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

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

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	109,794	25,041	298	-	134,537
Dollars	\$ 17,086.11	\$ -	\$ 38.74	\$ -	\$ 17,047.37
\$/Allowance	\$ 0.155620	\$ -	\$ 0.130000	\$ -	\$ 0.126711
NO_x Allowances - Annual					
Quantity	4,477	3,292	212	-	7,557
Dollars	\$ 4,185.91	\$ -	\$ 114.48	\$ -	\$ 4,071.43
\$/Allowance	\$ 0.934981	\$ -	\$ 0.540000	\$ -	\$ 0.538763
NO_x Allowances - Seasonal					
Quantity	485	913	-	-	1,398
Dollars	\$ 2,484.70	\$ -	\$ -	\$ -	\$ 2,484.70
\$/Allowance	\$ 5.123093	\$ -	\$ -	\$ -	\$ 1.777325
Total Emission Allowances					
Quantity	114,756	29,246	510	-	143,492
Dollars	\$ 23,756.72	\$ -	\$ 153.22	\$ -	\$ 23,603.50

(a) Note: The SO₂ 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 February 2019

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
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%	

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.	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	\$ 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	ES Form 3.00	40.68%	59.32%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 1,082,123	\$ 1,577,964
16	R(m) Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	ES Form 3.00 ES Form 3.00	\$ 11,497,201	\$ 10,620,061
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	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 ₂ Allowance Sales		\$ -
22	NOx 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		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
No.	Description			(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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month Ending 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)	\$ 518,486	\$ (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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month Ending 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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month Ending 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

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	134,537	-	-	-	134,537
Dollars	\$ 17,047.37	\$ -	\$ -	\$ -	\$ 17,047.37
\$/Allowance	\$ 0.126711	\$ -	\$ -	\$ -	\$ 0.126711
NO_x Allowances - Annual					
Quantity	7,557	-	-	-	7,557
Dollars	\$ 4,071.43	\$ -	\$ -	\$ -	\$ 4,071.43
\$/Allowance	\$ 0.538763	\$ -	\$ -	\$ -	\$ 0.538763
NO_x Allowances - Seasonal					
Quantity	1,398	-	-	-	1,398
Dollars	\$ 2,484.70	\$ -	\$ -	\$ -	\$ 2,484.70
\$/Allowance	\$ 1.777325	\$ -	\$ -	\$ -	\$ 1.777325
Total Emission Allowances					
Quantity	143,492	-	-	-	143,492
Dollars	\$ 23,603.50	\$ -	\$ -	\$ -	\$ 23,603.50

(a) Note: The SO₂ 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 March 2019

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
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	Total Non-Fuel Revenue
					(2) - (5)	(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%	

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 April 2019

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,258,337
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	11,455,973
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		10.98%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,848,667
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	10,685,000
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		17.30%

Effective Date for Billing: May 31, 2019

Submitted by: Theodore H. Czupik Jr.

Title: Rates & Regulatory Strategy Manager

Date Submitted: May 21, 2019

ES FORM 1.10

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of April 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	\$ 40,448,174
2	RB ÷ 12 months	(1) ÷ 12	\$ 3,370,681
3	Pretax Rate of Return (ROR)	ES Form 1.20	8.446%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 284,688
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 2,636,180
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 2,920,868
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	97.20%
9	Jurisdictional E(m)	(7) x (8)	\$ 2,839,084
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ 267,920
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 3,107,004
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 81,784

Calculation of Environmental Surcharge Billing Factors

		Residential (Total Revenue)	Non-Residential (Net Revenue)
14	Revenues as a Percentage of 12 Month Average Total Revenues	40.50%	59.50%
15	Adjusted Jurisdictional E(m) - Allocated	\$ 1,258,337	\$ 1,848,667
16	R(m) Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	\$ 11,455,973	\$ 10,685,000
17	Jurisdictional E(m) / R(m)	10.98%	17.30%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 28,286,265	97.20%
19	Sales for Resale	Company Records	\$ 814,336	2.80%
20	Total Revenue		\$ 29,100,601	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 April 2019

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant)	ES Form 2.10	\$ 40,592,843
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	1,456,221
3	Subtotal		\$ 42,049,064
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 23,499
6	Subtotal		\$ 23,499
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 166,308
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	1,458,081
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 1,624,389
12	Environmental Compliance Rate Base		\$ 40,448,174
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 83,066
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 597,834
16	Monthly Amortization Expense	ES Form 2.20	\$ 1,791,033
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 105
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 164,142
19	Total Environmental Compliance Operating Expense		\$ 2,636,180
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NOx Allowances Sales		-
23	Total Emission Allowance Sales		\$ -
24	<u>(Over) / Under Recovery</u>		
25	Adjusted Jurisdictional E(m) Authorized for Expense Month two Months Prior		\$ 2,262,505
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		1,994,585
27	(Over) / Under Recovery		\$ 267,920

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 April 2019

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project		Gross Plant in-Service as of April-19	Accumulated Depreciation as of April-19	Net Plant in-Service as of April-19	CWIP Excluding AFUDC as of April-19	Accumulated Deferred ITC as of April-19	Accumulated Deferred Tax Balance as of April-19	Monthly Depreciation Expense	Monthly Property Tax Expense
No.	Description			(2)-(3)					
1	EB020290 Lined Retention Basin West	\$ 10,604,420	\$ 104,668	\$ 10,499,752	\$ -	\$ -	\$ 1,166,238	\$ 21,426	\$ 149,873
2	EB020745 Lined Retention Basin East	\$ -	\$ -	\$ -	\$ 449,539	\$ -	\$ -	\$ -	\$ 6,417
3	EB020298 East Bend SW/PW Reroute	\$ 29,988,423	\$ 61,640	\$ 29,926,783	\$ -	\$ -	\$ 291,843	\$ 61,640	\$ 427,175
4	EB021281 East Bend Landfill Cell 2	\$ -	\$ -	\$ -	\$ 1,006,682	\$ -	\$ -	\$ -	\$ 14,369
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 40,592,843	\$ 166,308	\$ 40,426,535	\$ 1,456,221	\$ -	\$ 1,458,081	\$ 83,066	\$ 597,834

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of April 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	\$ 1,588,547	\$ (150,851)	\$ 1,997,156	\$ (353,337)
31	May-19	Actual \$ -	\$ -	\$ 104,878	\$ (202,486)	\$ 15,574,775	\$ -	\$ (408,609)	\$ 1,588,547	\$ (611,095)
32	Jun-19	Actual \$ -	\$ -	\$ 104,216	\$ (202,486)	\$ 15,476,505	\$ -	\$ (1,588,547)	\$ -	\$ (1,791,033)
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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of April 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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of April 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)	3,800,762	-	-	-	(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)		\$ 4,115,024	\$ (4,115,024)		(28,413,344)

Monthly Amortization Amount

(1,791,033)

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending April 2019

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	134,537	-	238	-	134,299
Dollars	\$ 17,047.37	\$ -	\$ 30.94	\$ -	\$ 17,016.43
\$/Allowance	\$ 0.126711	\$ -	\$ 0.130000	\$ -	\$ 0.126706
NO_x Allowances - Annual					
Quantity	7,557	-	137	-	7,420
Dollars	\$ 4,071.43	\$ -	\$ 73.98	\$ -	\$ 3,997.45
\$/Allowance	\$ 0.538763	\$ -	\$ 0.540000	\$ -	\$ 0.538740
NO_x Allowances - Seasonal					
Quantity	1,398	-	-	-	1,398
Dollars	\$ 2,484.70	\$ -	\$ -	\$ -	\$ 2,484.70
\$/Allowance	\$ 1.777325	\$ -	\$ -	\$ -	\$ 1.777325
Total Emission Allowances					
Quantity	143,492	-	375	-	143,117
Dollars	\$ 23,603.50	\$ -	\$ 104.92	\$ -	\$ 23,498.58

(a) Note: The SO₂ 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 April 2019

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
1	Ammonia	502020	\$ -	\$ -
2	Lime	502040	119,760	119,760
3	Hydrated Lime	502040	44,382	44,382
4	Total		\$ 164,142	\$ 164,142

ES FORM 3.00

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

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

For the Expense Month of April 2019

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge
					(2) - (5)
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
Apr-19	\$ 9,398,011			\$ 700,129	\$ 8,697,882
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 11,455,973
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 28,286,265
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					40.50%

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)
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
Apr-19	\$ 16,381,370	\$ 4,678,873	\$ 265,615	\$ 1,294,456	\$ 15,086,914	\$ 10,142,426
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 16,830,292	\$ 10,685,000
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 28,286,265	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					59.50%	

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 May 2019

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	648,671
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	11,344,727
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		5.72%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	954,965
Jurisdictional R(m)	ES Form 1.10, Line 16		\$	10,745,168
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		8.89%

Effective Date for Billing: July 1, 2019

Submitted by: Theodore H. Czupik Jr.

Title: Rates & Regulatory Strategy Manager

Date Submitted: June 21, 2019

ES FORM 1.10

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of May 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	\$ 41,423,724
2	RB ÷ 12 months	(1) ÷ 12	\$ 3,451,977
3	Pretax Rate of Return (ROR)	ES Form 1.20	8.446%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 291,554
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 2,899,513
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 3,191,067
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	96.97%
9	Jurisdictional E(m)	(7) x (8)	\$ 3,094,378
10	Prior Period Adjustment (if necessary)	(A)	+ \$ (1,885,759)
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ 395,017
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 1,603,636
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 96,689

Calculation of Environmental Surcharge Billing Factors

		Residential (Total Revenue)	Non-Residential (Net Revenue)
14	Revenues as a Percentage of 12 Month Average Total Revenues	40.45%	59.55%
15	Adjusted Jurisdictional E(m) - Allocated	\$ 648,671	\$ 954,965
16	R(m) Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	\$ 11,344,727	\$ 10,745,168
17	Jurisdictional E(m) / R(m)	5.72%	8.89%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 28,045,115	96.97%
19	Sales for Resale	Company Records	\$ 876,089	3.03%
20	Total Revenue		\$ 28,921,204	100.00%

Note: (A) Amounts determined by the Commission during six-month and two-year reviews. Additionally, per discussion with the KPSC Staff, the Company is including an adjustment for over-collection of property taxes in the three monthly filings for Expense Months May, June & July of 2019.

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 May 2019

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant)	ES Form 2.10	\$ 41,089,899
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	2,326,583
3	Subtotal		\$ 43,416,482
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 23,383
6	Subtotal		\$ 23,383
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 249,863
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	1,766,278
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 2,016,141
12	Environmental Compliance Rate Base		\$ 41,423,724
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 83,553
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 51,346
16	Monthly Amortization Expense	ES Form 2.20	\$ 1,843,541
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 115
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 920,958
19	Total Environmental Compliance Operating Expense		\$ 2,899,513
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NOx Allowances Sales		-
23	Total Emission Allowance Sales		\$ -
24	<u>(Over) / Under Recovery</u>		
25	Adjusted Jurisdictional E(m) Authorized for Expense Month two Months Prior		\$ 2,660,087
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		2,265,070
27	(Over) / Under Recovery		\$ 395,017

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 May 2019

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project		Gross Plant in-Service as of May-19	Accumulated Depreciation as of May-19	Net Plant in-Service as of May-19	CWIP Excluding AFUDC as of May-19	Accumulated Deferred ITC as of May-19	Accumulated Deferred Tax Balance as of May-19	Monthly Depreciation Expense	Monthly Property Tax Expense
No.	Description			(2)-(3)					
1	EB020290 Lined Retention Basin West	\$ 10,604,187	\$ 126,496	\$ 10,477,691	\$ -	\$ -	\$ 1,172,645	\$ 21,827	\$ 12,463
2	EB020745 Lined Retention Basin East	\$ -	\$ -	\$ -	\$ 646,049	\$ -	\$ -	\$ -	\$ 768
3	EB020298 East Bend SW/PW Reroute	\$ 30,485,712	\$ 123,367	\$ 30,362,345	\$ -	\$ -	\$ 593,633	\$ 61,726	\$ 36,116
4	EB021281 East Bend Landfill Cell 2	\$ -	\$ -	\$ -	\$ 1,680,534	\$ -	\$ -	\$ -	\$ 1,999
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 41,089,899	\$ 249,863	\$ 40,840,036	\$ 2,326,583	\$ -	\$ 1,766,278	\$ 83,553	\$ 51,346

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of May 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)	\$ 82,500	\$ -	\$ 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	\$ 1,588,547	\$ (150,851)	\$ 1,997,156	\$ (353,337)
31	May-19	Actual \$ -	\$ -	\$ 104,878	\$ (202,486)	\$ 15,574,775	\$ 1,641,055	\$ (408,609)	\$ 3,229,602	\$ (611,095)
32	Jun-19	Actual \$ -	\$ -	\$ 104,216	\$ (202,486)	\$ 15,476,505	\$ -	\$ (1,588,547)	\$ 1,641,055	\$ (1,791,033)
33	Jul-19	Actual \$ -	\$ -	\$ 103,550	\$ (202,486)	\$ 15,377,569	\$ -	\$ (1,641,055)	\$ -	\$ (1,843,541)
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

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of May 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

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of May 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)		\$ 5,756,079	\$ (5,756,079)		(30,054,399)

Monthly Amortization Amount

(1,843,541)

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending May 2019

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	134,299	1,133	225	-	135,207
Dollars	\$ 17,016.43	\$ -	\$ 29.25	\$ -	\$ 16,987.18
\$/Allowance	\$ 0.126706	\$ -	\$ 0.130000	\$ -	\$ 0.125638
NO_x Allowances - Annual					
Quantity	7,420	766	176	-	8,010
Dollars	\$ 3,997.45	\$ -	\$ 86.24	\$ -	\$ 3,911.21
\$/Allowance	\$ 0.538740	\$ -	\$ 0.490000	\$ -	\$ 0.488291
NO_x Allowances - Seasonal					
Quantity	1,398	176	-	-	1,574
Dollars	\$ 2,484.70	\$ -	\$ -	\$ -	\$ 2,484.70
\$/Allowance	\$ 1.777325	\$ -	\$ -	\$ -	\$ 1.578590
Total Emission Allowances					
Quantity	143,117	2,075	401	-	144,791
Dollars	\$ 23,498.58	\$ -	\$ 115.49	\$ -	\$ 23,383.09

(a) Note: The SO₂ 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 May 2019

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
1	Ammonia	502020	\$ 47,933	\$ 47,933
2	Lime	502040	783,381	783,381
3	Hydrated Lime	502040	89,644	89,644
4	Total		\$ 920,958	\$ 920,958

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 May 2019

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge (2) - (5)
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
Apr-19	9,398,011			700,129	8,697,882
May-19	\$ 8,627,659			\$ 737,098	\$ 7,890,561
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 11,344,727
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 28,045,115
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					40.45%

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)
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
Apr-19	16,381,370	4,678,873	265,615	1,294,456	15,086,914	10,142,426
May-19	\$ 16,730,729	\$ 4,667,996	\$ 90,852	\$ 1,527,972	\$ 15,202,757	\$ 10,443,909
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 16,700,388	\$ 10,745,168
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 28,045,115	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					59.55%	

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 June 2019

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	586,279
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	11,145,185
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		5.26%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	874,307
Jurisdictional R(m)	ES Form 1.10, Line 16		\$	10,764,919
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		8.12%

Effective Date for Billing: July 31, 2019

Submitted by: Theodore H. Czupik Jr.

Title: Rates & Regulatory Strategy Manager

Date Submitted: July 19, 2019

ES FORM 1.10

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of June 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	\$ 42,653,919
2	RB ÷ 12 months	(1) ÷ 12	\$ 3,554,493
3	Pretax Rate of Return (ROR)	ES Form 1.20	8.446%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 300,212
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 3,068,519
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 3,368,731
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	96.93%
9	Jurisdictional E(m)	(7) x (8)	\$ 3,265,311
10	Prior Period Adjustment (if necessary)	(A)	+ \$ (1,805,080)
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ 355
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 1,460,586
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 103,420

Calculation of Environmental Surcharge Billing Factors

		Residential (Total Revenue)	Non-Residential (Net Revenue)
14	Revenues as a Percentage of 12 Month Average Total Revenues	40.14%	59.86%
15	Adjusted Jurisdictional E(m) - Allocated	\$ 586,279	\$ 874,307
16	R(m) Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	\$ 11,145,185	\$ 10,764,919
17	Jurisdictional E(m) / R(m)	5.26%	8.12%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 27,767,218	96.93%
19	Sales for Resale	Company Records	\$ 878,553	3.07%
20	Total Revenue		\$ 28,645,771	100.00%

Note: (A) Amounts determined by the Commission during six-month and two-year reviews. Additionally, per discussion with the KPSC Staff, the Company is including an adjustment for over-collection of property taxes in the three monthly filings for Expense Months May, June & July of 2019.

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 June 2019

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant)	ES Form 2.10	\$ 41,154,832
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	3,881,868
3	Subtotal		\$ 45,036,700
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 22,843
6	Subtotal		\$ 22,843
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 334,439
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	2,071,185
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 2,405,624
12	Environmental Compliance Rate Base		\$ 42,653,919
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 84,577
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 53,174
16	Monthly Amortization Expense	ES Form 2.20	\$ 1,625,719
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 541
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 1,304,508
19	Total Environmental Compliance Operating Expense		\$ 3,068,519
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NOx Allowances Sales		-
23	Total Emission Allowance Sales		\$ -
24	<u>(Over) / Under Recovery</u>		
25	Adjusted Jurisdictional E(m) Authorized for Expense Month two Months Prior		\$ 3,107,004
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		3,106,649
27	(Over) / Under Recovery		\$ 355

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 June 2019

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project		Gross Plant in-Service as of June-19	Accumulated Depreciation as of June-19	Net Plant in-Service as of June-19	CWIP Excluding AFUDC as of June-19	Accumulated Deferred ITC as of June-19	Accumulated Deferred Tax Balance as of June-19	Monthly Depreciation Expense	Monthly Property Tax Expense
No.	Description			(2)-(3)					
1	EB020290 Lined Retention Basin West	\$ 10,604,187	\$ 148,323	\$ 10,455,864	\$ -	\$ -	\$ 1,179,049	\$ 21,827	\$ 12,437
2	EB020745 Lined Retention Basin East	\$ -	\$ -	\$ -	\$ 1,559,087	\$ -	\$ -	\$ -	\$ 1,855
3	EB020298 East Bend SW/PW Reroute	\$ 30,550,645	\$ 186,116	\$ 30,364,529	\$ -	\$ -	\$ 892,136	\$ 62,750	\$ 36,119
4	EB021281 East Bend Landfill Cell 2	\$ -	\$ -	\$ -	\$ 2,322,781	\$ -	\$ -	\$ -	\$ 2,763
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 41,154,832	\$ 334,439	\$ 40,820,393	\$ 3,881,868	\$ -	\$ 2,071,185	\$ 84,577	\$ 53,174

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of June 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	\$ 1,588,547	\$ (150,851)	\$ 1,997,156	\$ (353,337)
31	May-19	Actual \$ -	\$ -	\$ 104,878	\$ (202,486)	\$ 15,574,775	\$ 1,641,055	\$ (408,609)	\$ 3,229,602	\$ (611,095)
32	Jun-19	Actual \$ -	\$ -	\$ 104,216	\$ (202,486)	\$ 15,476,505	\$ 1,423,233	\$ (1,588,547)	\$ 3,064,288	\$ (1,791,033)
33	Jul-19	Actual \$ -	\$ -	\$ 103,550	\$ (202,486)	\$ 15,377,569	\$ -	\$ (1,641,055)	\$ 1,423,233	\$ (1,843,541)
34	Aug-19	Actual \$ -	\$ -	\$ 102,880	\$ (202,486)	\$ 15,277,963	\$ -	\$ (1,423,233)	\$ -	\$ (1,625,719)
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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of June 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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of June 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)		\$ 7,179,312	\$ (7,179,312)		(31,477,632)

Monthly Amortization Amount

(1,625,719)

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending June 2019

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	135,207	-	249	-	134,958
Dollars	\$ 16,987.18	\$ -	\$ 32.37	\$ -	\$ 16,954.81
\$/Allowance	\$ 0.125638	\$ -	\$ 0.130000	\$ -	\$ 0.125630
NO_x Allowances - Annual					
Quantity	8,010	-	247	-	7,763
Dollars	\$ 3,911.21	\$ -	\$ 121.03	\$ -	\$ 3,790.18
\$/Allowance	\$ 0.488291	\$ -	\$ 0.490000	\$ -	\$ 0.488237
NO_x Allowances - Seasonal					
Quantity	1,574	-	245	-	1,329
Dollars	\$ 2,484.70	\$ -	\$ 387.10	\$ -	\$ 2,097.60
\$/Allowance	\$ 1.578590	\$ -	\$ 1.580000	\$ -	\$ 1.578330
Total Emission Allowances					
Quantity	144,791	-	741	-	144,050
Dollars	\$ 23,383.09	\$ -	\$ 540.50	\$ -	\$ 22,842.59

(a) Note: The SO₂ 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 June 2019

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
1	Ammonia	502020	\$ 44,952	\$ 44,952
2	Lime	502040	1,164,665	1,164,665
3	Hydrated Lime	502040	94,891	94,891
4	Total		\$ 1,304,508	\$ 1,304,508

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 June 2019

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge
					(2) - (5)
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
Apr-19	9,398,011			700,129	8,697,882
May-19	8,627,659			737,098	7,890,561
Jun-19	\$ 11,487,026			\$ 1,138,649	\$ 10,348,377
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 11,145,185
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 27,767,218
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					40.14%

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	Total Non-Fuel Revenue
					(2) - (5)	(6) - (3) - (4)
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
Apr-19	16,381,370	4,678,873	265,615	1,294,456	15,086,914	10,142,426
May-19	16,730,729	4,667,996	90,852	1,527,972	15,202,757	10,443,909
Jun-19	\$ 19,945,443	\$ 5,235,309	\$ 1,537,295	\$ 1,968,000	\$ 17,977,443	\$ 11,204,839
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 16,622,033	\$ 10,764,919
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 27,767,218	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					59.86%	

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 July 2019

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	510,839
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	10,965,259
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		4.66%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	768,818
Jurisdictional R(m)	ES Form 1.10, Line 16		\$	10,862,354
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		7.08%

Effective Date for Billing: August 29, 2019

Submitted by: Theodore H. Czupik Jr.

Title: Rates & Regulatory Strategy Manager

Date Submitted: August 19, 2019

ES FORM 1.10

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

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of July 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	\$ 45,064,757
2	RB ÷ 12 months	(1) ÷ 12	\$ 3,755,396
3	Pretax Rate of Return (ROR)	ES Form 1.20	8.446%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 317,181
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 3,122,911
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 3,440,092
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	97.10%
9	Jurisdictional E(m)	(7) x (8)	\$ 3,340,329
10	Prior Period Adjustment (if necessary)	(A)	+ \$ (1,805,080)
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ (255,592)
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 1,279,657
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 99,763

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	39.92%	60.08%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 510,839	\$ 768,818
16	<u>R(m)</u> 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	\$ 10,965,259	\$ 10,862,354
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	4.66%	7.08%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 27,470,206	97.10%
19	Sales for Resale	Company Records	\$ 820,402	2.90%
20	Total Revenue		\$ 28,290,608	100.00%

Note: (A) Amounts determined by the Commission during six-month and two-year reviews. Additionally, per discussion with the KPSC Staff, the Company is including an adjustment for over-collection of property taxes in the three monthly filings for Expense Months May, June & July of 2019.

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 July 2019

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant)	ES Form 2.10	\$ 41,357,126
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	6,487,266
3	Subtotal		\$ 47,844,392
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 22,380
6	Subtotal		\$ 22,380
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 419,150
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	2,382,865
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 2,802,015
12	Environmental Compliance Rate Base		\$ 45,064,757
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 84,710
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 56,412
16	Monthly Amortization Expense	ES Form 2.20	\$ 1,571,071
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 463
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 1,410,255
19	Total Environmental Compliance Operating Expense		\$ 3,122,911
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NOx Allowances Sales		-
23	Total Emission Allowance Sales		\$ -
24	<u>(Over) / Under Recovery</u>		
25	Adjusted Jurisdictional E(m) Authorized for Expense Month two Months Prior		\$ 1,603,636
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		1,859,228
27	(Over) / Under Recovery		\$ (255,592)

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 July 2019

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project		Gross Plant in-Service as of July-19	Accumulated Depreciation as of July-19	Net Plant in-Service as of July-19	CWIP Excluding AFUDC as of July-19	Accumulated Deferred ITC as of July-19	Accumulated Deferred Tax Balance as of July-19	Monthly Depreciation Expense	Monthly Property Tax Expense
No.	Description			(2)-(3)					
1	EB020290 Lined Retention Basin West	\$ 10,604,187	\$ 170,150	\$ 10,434,037	\$ -	\$ -	\$ 1,185,452	\$ 21,827	\$ 12,411
2	EB020745 Lined Retention Basin East	\$ -	\$ -	\$ -	\$ 2,632,769	\$ -	\$ -	\$ -	\$ 3,132
3	EB020298 East Bend SW/PW Reroute	\$ 30,752,939	\$ 249,000	\$ 30,503,939	\$ -	\$ -	\$ 1,197,413	\$ 62,883	\$ 36,284
4	EB021281 East Bend Landfill Cell 2	\$ -	\$ -	\$ -	\$ 3,854,497	\$ -	\$ -	\$ -	\$ 4,585
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 41,357,126	\$ 419,150	\$ 40,937,976	\$ 6,487,266	\$ -	\$ 2,382,865	\$ 84,710	\$ 56,412

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of July 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)	\$ 82,500	\$ -	\$ 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	\$ 1,588,547	\$ (150,851)	\$ 1,997,156	\$ (353,337)
31	May-19	Actual \$ -	\$ -	\$ 104,878	\$ (202,486)	\$ 15,574,775	\$ 1,641,055	\$ (408,609)	\$ 3,229,602	\$ (611,095)
32	Jun-19	Actual \$ -	\$ -	\$ 104,216	\$ (202,486)	\$ 15,476,505	\$ 1,423,233	\$ (1,588,547)	\$ 3,064,288	\$ (1,791,033)
33	Jul-19	Actual \$ -	\$ -	\$ 103,550	\$ (202,486)	\$ 15,377,569	\$ 1,368,585	\$ (1,641,055)	\$ 2,791,818	\$ (1,843,541)
34	Aug-19	Actual \$ -	\$ -	\$ 102,880	\$ (202,486)	\$ 15,277,963	\$ -	\$ (1,423,233)	\$ 1,368,585	\$ (1,625,719)
35	Sep-19	Actual \$ -	\$ -	\$ 102,204	\$ (202,486)	\$ 15,177,681	\$ -	\$ (1,368,585)	\$ -	\$ (1,571,071)
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

DUKE ENERGY KENTUCKY, INC.

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of July 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

DUKE ENERGY KENTUCKY, INC.

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of July 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)		\$ 8,547,897	\$ (8,547,897)		(32,846,217)

Monthly Amortization Amount

(1,571,071)

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending July 2019

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	134,958	-	200	-	134,758
Dollars	\$ 16,954.81	\$ -	\$ 26.00	\$ -	\$ 16,928.81
\$/Allowance	\$ 0.125630	\$ -	\$ 0.130000	\$ -	\$ 0.125624
NO_x Allowances - Annual					
Quantity	7,763	-	211	-	7,552
Dollars	\$ 3,790.18	\$ -	\$ 103.39	\$ -	\$ 3,686.79
\$/Allowance	\$ 0.488237	\$ -	\$ 0.490000	\$ -	\$ 0.488187
NO_x Allowances - Seasonal					
Quantity	1,329	-	211	-	1,118
Dollars	\$ 2,097.60	\$ -	\$ 333.38	\$ -	\$ 1,764.22
\$/Allowance	\$ 1.578330	\$ -	\$ 1.580000	\$ -	\$ 1.578014
Total Emission Allowances					
Quantity	144,050	-	622	-	143,428
Dollars	\$ 22,842.59	\$ -	\$ 462.77	\$ -	\$ 22,379.82

(a) Note: The SO₂ 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 July 2019

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
1	Ammonia	502020	\$ 49,392	\$ 49,392
2	Lime	502040	1,297,389	1,297,389
3	Hydrated Lime	502040	63,474	63,474
4	Total		\$ 1,410,255	\$ 1,410,255

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 July 2019

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge
					(2) - (5)
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
Apr-19	9,398,011			700,129	8,697,882
May-19	8,627,659			737,098	7,890,561
Jun-19	11,487,026			1,138,649	10,348,377
Jul-19	\$ 13,524,273			\$ 734,203	\$ 12,790,070
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 10,965,259
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 27,470,206
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					39.92%

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)
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
Apr-19	16,381,370	4,678,873	265,615	1,294,456	15,086,914	10,142,426
May-19	16,730,729	4,667,996	90,852	1,527,972	15,202,757	10,443,909
Jun-19	19,945,443	5,235,309	1,537,295	1,968,000	17,977,443	11,204,839
Jul-19	\$ 19,726,822	\$ 5,582,336	\$ 582,168	\$ 1,125,025	\$ 18,601,797	\$ 12,437,293
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 16,504,947	\$ 10,862,354
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 27,470,206	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					60.08%	

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 August 2019

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	938,918
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	10,929,700
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		8.59%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,416,031
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	10,950,909
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		12.93%

Effective Date for Billing: September 30, 2019

Submitted by: Theodore H. Czupik Jr.

Title: Rates & Regulatory Strategy Manager

Date Submitted: September 20, 2019

ES FORM 1.10

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of August 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	\$ 47,240,866
2	RB ÷ 12 months	(1) ÷ 12	\$ 3,936,739
3	Pretax Rate of Return (ROR)	ES Form 1.20	8.446%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 332,497
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 2,218,294
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 2,550,791
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	97.11%
9	Jurisdictional E(m)	(7) x (8)	\$ 2,477,073
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ (122,124)
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 2,354,949
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 73,718

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	39.87% 60.13%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 938,918 \$ 1,416,031
16	R(m) Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	ES Form 3.00 ES Form 3.00	\$ 10,929,700 \$ 10,950,909
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	8.59% 12.93%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 27,414,377	97.11%
19	Sales for Resale	Company Records	\$ 816,625	2.89%
20	Total Revenue		\$ 28,231,002	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 August 2019

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant)	ES Form 2.10	\$ 41,613,954
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	8,811,032
3	Subtotal		\$ 50,424,986
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 21,387
6	Subtotal		\$ 21,387
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 504,277
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	2,701,230
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 3,205,507
12	Environmental Compliance Rate Base		\$ 47,240,866
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 85,127
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 59,380
16	Monthly Amortization Expense	ES Form 2.20	\$ 690,245
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 993
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 1,382,549
19	Total Environmental Compliance Operating Expense		\$ 2,218,294
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x 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		\$ 1,460,586
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		1,582,710
27	(Over) / Under Recovery		\$ (122,124)

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 August 2019

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project		Gross Plant in-Service as of August-19	Accumulated Depreciation as of August-19	Net Plant in-Service as of August-19	CWIP Excluding AFUDC as of August-19	Accumulated Deferred ITC as of August-19	Accumulated Deferred Tax Balance as of August-19	Monthly Depreciation Expense	Monthly Property Tax Expense
No.	Description			(2)-(3)					
1	EB020290 Lined Retention Basin West	\$ 10,604,187	\$ 191,977	\$ 10,412,210	\$ -	\$ -	\$ 1,191,856	\$ 21,827	\$ 12,385
2	EB020745 Lined Retention Basin East	\$ -	\$ -	\$ -	\$ 3,857,374	\$ -	\$ -	\$ -	\$ 4,588
3	EB020298 East Bend SW/PW Reroute	\$ 31,009,767	\$ 312,300	\$ 30,697,467	\$ -	\$ -	\$ 1,509,374	\$ 63,300	\$ 36,515
4	EB021281 East Bend Landfill Cell 2	\$ -	\$ -	\$ -	\$ 4,953,658	\$ -	\$ -	\$ -	\$ 5,892
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 41,613,954	\$ 504,277	\$ 41,109,677	\$ 8,811,032	\$ -	\$ 2,701,230	\$ 85,127	\$ 59,380

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of August 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	\$ 1,588,547	\$ (150,851)	\$ 1,997,156	\$ (353,337)
31	May-19	Actual \$ -	\$ -	\$ 104,878	\$ (202,486)	\$ 15,574,775	\$ 1,641,055	\$ (408,609)	\$ 3,229,602	\$ (611,095)
32	Jun-19	Actual \$ -	\$ -	\$ 104,216	\$ (202,486)	\$ 15,476,505	\$ 1,423,233	\$ (1,588,547)	\$ 3,064,288	\$ (1,791,033)
33	Jul-19	Actual \$ -	\$ -	\$ 103,550	\$ (202,486)	\$ 15,377,569	\$ 1,368,585	\$ (1,641,055)	\$ 2,791,818	\$ (1,843,541)
34	Aug-19	Actual \$ -	\$ -	\$ 102,880	\$ (202,486)	\$ 15,277,963	\$ 487,759	\$ (1,423,233)	\$ 1,856,344	\$ (1,625,719)
35	Sep-19	Actual \$ -	\$ -	\$ 102,204	\$ (202,486)	\$ 15,177,681	\$ -	\$ (1,368,585)	\$ 487,759	\$ (1,571,071)
36	Oct-19	Actual \$ -	\$ -	\$ 101,524	\$ (202,486)	\$ 15,076,719	\$ -	\$ (487,759)	\$ -	\$ (690,245)
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

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of August 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

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of August 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)		\$ 9,035,656	\$ (9,035,656)		(33,333,976)

Monthly Amortization Amount

(690,245)

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending August 2019

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	134,758	-	561	-	134,197
Dollars	\$ 16,928.81	\$ -	\$ 72.93	\$ -	\$ 16,855.88
\$/Allowance	\$ 0.125624	\$ -	\$ 0.130000	\$ -	\$ 0.125605
NO_x Allowances - Annual					
Quantity	7,552	-	445	-	7,107
Dollars	\$ 3,686.79	\$ -	\$ 218.05	\$ -	\$ 3,468.74
\$/Allowance	\$ 0.488187	\$ -	\$ 0.490000	\$ -	\$ 0.488074
NO_x Allowances - Seasonal					
Quantity	1,118	-	444	-	674
Dollars	\$ 1,764.22	\$ -	\$ 701.52	\$ -	\$ 1,062.70
\$/Allowance	\$ 1.578014	\$ -	\$ 1.580000	\$ -	\$ 1.576706
Total Emission Allowances					
Quantity	143,428	-	1,450	-	141,978
Dollars	\$ 22,379.82	\$ -	\$ 992.50	\$ -	\$ 21,387.32

(a) Note: The SO₂ 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 August 2019

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
1	Ammonia	502020	\$ 54,292	\$ 54,292
2	Lime	502040	1,240,594	1,240,594
3	Hydrated Lime	502040	87,663	87,663
4	Total		\$ 1,382,549	\$ 1,382,549

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 August 2019

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge
					(2) - (5)
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
Apr-19	9,398,011			700,129	8,697,882
May-19	8,627,659			737,098	7,890,561
Jun-19	11,487,026			1,138,649	10,348,377
Jul-19	13,524,273			734,203	12,790,070
Aug-19	\$ 12,261,118			\$ 613,630	\$ 11,647,488
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 10,929,700
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 27,414,377
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					39.87%

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)
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
Apr-19	16,381,370	4,678,873	265,615	1,294,456	15,086,914	10,142,426
May-19	16,730,729	4,667,996	90,852	1,527,972	15,202,757	10,443,909
Jun-19	19,945,443	5,235,309	1,537,295	1,968,000	17,977,443	11,204,839
Jul-19	19,726,822	5,582,336	582,168	1,125,025	18,601,797	12,437,293
Aug-19	\$ 17,808,671	\$ 5,629,529	\$ (777,050)	\$ 969,080	\$ 16,839,591	\$ 11,987,112
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 16,484,677	\$ 10,950,909
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 27,414,377	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					60.13%	

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 September 2019

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	706,706
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	10,886,958
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		6.49%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,072,065
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	10,997,970
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		9.75%

Effective Date for Billing: October 29, 2019

Submitted by: Theodore H. Czupik Jr.

Title: Rates & Regulatory Strategy Manager

Date Submitted: October 19, 2019

ES FORM 1.10

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of September 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	\$ 51,650,762
2	RB ÷ 12 months	(1) ÷ 12	\$ 4,304,230
3	Pretax Rate of Return (ROR)	ES Form 1.20	8.446%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 363,535
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 1,577,093
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 1,940,628
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	96.98%
9	Jurisdictional E(m)	(7) x (8)	\$ 1,882,021
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ (103,250)
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 1,778,771
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 58,607

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	39.73% 60.27%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 706,706 \$ 1,072,065
16	R(m) Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	ES Form 3.00 ES Form 3.00	\$ 10,886,958 \$ 10,997,970
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	6.49% 9.75%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 27,401,551	96.98%
19	Sales for Resale	Company Records	\$ 853,672	3.02%
20	Total Revenue		\$ 28,255,223	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 September 2019

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant)	ES Form 2.10	\$ 41,240,678
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	13,965,816
3	Subtotal		\$ 55,206,494
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 20,921
6	Subtotal		\$ 20,921
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 589,932
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	2,986,721
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 3,576,653
12	Environmental Compliance Rate Base		\$ 51,650,762
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 85,655
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 64,967
16	Monthly Amortization Expense	ES Form 2.20	\$ 249,963
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 467
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 1,176,041
19	Total Environmental Compliance Operating Expense		\$ 1,577,093
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NOx Allowances Sales		-
23	Total Emission Allowance Sales		\$ -
24	<u>(Over) / Under Recovery</u>		
25	Adjusted Jurisdictional E(m) Authorized for Expense Month two Months Prior		\$ 1,279,657
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		1,382,907
27	(Over) / Under Recovery		\$ (103,250)

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 September 2019

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project		Gross Plant in-Service as of September-19	Accumulated Depreciation as of September-19	Net Plant in-Service as of September-19	CWIP Excluding AFUDC as of September-19	Accumulated Deferred ITC as of September-19	Accumulated Deferred Tax Balance as of September-19	Monthly Depreciation Expense	Monthly Property Tax Expense
No.	Description			(2)-(3)					
1	EB020290 Lined Retention Basin West	\$ 10,604,187	\$ 213,804	\$ 10,390,383	\$ -	\$ -	\$ 1,198,259	\$ 21,827	\$ 12,359
2	EB020745 Lined Retention Basin East	\$ -	\$ -	\$ -	\$ 4,994,232	\$ -	\$ -	\$ -	\$ 5,941
3	EB020298 East Bend SW/PW Reroute	\$ 30,636,491	\$ 376,128	\$ 30,260,363	\$ -	\$ -	\$ 1,788,462	\$ 63,828	\$ 35,995
4	EB021281 East Bend Landfill Cell 2	\$ -	\$ -	\$ -	\$ 8,971,584	\$ -	\$ -	\$ -	\$ 10,672
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 41,240,678	\$ 589,932	\$ 40,650,746	\$ 13,965,816	\$ -	\$ 2,986,721	\$ 85,655	\$ 64,967

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of September 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	\$ 1,588,547	\$ (150,851)	\$ 1,997,156	\$ (353,337)
31	May-19	Actual \$ -	\$ -	\$ 104,878	\$ (202,486)	\$ 15,574,775	\$ 1,641,055	\$ (408,609)	\$ 3,229,602	\$ (611,095)
32	Jun-19	Actual \$ -	\$ -	\$ 104,216	\$ (202,486)	\$ 15,476,505	\$ 1,423,233	\$ (1,588,547)	\$ 3,064,288	\$ (1,791,033)
33	Jul-19	Actual \$ -	\$ -	\$ 103,550	\$ (202,486)	\$ 15,377,569	\$ 1,368,585	\$ (1,641,055)	\$ 2,791,818	\$ (1,843,541)
34	Aug-19	Actual \$ -	\$ -	\$ 102,880	\$ (202,486)	\$ 15,277,963	\$ 487,759	\$ (1,423,233)	\$ 1,856,344	\$ (1,625,719)
35	Sep-19	Actual \$ -	\$ -	\$ 102,204	\$ (202,486)	\$ 15,177,681	\$ 47,477	\$ (1,368,585)	\$ 535,236	\$ (1,571,071)
36	Oct-19	Actual \$ -	\$ -	\$ 101,524	\$ (202,486)	\$ 15,076,719	\$ -	\$ (487,759)	\$ 47,477	\$ (690,245)
37	Nov-19	Actual \$ -	\$ -	\$ 100,840	\$ (202,486)	\$ 14,975,073	\$ -	\$ (47,477)	\$ -	\$ (249,963)
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

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of September 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

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of September 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)		\$ 9,083,133	\$ (9,083,133)		(33,381,453)

Monthly Amortization Amount

(249,963)

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending September 2019

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	134,197	-	238	-	133,959
Dollars	\$ 16,855.88	\$ -	\$ 30.94	\$ -	\$ 16,824.94
\$/Allowance	\$ 0.125605	\$ -	\$ 0.130000	\$ -	\$ 0.125598
NO_x Allowances - Annual					
Quantity	7,107	-	211	-	6,896
Dollars	\$ 3,468.74	\$ -	\$ 102.98	\$ -	\$ 3,365.76
\$/Allowance	\$ 0.488074	\$ -	\$ 0.488057	\$ -	\$ 0.488074
NO_x Allowances - Seasonal					
Quantity	674	-	211	-	463
Dollars	\$ 1,062.70	\$ -	\$ 332.69	\$ -	\$ 730.01
\$/Allowance	\$ 1.576706	\$ -	\$ 1.576730	\$ -	\$ 1.576695
Total Emission Allowances					
Quantity	141,978	-	660	-	141,318
Dollars	\$ 21,387.32	\$ -	\$ 466.61	\$ -	\$ 20,920.71

(a) Note: The SO₂ 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 September 2019

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
1	Ammonia	502020	\$ 36,768	\$ 36,768
2	Lime	502040	1,087,686	1,087,686
3	Hydrated Lime	502040	51,587	51,587
4	Total		\$ 1,176,041	\$ 1,176,041

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 September 2019

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge
					(2) - (5)
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
Apr-19	9,398,011			700,129	8,697,882
May-19	8,627,659			737,098	7,890,561
Jun-19	11,487,026			1,138,649	10,348,377
Jul-19	13,524,273			734,203	12,790,070
Aug-19	12,261,118			613,630	11,647,488
Sep-19	\$ 12,108,304			\$ 540,297	\$ 11,568,007
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 10,886,958
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 27,401,551
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					39.73%

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)
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
Apr-19	16,381,370	4,678,873	265,615	1,294,456	15,086,914	10,142,426
May-19	16,730,729	4,667,996	90,852	1,527,972	15,202,757	10,443,909
Jun-19	19,945,443	5,235,309	1,537,295	1,968,000	17,977,443	11,204,839
Jul-19	19,726,822	5,582,336	582,168	1,125,025	18,601,797	12,437,293
Aug-19	17,808,671	5,629,529	(777,050)	969,080	16,839,591	11,987,112
Sep-19	\$ 18,431,519	\$ 5,357,488	\$ 214,486	\$ 842,610	\$ 17,588,909	\$ 12,016,935
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 16,514,593	\$ 10,997,970
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 27,401,551	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					60.27%	

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 2019

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	421,477
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	10,844,863
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		3.89%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	642,860
Jurisdictional R(m)	ES Form 1.10, Line 16		\$	11,078,771
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		5.80%

Effective Date for Billing: December 2, 2019

Submitted by: Theodore H. Czupik Jr.

Title: Rates & Regulatory Strategy Manager

Date Submitted: November 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 October 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	\$ 56,374,664
2	RB ÷ 12 months	(1) ÷ 12	\$ 4,697,889
3	Pretax Rate of Return (ROR)	ES Form 1.20	8.446%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 396,784
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 669,937
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 1,066,721
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	97.24%
9	Jurisdictional E(m)	(7) x (8)	\$ 1,037,280
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ 27,057
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 1,064,337
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 29,441

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	39.60% 60.40%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 421,477 \$ 642,860
16	R(m) Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	ES Form 3.00 ES Form 3.00	\$ 10,844,863 \$ 11,078,771
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	3.89% 5.80%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 27,385,041	97.24%
19	Sales for Resale	Company Records	\$ 778,449	2.76%
20	Total Revenue		\$ 28,163,490	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 2019

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant)	ES Form 2.10	\$ 41,121,404
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	19,189,936
3	Subtotal		\$ 60,311,340
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 20,884
6	Subtotal		\$ 20,884
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 674,819
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	3,282,741
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 3,957,560
12	Environmental Compliance Rate Base		\$ 56,374,664
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 84,887
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 70,937
16	Monthly Amortization Expense	ES Form 2.20	\$ 183,891
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 37
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 330,185
19	Total Environmental Compliance Operating Expense		\$ 669,937
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NOx Allowances Sales		-
23	Total Emission Allowance Sales		\$ -
24	<u>(Over) / Under Recovery</u>		
25	Adjusted Jurisdictional E(m) Authorized for Expense Month two Months Prior		\$ 2,354,949
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		2,327,892
27	(Over) / Under Recovery		\$ 27,057

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 2019

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project		Gross Plant in-Service as of October-19	Accumulated Depreciation as of October-19	Net Plant in-Service as of October-19	CWIP Excluding AFUDC as of October-19	Accumulated Deferred ITC as of October-19	Accumulated Deferred Tax Balance as of October-19	Monthly Depreciation Expense	Monthly Property Tax Expense
No.	Description			(2)-(3)					
1	EB020290 Lined Retention Basin West	\$ 10,604,187	\$ 235,631	\$ 10,368,556	\$ -	\$ -	\$ 1,204,662	\$ 21,827	\$ 12,333
2	EB020745 Lined Retention Basin East	\$ -	\$ -	\$ -	\$ 6,491,111	\$ -	\$ -	\$ -	\$ 7,721
3	EB020298 East Bend SW/PW Reroute	\$ 30,517,217	\$ 439,188	\$ 30,078,029	\$ -	\$ -	\$ 2,078,079	\$ 63,060	\$ 35,778
4	EB021281 East Bend Landfill Cell 2	\$ -	\$ -	\$ -	\$ 12,698,825	\$ -	\$ -	\$ -	\$ 15,105
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 41,121,404	\$ 674,819	\$ 40,446,585	\$ 19,189,936	\$ -	\$ 3,282,741	\$ 84,887	\$ 70,937

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of October 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	\$ 1,588,547	\$ (150,851)	\$ 1,997,156	\$ (353,337)
31	May-19	Actual \$ -	\$ -	\$ 104,878	\$ (202,486)	\$ 15,574,775	\$ 1,641,055	\$ (408,609)	\$ 3,229,602	\$ (611,095)
32	Jun-19	Actual \$ -	\$ -	\$ 104,216	\$ (202,486)	\$ 15,476,505	\$ 1,423,233	\$ (1,588,547)	\$ 3,064,288	\$ (1,791,033)
33	Jul-19	Actual \$ -	\$ -	\$ 103,550	\$ (202,486)	\$ 15,377,569	\$ 1,368,585	\$ (1,641,055)	\$ 2,791,818	\$ (1,843,541)
34	Aug-19	Actual \$ -	\$ -	\$ 102,880	\$ (202,486)	\$ 15,277,963	\$ 487,759	\$ (1,423,233)	\$ 1,856,344	\$ (1,625,719)
35	Sep-19	Actual \$ -	\$ -	\$ 102,204	\$ (202,486)	\$ 15,177,681	\$ 47,477	\$ (1,368,585)	\$ 535,236	\$ (1,571,071)
36	Oct-19	Actual \$ -	\$ -	\$ 101,524	\$ (202,486)	\$ 15,076,719	\$ (18,595)	\$ (487,759)	\$ 28,882	\$ (690,245)
37	Nov-19	Actual \$ -	\$ -	\$ 100,840	\$ (202,486)	\$ 14,975,073	\$ -	\$ (47,477)	\$ (18,595)	\$ (249,963)
38	Dec-19	Actual \$ -	\$ -	\$ 100,151	\$ (202,486)	\$ 14,872,738	\$ -	\$ 18,595	\$ -	\$ (183,891)
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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of October 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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of October 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)		\$ 9,064,538	\$ (9,064,538)		(33,362,858)

Monthly Amortization Amount

(183,891)

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending October 2019

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	133,959	-	17	-	133,942
Dollars	\$ 16,824.94	\$ -	\$ 2.21	\$ -	\$ 16,822.73
\$/Allowance	\$ 0.125598	\$ -	\$ 0.130000	\$ -	\$ 0.125597
NO_x Allowances - Annual					
Quantity	6,896	-	23	-	6,873
Dollars	\$ 3,365.76	\$ -	\$ 11.27	\$ -	\$ 3,354.49
\$/Allowance	\$ 0.488074	\$ -	\$ 0.490000	\$ -	\$ 0.488068
NO_x Allowances - Seasonal					
Quantity	463	-	15	-	448
Dollars	\$ 730.01	\$ -	\$ 23.70	\$ -	\$ 706.31
\$/Allowance	\$ 1.576695	\$ -	\$ 1.580000	\$ -	\$ 1.576585
Total Emission Allowances					
Quantity	141,318	-	55	-	141,263
Dollars	\$ 20,920.71	\$ -	\$ 37.18	\$ -	\$ 20,883.53

(a) Note: The SO₂ 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 October 2019

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
1	Ammonia	502020	\$ -	\$ -
2	Lime	502040	159,833	159,833
3	Hydrated Lime	502040	170,352	170,352
4	Total		\$ 330,185	\$ 330,185

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 2019

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge
					(2) - (5)
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
Apr-19	9,398,011			700,129	8,697,882
May-19	8,627,659			737,098	7,890,561
Jun-19	11,487,026			1,138,649	10,348,377
Jul-19	13,524,273			734,203	12,790,070
Aug-19	12,261,118			613,630	11,647,488
Sep-19	12,108,304			540,297	11,568,007
Oct-19	\$ 10,517,865			\$ 833,088	\$ 9,684,777
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 10,844,863
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 27,385,041
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					39.60%

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-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
Apr-19	16,381,370	4,678,873	265,615	1,294,456	15,086,914	10,142,426
May-19	16,730,729	4,667,996	90,852	1,527,972	15,202,757	10,443,909
Jun-19	19,945,443	5,235,309	1,537,295	1,968,000	17,977,443	11,204,839
Jul-19	19,726,822	5,582,336	582,168	1,125,025	18,601,797	12,437,293
Aug-19	17,808,671	5,629,529	(777,050)	969,080	16,839,591	11,987,112
Sep-19	18,431,519	5,357,488	214,486	842,610	17,588,909	12,016,935
Oct-19	\$ 18,843,454	\$ 5,442,045	\$ 54,598	\$ 1,494,804	\$ 17,348,650	\$ 11,852,007
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 16,540,178	\$ 11,078,771
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 27,385,041	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					60.40%	

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 2019

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	579,757
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	10,763,176
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		5.39%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	889,471
Jurisdictional R(m)	ES Form 1.10, Line 16		\$	11,078,631
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		8.03%

Effective Date for Billing: January 2, 2020

Submitted by: Theodore H. Czupik Jr.

Title: Rates & Regulatory Strategy Manager

Date Submitted: December 16, 2019

ES FORM 1.10

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

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of November 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	\$ 59,187,736
2	RB ÷ 12 months	(1) ÷ 12	\$ 4,932,311
3	Pretax Rate of Return (ROR)	ES Form 1.20	8.446%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 416,583
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 858,672
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 1,275,255
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	97.63%
9	Jurisdictional E(m)	(7) x (8)	\$ 1,245,031
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ 224,197
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 1,469,228
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 30,224

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	39.46%	60.54%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 579,757	\$ 889,471
16	<u>R(m)</u> 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	\$ 10,763,176	\$ 11,078,631
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	5.39%	8.03%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 27,274,326	97.63%
19	Sales for Resale	Company Records	\$ 662,008	2.37%
20	Total Revenue		\$ 27,936,334	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 2019

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant)	ES Form 2.10	\$ 41,587,732
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	21,961,993
3	Subtotal		\$ 63,549,725
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 20,854
6	Subtotal		\$ 20,854
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 759,460
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	3,623,383
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 4,382,843
12	Environmental Compliance Rate Base		\$ 59,187,736
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 84,642
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 74,689
16	Monthly Amortization Expense	ES Form 2.20	\$ 532,861
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 29
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 166,451
19	Total Environmental Compliance Operating Expense		\$ 858,672
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x 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		\$ 1,778,771
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		1,554,574
27	(Over) / Under Recovery		\$ 224,197

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 2019

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project No.	Description	Gross Plant in-Service as of November-19	Accumulated Depreciation as of November-19	Net Plant in-Service as of November-19 (2)-(3)	CWIP Excluding AFUDC as of November-19	Accumulated Deferred ITC as of November-19	Accumulated Deferred Tax Balance as of November-19	Monthly Depreciation Expense	Monthly Property Tax Expense
1	EB020290 Lined Retention Basin West	\$ 10,604,187	\$ 257,457	\$ 10,346,730	\$ -	\$ -	\$ 1,211,066	\$ 21,827	\$ 12,307
2	EB020745 Lined Retention Basin East	\$ -	\$ -	\$ -	\$ 7,619,647	\$ -	\$ -	\$ -	\$ 9,064
3	EB020298 East Bend SW/PW Reroute	\$ 30,983,545	\$ 502,003	\$ 30,481,542	\$ -	\$ -	\$ 2,412,317	\$ 62,815	\$ 36,258
4	EB021281 East Bend Landfill Cell 2	\$ -	\$ -	\$ -	\$ 14,342,346	\$ -	\$ -	\$ -	\$ 17,060
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 41,587,732	\$ 759,460	\$ 40,828,272	\$ 21,961,993	\$ -	\$ 3,623,383	\$ 84,642	\$ 74,689

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of November 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	\$ 1,588,547	\$ (150,851)	\$ 1,997,156	\$ (353,337)
31	May-19	Actual \$ -	\$ -	\$ 104,878	\$ (202,486)	\$ 15,574,775	\$ 1,641,055	\$ (408,609)	\$ 3,229,602	\$ (611,095)
32	Jun-19	Actual \$ -	\$ -	\$ 104,216	\$ (202,486)	\$ 15,476,505	\$ 1,423,233	\$ (1,588,547)	\$ 3,064,288	\$ (1,791,033)
33	Jul-19	Actual \$ -	\$ -	\$ 103,550	\$ (202,486)	\$ 15,377,569	\$ 1,368,585	\$ (1,641,055)	\$ 2,791,818	\$ (1,843,541)
34	Aug-19	Actual \$ -	\$ -	\$ 102,880	\$ (202,486)	\$ 15,277,963	\$ 487,759	\$ (1,423,233)	\$ 1,856,344	\$ (1,625,719)
35	Sep-19	Actual \$ -	\$ -	\$ 102,204	\$ (202,486)	\$ 15,177,681	\$ 47,477	\$ (1,368,585)	\$ 535,236	\$ (1,571,071)
36	Oct-19	Actual \$ -	\$ -	\$ 101,524	\$ (202,486)	\$ 15,076,719	\$ (18,595)	\$ (487,759)	\$ 28,882	\$ (690,245)
37	Nov-19	Actual \$ -	\$ -	\$ 100,840	\$ (202,486)	\$ 14,975,073	\$ 330,375	\$ (47,477)	\$ 311,780	\$ (249,963)
38	Dec-19	Actual \$ -	\$ -	\$ 100,151	\$ (202,486)	\$ 14,872,738	\$ -	\$ 18,595	\$ 330,375	\$ (183,891)
39	Jan-20	Actual \$ -	\$ -	\$ 99,457	\$ (202,486)	\$ 14,769,709	\$ -	\$ (330,375)	\$ -	\$ (532,861)
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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of November 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

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of November 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)		\$ 9,394,913	\$ (9,394,913)		(33,693,233)

Monthly Amortization Amount

(532,861)

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending November 2019

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	133,942	-	36	-	133,906
Dollars	\$ 16,822.73	\$ -	\$ 4.68	\$ -	\$ 16,818.05
\$/Allowance	\$ 0.125597	\$ -	\$ 0.130000	\$ -	\$ 0.125596
NO_x Allowances - Annual					
Quantity	6,873	-	53	-	6,820
Dollars	\$ 3,354.49	\$ -	\$ 25.97	\$ -	\$ 3,328.52
\$/Allowance	\$ 0.488068	\$ -	\$ 0.490000	\$ -	\$ 0.488053
NO_x Allowances - Seasonal					
Quantity	448	-	(1)	-	449
Dollars	\$ 706.31	\$ -	\$ (1.58)	\$ -	\$ 707.89
\$/Allowance	\$ 1.576585	\$ -	\$ 1.580000	\$ -	\$ 1.576592
Total Emission Allowances					
Quantity	141,263	-	88	-	141,175
Dollars	\$ 20,883.53	\$ -	\$ 29.07	\$ -	\$ 20,854.46

(a) Note: The SO₂ 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 2019

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
1	Ammonia	502020	\$ 13,486	\$ 13,486
2	Lime	502040	143,647	143,647
3	Hydrated Lime	502040	9,318	9,318
4	Total		\$ 166,451	\$ 166,451

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 2019

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge (2) - (5)
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
Apr-19	9,398,011			700,129	8,697,882
May-19	8,627,659			737,098	7,890,561
Jun-19	11,487,026			1,138,649	10,348,377
Jul-19	13,524,273			734,203	12,790,070
Aug-19	12,261,118			613,630	11,647,488
Sep-19	12,108,304			540,297	11,568,007
Oct-19	10,517,865			833,088	9,684,777
Nov-19	\$ 8,743,548			\$ 534,343	\$ 8,209,205
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 10,763,176
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 27,274,326
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					39.46%

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)
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
Apr-19	16,381,370	4,678,873	265,615	1,294,456	15,086,914	10,142,426
May-19	16,730,729	4,667,996	90,852	1,527,972	15,202,757	10,443,909
Jun-19	19,945,443	5,235,309	1,537,295	1,968,000	17,977,443	11,204,839
Jul-19	19,726,822	5,582,336	582,168	1,125,025	18,601,797	12,437,293
Aug-19	17,808,671	5,629,529	(777,050)	969,080	16,839,591	11,987,112
Sep-19	18,431,519	5,357,488	214,486	842,610	17,588,909	12,016,935
Oct-19	18,843,454	5,442,045	54,598	1,494,804	17,348,650	11,852,007
Nov-19	\$ 16,478,475	\$ 4,862,659	\$ 367,980	\$ 1,020,231	\$ 15,458,244	\$ 10,227,605
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 16,511,150	\$ 11,078,631
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 27,274,326	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					60.54%	

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 2019

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	863,241
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	10,813,485
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		7.98%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,334,420
Jurisdictional R(m)	ES Form 1.10, Line 16		\$	11,070,346
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		12.05%

Effective Date for Billing: January 31, 2020

Submitted by: Theodore H. Czupik Jr.

Title: Rates & Regulatory Strategy Manager

Date Submitted: January 21, 2020

ES FORM 1.10

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

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of December 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	\$ 62,436,439
2	RB ÷ 12 months	(1) ÷ 12	\$ 5,203,037
3	Pretax Rate of Return (ROR)	ES Form 1.20	8.446%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 439,449
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 1,843,959
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 2,283,408
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	97.90%
9	Jurisdictional E(m)	(7) x (8)	\$ 2,235,456
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ (37,795)
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 2,197,661
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 47,952

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	39.28%	60.72%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 863,241	\$ 1,334,420
16	R(m) Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	ES Form 3.00 ES Form 3.00	\$ 10,813,485	\$ 11,070,346
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	7.98%	12.05%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 27,526,851	97.90%
19	Sales for Resale	Company Records	\$ 589,099	2.10%
20	Total Revenue		\$ 28,115,950	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 2019

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant)	ES Form 2.10	\$ 51,431,092
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	15,873,277
3	Subtotal		\$ 67,304,369
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 20,728
6	Subtotal		\$ 20,728
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 845,061
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	4,043,597
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 4,888,658
12	Environmental Compliance Rate Base		\$ 62,436,439
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 85,601
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 78,042
16	Monthly Amortization Expense	ES Form 2.20	\$ 324,126
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 127
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 1,356,063
19	Total Environmental Compliance Operating Expense		\$ 1,843,959
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x 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		\$ 1,064,337
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		1,102,132
27	(Over) / Under Recovery		\$ (37,795)

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 2019

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
Project No.	Description	Gross Plant in-Service as of December-19	Accumulated Depreciation as of December-19	Net Plant in-Service as of December-19 (2)-(3)	CWIP Excluding AFUDC as of December-19	Accumulated Deferred ITC as of December-19	Accumulated Deferred Tax Balance as of December-19	Monthly Depreciation Expense	Monthly Property Tax Expense
1	EB020290 Lined Retention Basin West	\$ 10,604,187	\$ 279,284	\$ 10,324,903	\$ -	\$ -	\$ 1,217,469	\$ 21,827	\$ 12,124
2	EB020745 Lined Retention Basin East	\$ 9,655,902	\$ -	\$ 9,655,902	\$ -	\$ -	\$ 95,613	\$ -	\$ 11,339
3	EB020298 East Bend SW/PW Reroute	\$ 31,171,003	\$ 565,777	\$ 30,605,226	\$ -	\$ -	\$ 2,730,515	\$ 63,774	\$ 35,939
4	EB021281 East Bend Landfill Cell 2	\$ -	\$ -	\$ -	\$ 15,873,277	\$ -	\$ -	\$ -	\$ 18,640
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 51,431,092	\$ 845,061	\$ 50,586,031	\$ 15,873,277	\$ -	\$ 4,043,597	\$ 85,601	\$ 78,042

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of December 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	\$ 1,588,547	\$ (150,851)	\$ 1,997,156	\$ (353,337)
31	May-19	Actual \$ -	\$ -	\$ 104,878	\$ (202,486)	\$ 15,574,775	\$ 1,641,055	\$ (408,609)	\$ 3,229,602	\$ (611,095)
32	Jun-19	Actual \$ -	\$ -	\$ 104,216	\$ (202,486)	\$ 15,476,505	\$ 1,423,233	\$ (1,588,547)	\$ 3,064,288	\$ (1,791,033)
33	Jul-19	Actual \$ -	\$ -	\$ 103,550	\$ (202,486)	\$ 15,377,569	\$ 1,368,585	\$ (1,641,055)	\$ 2,791,818	\$ (1,843,541)
34	Aug-19	Actual \$ -	\$ -	\$ 102,880	\$ (202,486)	\$ 15,277,963	\$ 487,759	\$ (1,423,233)	\$ 1,856,344	\$ (1,625,719)
35	Sep-19	Actual \$ -	\$ -	\$ 102,204	\$ (202,486)	\$ 15,177,681	\$ 47,477	\$ (1,368,585)	\$ 535,236	\$ (1,571,071)
36	Oct-19	Actual \$ -	\$ -	\$ 101,524	\$ (202,486)	\$ 15,076,719	\$ (18,595)	\$ (487,759)	\$ 28,882	\$ (690,245)
37	Nov-19	Actual \$ -	\$ -	\$ 100,840	\$ (202,486)	\$ 14,975,073	\$ 330,375	\$ (47,477)	\$ 311,780	\$ (249,963)
38	Dec-19	Actual \$ -	\$ -	\$ 100,151	\$ (202,486)	\$ 14,872,738	\$ 121,640	\$ 18,595	\$ 452,015	\$ (183,891)
39	Jan-20	Actual \$ -	\$ -	\$ 99,457	\$ (202,486)	\$ 14,769,709	\$ -	\$ (330,375)	\$ 121,640	\$ (532,861)
40	Feb-20	Actual \$ -	\$ -	\$ 98,759	\$ (202,486)	\$ 14,665,982	\$ -	\$ (121,640)	\$ -	\$ (324,126)
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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of December 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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of December 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)	\$ 9,516,553	\$ (9,516,553)		(33,814,873)

Monthly Amortization Amount

(324,126)

ES FORM 2.30

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Inventory and Expense of Emission Allowances

For the Expense Month Ending December 2019

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	133,906	-	275	-	133,631
Dollars	\$ 16,818.05	\$ -	\$ 35.75	\$ -	\$ 16,782.30
\$/Allowance	\$ 0.125596	\$ -	\$ 0.130000	\$ -	\$ 0.125587
NO_x Allowances - Annual					
Quantity	6,820	-	182	-	6,638
Dollars	\$ 3,328.52	\$ -	\$ 89.18	\$ -	\$ 3,239.34
\$/Allowance	\$ 0.488052	\$ -	\$ 0.490000	\$ -	\$ 0.487999
NO_x Allowances - Seasonal					
Quantity	449	-	1	-	448
Dollars	\$ 707.89	\$ -	\$ 1.58	\$ -	\$ 706.31
\$/Allowance	\$ 1.576604	\$ -	\$ 1.580000	\$ -	\$ 1.576596
Total Emission Allowances					
Quantity	141,175	-	458	-	140,717
Dollars	\$ 20,854.46	\$ -	\$ 126.51	\$ -	\$ 20,727.95

(a) Note: The SO₂ 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 December 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	\$ 54,458	\$ 54,458
2	Lime	502040	1,240,486	1,240,486
3	Hydrated Lime	502040	61,119	61,119
4	Total		\$ 1,356,063	\$ 1,356,063

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 December 2019

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge
					(2) - (5)
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
Apr-19	9,398,011			700,129	8,697,882
May-19	8,627,659			737,098	7,890,561
Jun-19	11,487,026			1,138,649	10,348,377
Jul-19	13,524,273			734,203	12,790,070
Aug-19	12,261,118			613,630	11,647,488
Sep-19	12,108,304			540,297	11,568,007
Oct-19	10,517,865			833,088	9,684,777
Nov-19	8,743,548			534,343	8,209,205
Dec-19	\$ 12,807,518			\$ 480,713	\$ 12,326,805
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 10,813,485
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 27,526,851
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					39.28%

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)
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
Apr-19	16,381,370	4,678,873	265,615	1,294,456	15,086,914	10,142,426
May-19	16,730,729	4,667,996	90,852	1,527,972	15,202,757	10,443,909
Jun-19	19,945,443	5,235,309	1,537,295	1,968,000	17,977,443	11,204,839
Jul-19	19,726,822	5,582,336	582,168	1,125,025	18,601,797	12,437,293
Aug-19	17,808,671	5,629,529	(777,050)	969,080	16,839,591	11,987,112
Sep-19	18,431,519	5,357,488	214,486	842,610	17,588,909	12,016,935
Oct-19	18,843,454	5,442,045	54,598	1,494,804	17,348,650	11,852,007
Nov-19	16,478,475	4,862,659	367,980	1,020,231	15,458,244	10,227,605
Dec-19	\$ 19,084,712	\$ 5,004,531	\$ 2,796,137	\$ 621,419	\$ 18,463,293	\$ 10,662,625
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 16,713,366	\$ 11,070,346
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 27,526,851	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					60.72%	

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 2020

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	723,711
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	10,768,718
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		6.72%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,130,056
Jurisdictional R(m)	ES Form 1.10, Line 16		\$	11,046,646
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		10.23%

Effective Date for Billing: March 2, 2020

Submitted by: Theodore H. Czupik Jr.

Title: Rates & Regulatory Strategy Manager

Date Submitted: February 21, 2020

ES FORM 1.10

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

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of January 2020

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	\$ 63,311,794
2	RB ÷ 12 months	(1) ÷ 12	\$ 5,275,983
3	Pretax Rate of Return (ROR)	ES Form 1.20	8.446%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 445,610
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 1,504,266
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 1,949,876
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	98.02%
9	Jurisdictional E(m)	(7) x (8)	\$ 1,911,268
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ (57,501)
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 1,853,767
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 38,608

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	39.04%	60.96%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 723,711	\$ 1,130,056
16	R(m) Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	ES Form 3.00 ES Form 3.00	\$ 10,768,718	\$ 11,046,646
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	6.72%	10.23%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 27,585,941	98.02%
19	Sales for Resale	Company Records	\$ 558,396	1.98%
20	Total Revenue		\$ 28,144,337	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 2020

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant)	ES Form 2.10	\$ 51,826,558
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	16,487,012
3	Subtotal		\$ 68,313,570
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 20,664
6	Subtotal		\$ 20,664
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 950,924
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	4,071,516
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 5,022,440
12	Environmental Compliance Rate Base		\$ 63,311,794
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 105,862
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 79,102
16	Monthly Amortization Expense	ES Form 2.20	\$ 279,902
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 64
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 1,039,336
19	Total Environmental Compliance Operating Expense		\$ 1,504,266
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x 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		\$ 1,469,228
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		1,526,729
27	(Over) / Under Recovery		\$ (57,501)

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 2020

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
Project No.	Description	Gross Plant in-Service as of January-20	Accumulated Depreciation as of January-20	Net Plant in-Service as of January-20 (2)-(3)	CWIP Excluding AFUDC as of January-20	Accumulated Deferred ITC as of January-20	Accumulated Deferred Tax Balance as of January-20	Monthly Depreciation Expense	Monthly Property Tax Expense
1	EB020290 Lined Retention Basin West	\$ 10,604,187	\$ 301,111	\$ 10,303,076	\$ -	\$ -	\$ 1,220,504	\$ 21,827	\$ 12,099
2	EB020745 Lined Retention Basin East	\$ 10,009,301	\$ 19,875	\$ 9,989,426	\$ -	\$ -	\$ 105,561	\$ 19,875	\$ 11,730
3	EB020298 East Bend SW/PW Reroute	\$ 31,213,070	\$ 629,938	\$ 30,583,132	\$ -	\$ -	\$ 2,745,451	\$ 64,160	\$ 35,913
4	EB021281 East Bend Landfill Cell 2	\$ -	\$ -	\$ -	\$ 16,487,012	\$ -	\$ -	\$ -	\$ 19,360
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 51,826,558	\$ 950,924	\$ 50,875,634	\$ 16,487,012	\$ -	\$ 4,071,516	\$ 105,862	\$ 79,102

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of January 2020

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	\$ 1,588,547	\$ (150,851)	\$ 1,997,156	\$ (353,337)
31	May-19	Actual \$ -	\$ -	\$ 104,878	\$ (202,486)	\$ 15,574,775	\$ 1,641,055	\$ (408,609)	\$ 3,229,602	\$ (611,095)
32	Jun-19	Actual \$ -	\$ -	\$ 104,216	\$ (202,486)	\$ 15,476,505	\$ 1,423,233	\$ (1,588,547)	\$ 3,064,288	\$ (1,791,033)
33	Jul-19	Actual \$ -	\$ -	\$ 103,550	\$ (202,486)	\$ 15,377,569	\$ 1,368,585	\$ (1,641,055)	\$ 2,791,818	\$ (1,843,541)
34	Aug-19	Actual \$ -	\$ -	\$ 102,880	\$ (202,486)	\$ 15,277,963	\$ 487,759	\$ (1,423,233)	\$ 1,856,344	\$ (1,625,719)
35	Sep-19	Actual \$ -	\$ -	\$ 102,204	\$ (202,486)	\$ 15,177,681	\$ 47,477	\$ (1,368,585)	\$ 535,236	\$ (1,571,071)
36	Oct-19	Actual \$ -	\$ -	\$ 101,524	\$ (202,486)	\$ 15,076,719	\$ (18,595)	\$ (487,759)	\$ 28,882	\$ (690,245)
37	Nov-19	Actual \$ -	\$ -	\$ 100,840	\$ (202,486)	\$ 14,975,073	\$ 330,375	\$ (47,477)	\$ 311,780	\$ (249,963)
38	Dec-19	Actual \$ -	\$ -	\$ 100,151	\$ (202,486)	\$ 14,872,738	\$ 121,640	\$ 18,595	\$ 452,015	\$ (183,891)
39	Jan-20	Actual \$ -	\$ -	\$ 99,457	\$ (202,486)	\$ 14,769,709	\$ 77,416	\$ (330,375)	\$ 199,056	\$ (532,861)
40	Feb-20	Actual \$ -	\$ -	\$ 98,759	\$ (202,486)	\$ 14,665,982	\$ -	\$ (121,640)	\$ 77,416	\$ (324,126)
41	Mar-20	Actual \$ -	\$ -	\$ 98,055	\$ (202,486)	\$ 14,561,551	\$ -	\$ (77,416)	\$ -	\$ (279,902)
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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of January 2020

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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of January 2020

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)		\$ 9,593,969	\$ (9,593,969)		(33,892,289)

Monthly Amortization Amount

(279,902)

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending January 2020

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	133,631	25,041	177	-	158,495
Dollars	\$ 16,782.30	\$ -	\$ 19.47	\$ -	\$ 16,762.83
\$/Allowance	\$ 0.125587	\$ -	\$ 0.110000	\$ -	\$ 0.105763
NO_x Allowances - Annual					
Quantity	6,638	3,977	145	-	10,470
Dollars	\$ 3,239.34	\$ -	\$ 44.95	\$ -	\$ 3,194.39
\$/Allowance	\$ 0.487999	\$ -	\$ 0.310000	\$ -	\$ 0.305099
NO_x Allowances - Seasonal					
Quantity	448	1,082	-	-	1,530
Dollars	\$ 706.31	\$ -	\$ -	\$ -	\$ 706.31
\$/Allowance	\$ 1.576585	\$ -	\$ -	\$ -	\$ 0.461641
Total Emission Allowances					
Quantity	140,717	30,100	322	-	170,495
Dollars	\$ 20,727.95	\$ -	\$ 64.42	\$ -	\$ 20,663.53

(a) Note: The SO₂ 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 January 2020

<u>Line No.</u>	<u>Expense Type</u>	<u>Account Number</u>	<u>East Bend Unit 2</u>	<u>Total</u>
1	Ammonia	502020	\$ 40,204	\$ 40,204
2	Lime	502040	954,497	954,497
3	Hydrated Lime	502040	44,635	44,635
4	Total		\$ 1,039,336	\$ 1,039,336

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 January 2020

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge
					(2) - (5)
Feb-19	\$ 13,898,083			\$ 1,131,936	\$ 12,766,147
Mar-19	11,471,832			773,284	10,698,548
Apr-19	9,398,011			700,129	8,697,882
May-19	8,627,659			737,098	7,890,561
Jun-19	11,487,026			1,138,649	10,348,377
Jul-19	13,524,273			734,203	12,790,070
Aug-19	12,261,118			613,630	11,647,488
Sep-19	12,108,304			540,297	11,568,007
Oct-19	10,517,865			833,088	9,684,777
Nov-19	8,743,548			534,343	8,209,205
Dec-19	12,807,518			480,713	12,326,805
Jan-20	\$ 13,276,696			\$ 679,953	\$ 12,596,743
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 10,768,718
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 27,585,941
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					39.04%

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)
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
Apr-19	16,381,370	4,678,873	265,615	1,294,456	15,086,914	10,142,426
May-19	16,730,729	4,667,996	90,852	1,527,972	15,202,757	10,443,909
Jun-19	19,945,443	5,235,309	1,537,295	1,968,000	17,977,443	11,204,839
Jul-19	19,726,822	5,582,336	582,168	1,125,025	18,601,797	12,437,293
Aug-19	17,808,671	5,629,529	(777,050)	969,080	16,839,591	11,987,112
Sep-19	18,431,519	5,357,488	214,486	842,610	17,588,909	12,016,935
Oct-19	18,843,454	5,442,045	54,598	1,494,804	17,348,650	11,852,007
Nov-19	16,478,475	4,862,659	367,980	1,020,231	15,458,244	10,227,605
Dec-19	19,084,712	5,004,531	2,796,137	621,419	18,463,293	10,662,625
Jan-20	\$ 18,930,685	\$ 4,927,423	\$ 2,622,874	\$ 846,776	\$ 18,083,909	\$ 10,533,612
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 16,817,223	\$ 11,046,646
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 27,585,941	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					60.96%	

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 2020

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	627,667
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	10,548,229
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		5.95%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	993,373
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	11,008,686
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		9.02%

Effective Date for Billing: March 31, 2020

Submitted by: Theodore H. Czupik Jr.

Title: Rates & Regulatory Strategy Manager

Date Submitted: March 20, 2020

ES FORM 1.10

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

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of February 2020

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	\$ 63,702,395
2	RB ÷ 12 months	(1) ÷ 12	\$ 5,308,533
3	Pretax Rate of Return (ROR)	ES Form 1.20	8.446%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 448,359
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 1,058,108
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 1,506,467
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	98.16%
9	Jurisdictional E(m)	(7) x (8)	\$ 1,478,748
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ 142,292
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 1,621,040
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 27,719

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	38.72%	61.28%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 627,667	\$ 993,373
16	R(m) Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	ES Form 3.00 ES Form 3.00	\$ 10,548,229	\$ 11,008,686
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	5.95%	9.02%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 27,243,054	98.16%
19	Sales for Resale	Company Records	\$ 510,596	1.84%
20	Total Revenue		\$ 27,753,650	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 February 2020

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant)	ES Form 2.10	\$ 68,838,860
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	-
3	Subtotal		\$ 68,838,860
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 20,690
6	Subtotal		\$ 20,690
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 1,057,600
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	4,099,555
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 5,157,155
12	Environmental Compliance Rate Base		\$ 63,702,395
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 106,676
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 79,594
16	Monthly Amortization Expense	ES Form 2.20	\$ 227,670
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ (27)
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 644,195
19	Total Environmental Compliance Operating Expense		\$ 1,058,108
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x 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		\$ 2,197,661
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		2,055,369
27	(Over) / Under Recovery		\$ 142,292

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 2020

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
Project No.	Description	Gross Plant in-Service as of February-20	Accumulated Depreciation as of February-20	Net Plant in-Service as of February-20	CWIP Excluding AFUDC as of February-20	Accumulated Deferred ITC as of February-20	Accumulated Deferred Tax Balance as of February-20	Monthly Depreciation Expense	Monthly Property Tax Expense
				(2)-(3)					
1	EB020290 Lined Retention Basin West	\$ 10,604,187	\$ 322,938	\$ 10,281,249	\$ -	\$ -	\$ 1,223,538	\$ 21,827	\$ 12,073
2	EB020745 Lined Retention Basin East	\$ 10,088,613	\$ 40,478	\$ 10,048,135	\$ -	\$ -	\$ 115,280	\$ 20,602	\$ 11,799
3	EB020298 East Bend SW/PW Reroute	\$ 31,237,676	\$ 694,184	\$ 30,543,492	\$ -	\$ -	\$ 2,760,737	\$ 64,247	\$ 35,867
4	EB021281 East Bend Landfill Cell 2	\$ 16,908,384	\$ -	\$ 16,908,384	\$ -	\$ -	\$ -	\$ -	\$ 19,855
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 68,838,860	\$ 1,057,600	\$ 67,781,260	\$ -	\$ -	\$ 4,099,555	\$ 106,676	\$ 79,594

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of February 2020

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	\$ 1,588,547	\$ (150,851)	\$ 1,997,156	\$ (353,337)
31	May-19	Actual \$ -	\$ -	\$ 104,878	\$ (202,486)	\$ 15,574,775	\$ 1,641,055	\$ (408,609)	\$ 3,229,602	\$ (611,095)
32	Jun-19	Actual \$ -	\$ -	\$ 104,216	\$ (202,486)	\$ 15,476,505	\$ 1,423,233	\$ (1,588,547)	\$ 3,064,288	\$ (1,791,033)
33	Jul-19	Actual \$ -	\$ -	\$ 103,550	\$ (202,486)	\$ 15,377,569	\$ 1,368,585	\$ (1,641,055)	\$ 2,791,818	\$ (1,843,541)
34	Aug-19	Actual \$ -	\$ -	\$ 102,880	\$ (202,486)	\$ 15,277,963	\$ 487,759	\$ (1,423,233)	\$ 1,856,344	\$ (1,625,719)
35	Sep-19	Actual \$ -	\$ -	\$ 102,204	\$ (202,486)	\$ 15,177,681	\$ 47,477	\$ (1,368,585)	\$ 535,236	\$ (1,571,071)
36	Oct-19	Actual \$ -	\$ -	\$ 101,524	\$ (202,486)	\$ 15,076,719	\$ (18,595)	\$ (487,759)	\$ 28,882	\$ (690,245)
37	Nov-19	Actual \$ -	\$ -	\$ 100,840	\$ (202,486)	\$ 14,975,073	\$ 330,375	\$ (47,477)	\$ 311,780	\$ (249,963)
38	Dec-19	Actual \$ -	\$ -	\$ 100,151	\$ (202,486)	\$ 14,872,738	\$ 121,640	\$ 18,595	\$ 452,015	\$ (183,891)
39	Jan-20	Actual \$ -	\$ -	\$ 99,457	\$ (202,486)	\$ 14,769,709	\$ 77,416	\$ (330,375)	\$ 199,056	\$ (532,861)
40	Feb-20	Actual \$ -	\$ -	\$ 98,759	\$ (202,486)	\$ 14,665,982	\$ 25,184	\$ (121,640)	\$ 102,600	\$ (324,126)
41	Mar-20	Actual \$ -	\$ -	\$ 98,055	\$ (202,486)	\$ 14,561,551	\$ -	\$ (77,416)	\$ 25,184	\$ (279,902)
42	Apr-20	Actual \$ -	\$ -	\$ 97,347	\$ (202,486)	\$ 14,456,412	\$ -	\$ (25,184)	\$ -	\$ (227,670)
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

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of February 2020

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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of February 2020

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)		\$ 9,619,153	\$ (9,619,153)		(33,917,473)

Monthly Amortization Amount

(227,670)

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending February 2020

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	158,495	-	125	-	158,370
Dollars	\$ 16,762.83	\$ -	\$ 13.75	\$ -	\$ 16,749.08
\$/Allowance	\$ 0.105763	\$ -	\$ 0.110000	\$ -	\$ 0.105759
NO_x Allowances - Annual					
Quantity	10,470	-	(131)	-	10,601
Dollars	\$ 3,194.39	\$ -	\$ (40.61)	\$ -	\$ 3,235.00
\$/Allowance	\$ 0.305099	\$ -	\$ 0.310000	\$ -	\$ 0.305160
NO_x Allowances - Seasonal					
Quantity	1,530	-	-	-	1,530
Dollars	\$ 706.31	\$ -	\$ -	\$ -	\$ 706.31
\$/Allowance	\$ 0.461641	\$ -	\$ -	\$ -	\$ 0.461641
Total Emission Allowances					
Quantity	170,495	-	(6)	-	170,501
Dollars	\$ 20,663.53	\$ -	\$ (26.86)	\$ -	\$ 20,690.39

(a) Note: The SO₂ 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 February 2020

<u>Line No.</u>	<u>Expense Type</u>	<u>Account Number</u>	<u>East Bend Unit 2</u>	<u>Total</u>
1	Ammonia	502020	\$ 26,654	\$ 26,654
2	Lime	502040	597,104	597,104
3	Hydrated Lime	502040	20,437	20,437
4	Total		\$ 644,195	\$ 644,195

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 2020

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge
					(2) - (5)
Mar-19	\$ 11,471,832			\$ 773,284	\$ 10,698,548
Apr-19	9,398,011			700,129	8,697,882
May-19	8,627,659			737,098	7,890,561
Jun-19	11,487,026			1,138,649	10,348,377
Jul-19	13,524,273			734,203	12,790,070
Aug-19	12,261,118			613,630	11,647,488
Sep-19	12,108,304			540,297	11,568,007
Oct-19	10,517,865			833,088	9,684,777
Nov-19	8,743,548			534,343	8,209,205
Dec-19	12,807,518			480,713	12,326,805
Jan-20	13,276,696			679,953	12,596,743
Feb-20	\$ 10,929,297			\$ 809,008	\$ 10,120,289
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 10,548,229
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 27,243,054
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					38.72%

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-19	\$ 16,102,997	\$ 4,721,932	\$ (36,039)	\$ 1,173,249	\$ 14,929,748	\$ 10,243,855
Apr-19	16,381,370	4,678,873	265,615	1,294,456	15,086,914	10,142,426
May-19	16,730,729	4,667,996	90,852	1,527,972	15,202,757	10,443,909
Jun-19	19,945,443	5,235,309	1,537,295	1,968,000	17,977,443	11,204,839
Jul-19	19,726,822	5,582,336	582,168	1,125,025	18,601,797	12,437,293
Aug-19	17,808,671	5,629,529	(777,050)	969,080	16,839,591	11,987,112
Sep-19	18,431,519	5,357,488	214,486	842,610	17,588,909	12,016,935
Oct-19	18,843,454	5,442,045	54,598	1,494,804	17,348,650	11,852,007
Nov-19	16,478,475	4,862,659	367,980	1,020,231	15,458,244	10,227,605
Dec-19	19,084,712	5,004,531	2,796,137	621,419	18,463,293	10,662,625
Jan-20	18,930,685	4,927,423	2,622,874	846,776	18,083,909	10,533,612
Feb-20	\$ 16,003,003	\$ 4,714,130	\$ (309,499)	\$ 1,246,361	\$ 14,756,642	\$ 10,352,011
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 16,694,825	\$ 11,008,686
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 27,243,054	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					61.28%	

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 2020

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	748,277
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	10,457,363
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		7.16%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,194,794
Jurisdictional R(m)	ES Form 1.10, Line 16		\$	11,010,314
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		10.85%

Effective Date for Billing: April 30, 2020

Submitted by: Theodore H. Czupik Jr.

Title: Rates & Regulatory Strategy Manager

Date Submitted: April 20, 2020

ES FORM 1.10

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

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of March 2020

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	\$ 63,555,476
2	RB ÷ 12 months	(1) ÷ 12	\$ 5,296,290
3	Pretax Rate of Return (ROR)	ES Form 1.20	8.446%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 447,325
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 1,370,063
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 1,817,388
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	98.45%
9	Jurisdictional E(m)	(7) x (8)	\$ 1,789,218
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ 153,853
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 1,943,071
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 28,170

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	38.51%	61.49%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 748,277	\$ 1,194,794
16	<u>R(m)</u> 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	\$ 10,457,363	\$ 11,010,314
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	7.16%	10.85%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 27,153,263	98.45%
19	Sales for Resale	Company Records	\$ 426,836	1.55%
20	Total Revenue		\$ 27,580,099	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 2020

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant)	ES Form 2.10	\$ 68,880,121
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	-
3	Subtotal		\$ 68,880,121
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 20,690
6	Subtotal		\$ 20,690
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 1,199,293
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	4,146,042
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 5,345,335
12	Environmental Compliance Rate Base		\$ 63,555,476
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 141,694
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 79,477
16	Monthly Amortization Expense	ES Form 2.20	\$ 230,117
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ -
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 918,775
19	Total Environmental Compliance Operating Expense		\$ 1,370,063
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x 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		\$ 1,853,767
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		1,699,914
27	(Over) / Under Recovery		\$ 153,853

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 2020

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project No.	Description	Gross Plant in-Service as of March-20	Accumulated Depreciation as of March-20	Net Plant in-Service as of March-20 (2)-(3)	CWIP Excluding AFUDC as of March-20	Accumulated Deferred ITC as of March-20	Accumulated Deferred Tax Balance as of March-20	Monthly Depreciation Expense	Monthly Property Tax Expense
1	EB020290 Lined Retention Basin West	\$ 10,604,187	\$ 344,765	\$ 10,259,422	\$ -	\$ -	\$ 1,226,572	\$ 21,827	\$ 12,047
2	EB020745 Lined Retention Basin East	\$ 10,179,509	\$ 61,243	\$ 10,118,266	\$ -	\$ -	\$ 125,129	\$ 20,766	\$ 11,882
3	EB020298 East Bend SW/PW Reroute	\$ 31,293,467	\$ 758,482	\$ 30,534,985	\$ -	\$ -	\$ 2,777,082	\$ 64,298	\$ 35,857
4	EB021281 East Bend Landfill Cell 2	\$ 16,802,958	\$ 34,803	\$ 16,768,155	\$ -	\$ -	\$ 17,259	\$ 34,803	\$ 19,691
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 68,880,121	\$ 1,199,293	\$ 67,680,828	\$ -	\$ -	\$ 4,146,042	\$ 141,694	\$ 79,477

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of March 2020

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	\$ 1,588,547	\$ (150,851)	\$ 1,997,156	\$ (353,337)
31	May-19	Actual \$ -	\$ -	\$ 104,878	\$ (202,486)	\$ 15,574,775	\$ 1,641,055	\$ (408,609)	\$ 3,229,602	\$ (611,095)
32	Jun-19	Actual \$ -	\$ -	\$ 104,216	\$ (202,486)	\$ 15,476,505	\$ 1,423,233	\$ (1,588,547)	\$ 3,064,288	\$ (1,791,033)
33	Jul-19	Actual \$ -	\$ -	\$ 103,550	\$ (202,486)	\$ 15,377,569	\$ 1,368,585	\$ (1,641,055)	\$ 2,791,818	\$ (1,843,541)
34	Aug-19	Actual \$ -	\$ -	\$ 102,880	\$ (202,486)	\$ 15,277,963	\$ 487,759	\$ (1,423,233)	\$ 1,856,344	\$ (1,625,719)
35	Sep-19	Actual \$ -	\$ -	\$ 102,204	\$ (202,486)	\$ 15,177,681	\$ 47,477	\$ (1,368,585)	\$ 535,236	\$ (1,571,071)
36	Oct-19	Actual \$ -	\$ -	\$ 101,524	\$ (202,486)	\$ 15,076,719	\$ (18,595)	\$ (487,759)	\$ 28,882	\$ (690,245)
37	Nov-19	Actual \$ -	\$ -	\$ 100,840	\$ (202,486)	\$ 14,975,073	\$ 330,375	\$ (47,477)	\$ 311,780	\$ (249,963)
38	Dec-19	Actual \$ -	\$ -	\$ 100,151	\$ (202,486)	\$ 14,872,738	\$ 121,640	\$ 18,595	\$ 452,015	\$ (183,891)
39	Jan-20	Actual \$ -	\$ -	\$ 99,457	\$ (202,486)	\$ 14,769,709	\$ 77,416	\$ (330,375)	\$ 199,056	\$ (532,861)
40	Feb-20	Actual \$ -	\$ -	\$ 98,759	\$ (202,486)	\$ 14,665,982	\$ 25,184	\$ (121,640)	\$ 102,600	\$ (324,126)
41	Mar-20	Actual \$ -	\$ -	\$ 98,055	\$ (202,486)	\$ 14,561,551	\$ 27,631	\$ (77,416)	\$ 52,815	\$ (279,902)
42	Apr-20	Actual \$ -	\$ -	\$ 97,347	\$ (202,486)	\$ 14,456,412	\$ -	\$ (25,184)	\$ 27,631	\$ (227,670)
43	May-20	Actual \$ -	\$ -	\$ 96,635	\$ (202,486)	\$ 14,350,561	\$ -	\$ (27,631)	\$ -	\$ (230,117)
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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of March 2020

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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of March 2020

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)		\$ 9,646,784	\$ (9,646,784)		(33,945,104)

Monthly Amortization Amount

(230,117)

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending March 2020

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	158,370	-	-	-	158,370
Dollars	\$ 16,749.08	\$ -	\$ -	\$ -	\$ 16,749.08
\$/Allowance	\$ 0.105759	\$ -	\$ -	\$ -	\$ 0.105759
NO_x Allowances - Annual					
Quantity	10,601	-	-	-	10,601
Dollars	\$ 3,235.00	\$ -	\$ -	\$ -	\$ 3,235.00
\$/Allowance	\$ 0.305160	\$ -	\$ -	\$ -	\$ 0.305160
NO_x Allowances - Seasonal					
Quantity	1,530	-	-	-	1,530
Dollars	\$ 706.31	\$ -	\$ -	\$ -	\$ 706.31
\$/Allowance	\$ 0.461641	\$ -	\$ -	\$ -	\$ 0.461641
Total Emission Allowances					
Quantity	170,501	-	-	-	170,501
Dollars	\$ 20,690.39	\$ -	\$ -	\$ -	\$ 20,690.39

(a) Note: The SO₂ 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 March 2020

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
1	Ammonia	502020	\$ 26,815	\$ 26,815
2	Lime	502040	836,875	836,875
3	Hydrated Lime	502040	55,084	55,084
4	Total		\$ 918,775	\$ 918,775

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 2020

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge (2) - (5)
Apr-19	\$ 9,398,011			\$ 700,129	\$ 8,697,882
May-19	8,627,659			737,098	7,890,561
Jun-19	11,487,026			1,138,649	10,348,377
Jul-19	13,524,273			734,203	12,790,070
Aug-19	12,261,118			613,630	11,647,488
Sep-19	12,108,304			540,297	11,568,007
Oct-19	10,517,865			833,088	9,684,777
Nov-19	8,743,548			534,343	8,209,205
Dec-19	12,807,518			480,713	12,326,805
Jan-20	13,276,696			679,953	12,596,743
Feb-20	10,929,297			809,008	10,120,289
Mar-20	\$ 10,255,525			\$ 647,369	\$ 9,608,156
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 10,457,363
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 27,153,263
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					38.51%

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-19	\$ 16,381,370	\$ 4,678,873	\$ 265,615	\$ 1,294,456	\$ 15,086,914	\$ 10,142,426
May-19	16,730,729	4,667,996	90,852	1,527,972	15,202,757	10,443,909
Jun-19	19,945,443	5,235,309	1,537,295	1,968,000	17,977,443	11,204,839
Jul-19	19,726,822	5,582,336	582,168	1,125,025	18,601,797	12,437,293
Aug-19	17,808,671	5,629,529	(777,050)	969,080	16,839,591	11,987,112
Sep-19	18,431,519	5,357,488	214,486	842,610	17,588,909	12,016,935
Oct-19	18,843,454	5,442,045	54,598	1,494,804	17,348,650	11,852,007
Nov-19	16,478,475	4,862,659	367,980	1,020,231	15,458,244	10,227,605
Dec-19	19,084,712	5,004,531	2,796,137	621,419	18,463,293	10,662,625
Jan-20	18,930,685	4,927,423	2,622,874	846,776	18,083,909	10,533,612
Feb-20	16,003,003	4,714,130	(309,499)	1,246,361	14,756,642	10,352,011
Mar-20	\$ 15,995,194	\$ 4,652,202	\$ 27,058	\$ 1,052,545	\$ 14,942,649	\$ 10,263,389
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 16,695,900	\$ 11,010,314
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 27,153,263	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					61.49%	

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 April 2020

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	466,142
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	10,431,514
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		4.47%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	740,855
Jurisdictional R(m)	ES Form 1.10, Line 16		\$	10,940,442
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		6.77%

Effective Date for Billing: June 1, 2020

Submitted by: Theodore H. Czupik Jr.

Title: Rates & Regulatory Strategy Manager

Date Submitted: May 22, 2020

ES FORM 1.10

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of April 2020

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	\$ 63,691,663
2	RB ÷ 12 months	(1) ÷ 12	\$ 5,307,639
3	Pretax Rate of Return (ROR)	ES Form 1.20	7.905%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 419,569
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 521,123
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 940,692
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	98.60%
9	Jurisdictional E(m)	(7) x (8)	\$ 927,523
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ 279,474
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 1,206,997
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 13,169

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	38.62% 61.38%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 466,142 \$ 740,855
16	R(m) Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	ES Form 3.00 ES Form 3.00	\$ 10,431,514 \$ 10,940,442
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	4.47% 6.77%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 27,010,246	98.60%
19	Sales for Resale	Company Records	\$ 382,894	1.40%
20	Total Revenue		\$ 27,393,140	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	5.835%	1.710%	0.100%		0.100%
2	Long-term Debt	45.931%	4.028%	1.850%		1.850%
3	Common Equity	48.234%	9.250%	4.462%	1.3346139	5.955%
4	Total	100.000%		6.412%		7.905%

Note: Capital structure, cost of debt and tax rate gross-up factor as approved in Case No. 2019-00271. 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 April 2020

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant)	ES Form 2.10	\$ 69,194,311
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	-
3	Subtotal		\$ 69,194,311
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 20,546
6	Subtotal		\$ 20,546
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 1,341,071
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	4,182,123
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 5,523,194
12	Environmental Compliance Rate Base		\$ 63,691,663
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 141,778
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 79,679
16	Monthly Amortization Expense	ES Form 2.20	\$ 253,293
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 144
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 46,229
19	Total Environmental Compliance Operating Expense		\$ 521,123
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x 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		\$ 1,621,040
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		1,341,566
27	(Over) / Under Recovery		\$ 279,474

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 April 2020

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project No.	Description	Gross Plant in-Service as of April-20	Accumulated Depreciation as of April-20	Net Plant in-Service as of April-20 (2)-(3)	CWIP Excluding AFUDC as of April-20	Accumulated Deferred ITC as of April-20	Accumulated Deferred Tax Balance as of April-20	Monthly Depreciation Expense	Monthly Property Tax Expense
1	EB020290 Lined Retention Basin West	\$ 10,604,187	\$ 366,592	\$ 10,237,595	\$ -	\$ -	\$ 1,229,607	\$ 21,827	\$ 12,022
2	EB020745 Lined Retention Basin East	\$ 10,223,754	\$ 82,196	\$ 10,141,558	\$ -	\$ -	\$ 134,927	\$ 20,953	\$ 11,909
3	EB020298 East Bend SW/PW Reroute	\$ 31,299,964	\$ 822,894	\$ 30,477,070	\$ -	\$ -	\$ 2,792,756	\$ 64,412	\$ 35,789
4	EB021281 East Bend Landfill Cell 2	\$ 17,066,406	\$ 69,389	\$ 16,997,017	\$ -	\$ -	\$ 24,833	\$ 34,586	\$ 19,959
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 69,194,311	\$ 1,341,071	\$ 67,853,240	\$ -	\$ -	\$ 4,182,123	\$ 141,778	\$ 79,679

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of April 2020

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	\$ 1,588,547	\$ (150,851)	\$ 1,997,156	\$ (353,337)
31	May-19	Actual \$ -	\$ -	\$ 104,878	\$ (202,486)	\$ 15,574,775	\$ 1,641,055	\$ (408,609)	\$ 3,229,602	\$ (611,095)
32	Jun-19	Actual \$ -	\$ -	\$ 104,216	\$ (202,486)	\$ 15,476,505	\$ 1,423,233	\$ (1,588,547)	\$ 3,064,288	\$ (1,791,033)
33	Jul-19	Actual \$ -	\$ -	\$ 103,550	\$ (202,486)	\$ 15,377,569	\$ 1,368,585	\$ (1,641,055)	\$ 2,791,818	\$ (1,843,541)
34	Aug-19	Actual \$ -	\$ -	\$ 102,880	\$ (202,486)	\$ 15,277,963	\$ 487,759	\$ (1,423,233)	\$ 1,856,344	\$ (1,625,719)
35	Sep-19	Actual \$ -	\$ -	\$ 102,204	\$ (202,486)	\$ 15,177,681	\$ 47,477	\$ (1,368,585)	\$ 535,236	\$ (1,571,071)
36	Oct-19	Actual \$ -	\$ -	\$ 101,524	\$ (202,486)	\$ 15,076,719	\$ (18,595)	\$ (487,759)	\$ 28,882	\$ (690,245)
37	Nov-19	Actual \$ -	\$ -	\$ 100,840	\$ (202,486)	\$ 14,975,073	\$ 330,375	\$ (47,477)	\$ 311,780	\$ (249,963)
38	Dec-19	Actual \$ -	\$ -	\$ 100,151	\$ (202,486)	\$ 14,872,738	\$ 121,640	\$ (330,375)	\$ 452,015	\$ (183,891)
39	Jan-20	Actual \$ -	\$ -	\$ 99,457	\$ (202,486)	\$ 14,769,709	\$ 77,416	\$ (121,640)	\$ 199,056	\$ (532,861)
40	Feb-20	Actual \$ -	\$ -	\$ 98,759	\$ (202,486)	\$ 14,665,982	\$ 25,184	\$ (77,416)	\$ 102,600	\$ (324,126)
41	Mar-20	Actual \$ -	\$ -	\$ 98,055	\$ (202,486)	\$ 14,561,551	\$ 27,631	\$ (25,184)	\$ 52,815	\$ (279,902)
42	Apr-20	Actual \$ -	\$ -	\$ 97,347	\$ (202,486)	\$ 14,456,412	\$ 50,807	\$ (27,631)	\$ 78,438	\$ (229,670)
43	May-20	Actual \$ -	\$ -	\$ 96,635	\$ (202,486)	\$ 14,350,561	\$ -	\$ (50,807)	\$ 50,807	\$ (230,117)
44	Jun-20	Actual \$ -	\$ -	\$ 95,917	\$ (202,486)	\$ 14,243,992	\$ -	\$ -	\$ -	\$ (253,293)
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

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of April 2020

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

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of April 2020

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)		\$ 9,697,591	\$ (9,697,591)		(33,995,911)

Monthly Amortization Amount

(253,293)

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending April 2020

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	158,370	-	209	-	158,161
Dollars	\$ 16,749.08	\$ -	\$ 23.21	\$ -	\$ 16,725.87
\$/Allowance	\$ 0.105759	\$ -	\$ 0.111053	\$ -	\$ 0.105752
NO_x Allowances - Annual					
Quantity	10,601	49	392	-	10,258
Dollars	\$ 3,235.00	\$ -	\$ 119.95	\$ -	\$ 3,115.05
\$/Allowance	\$ 0.305160	\$ -	\$ 0.305995	\$ -	\$ 0.303670
NO_x Allowances - Seasonal					
Quantity	1,530	(2)	-	-	1,528
Dollars	\$ 706.31	\$ -	\$ 0.92	\$ -	\$ 705.39
\$/Allowance	\$ 0.461641	\$ -	\$ -	\$ -	\$ 0.461643
Total Emission Allowances					
Quantity	170,501	47	601	-	169,947
Dollars	\$ 20,690.39	\$ -	\$ 144.08	\$ -	\$ 20,546.31

(a) Note: The SO₂ 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 April 2020

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
1	Ammonia	502020		\$ -
2	Lime	502040	\$ 46,229	46,229
3	Hydrated Lime	502040		-
4	Total		\$ 46,229	\$ 46,229

ES FORM 3.00

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

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

For the Expense Month of April 2020

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge
					(2) - (5)
May-19	\$ 8,627,659			\$ 737,098	\$ 7,890,561
Jun-19	11,487,026			1,138,649	10,348,377
Jul-19	13,524,273			734,203	12,790,070
Aug-19	12,261,118			613,630	11,647,488
Sep-19	12,108,304			540,297	11,568,007
Oct-19	10,517,865			833,088	9,684,777
Nov-19	8,743,548			534,343	8,209,205
Dec-19	12,807,518			480,713	12,326,805
Jan-20	13,276,696			679,953	12,596,743
Feb-20	10,929,297			809,008	10,120,289
Mar-20	10,255,525			647,369	9,608,156
Apr-20	\$ 8,888,124			\$ 500,432	\$ 8,387,692
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 10,431,514
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 27,010,246
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					38.62%

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)
May-19	\$ 16,730,729	\$ 4,667,996	\$ 90,852	\$ 1,527,972	\$ 15,202,757	\$ 10,443,909
Jun-19	19,945,443	5,235,309	1,537,295	1,968,000	17,977,443	11,204,839
Jul-19	19,726,822	5,582,336	582,168	1,125,025	18,601,797	12,437,293
Aug-19	17,808,671	5,629,529	(777,050)	969,080	16,839,591	11,987,112
Sep-19	18,431,519	5,357,488	214,486	842,610	17,588,909	12,016,935
Oct-19	18,843,454	5,442,045	54,598	1,494,804	17,348,650	11,852,007
Nov-19	16,478,475	4,862,659	367,980	1,020,231	15,458,244	10,227,605
Dec-19	19,084,712	5,004,531	2,796,137	621,419	18,463,293	10,662,625
Jan-20	18,930,685	4,927,423	2,622,874	846,776	18,083,909	10,533,612
Feb-20	16,003,003	4,714,130	(309,499)	1,246,361	14,756,642	10,352,011
Mar-20	15,995,194	4,652,202	27,058	1,052,545	14,942,649	10,263,389
Apr-20	\$ 14,522,031	\$ 4,102,392	\$ 274,534	\$ 841,134	\$ 13,680,897	\$ 9,303,971
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 16,578,732	\$ 10,940,442
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 27,010,246	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					61.38%	

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 May 2020

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	508,610
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	10,475,102
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		4.86%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	794,849
Jurisdictional R(m)	ES Form 1.10, Line 16		\$	10,799,315
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		7.36%

Effective Date for Billing: June 30, 2020

Submitted by: Theodore H. Czupik Jr.

Title: Rates & Regulatory Strategy Manager

Date Submitted: June 19, 2020

ES FORM 1.10

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of May 2020

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	\$ 63,724,831
2	RB ÷ 12 months	(1) ÷ 12	\$ 5,310,403
3	Pretax Rate of Return (ROR)	ES Form 1.20	7.905%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 419,787
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 507,284
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 927,071
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	98.85%
9	Jurisdictional E(m)	(7) x (8)	\$ 916,410
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ 387,049
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 1,303,459
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 10,661

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	39.02% 60.98%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 508,610 \$ 794,849
16	R(m) Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	ES Form 3.00 ES Form 3.00	\$ 10,475,102 \$ 10,799,315
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	4.86% 7.36%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 26,844,928	98.85%
19	Sales for Resale	Company Records	\$ 312,169	1.15%
20	Total Revenue		\$ 27,157,097	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	5.835%	1.710%	0.100%		0.100%
2	Long-term Debt	45.931%	4.028%	1.850%		1.850%
3	Common Equity	48.234%	9.250%	4.462%	1.3346139	5.955%
4	Total	100.000%		6.412%		7.905%

Note: Capital structure, cost of debt and tax rate gross-up factor as approved in Case No. 2019-00271. 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 May 2020

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant)	ES Form 2.10	\$ 69,407,870
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	-
3	Subtotal		\$ 69,407,870
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 20,544
6	Subtotal		\$ 20,544
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 1,483,497
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	4,220,086
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 5,703,583
12	Environmental Compliance Rate Base		\$ 63,724,831
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 142,425
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 79,762
16	Monthly Amortization Expense	ES Form 2.20	\$ 285,024
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 3
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 70
19	Total Environmental Compliance Operating Expense		\$ 507,284
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x 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		\$ 1,943,071
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		1,556,022
27	(Over) / Under Recovery		\$ 387,049

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 May 2020

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project No.	Description	Gross Plant in-Service as of May-20	Accumulated Depreciation as of May-20	Net Plant in-Service as of May-20 (2)-(3)	CWIP Excluding AFUDC as of May-20	Accumulated Deferred ITC as of May-20	Accumulated Deferred Tax Balance as of May-20	Monthly Depreciation Expense	Monthly Property Tax Expense
1	EB020290 Lined Retention Basin West	\$ 10,604,187	\$ 388,419	\$ 10,215,767	\$ -	\$ -	\$ 1,232,641	\$ 21,827	\$ 11,996
2	EB020745 Lined Retention Basin East	\$ 10,307,791	\$ 103,240	\$ 10,204,551	\$ -	\$ -	\$ 144,896	\$ 21,044	\$ 11,983
3	EB020298 East Bend SW/PW Reroute	\$ 31,355,047	\$ 887,320	\$ 30,467,727	\$ -	\$ -	\$ 2,810,350	\$ 64,426	\$ 35,778
4	EB021281 East Bend Landfill Cell 2	\$ 17,140,845	\$ 104,518	\$ 17,036,328	\$ -	\$ -	\$ 32,199	\$ 35,128	\$ 20,005
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 69,407,870	\$ 1,483,497	\$ 67,924,373	\$ -	\$ -	\$ 4,220,086	\$ 142,425	\$ 79,762

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of May 2020

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	\$ 1,588,547	\$ (150,851)	\$ 1,997,156	\$ (353,337)
31	May-19	Actual \$ -	\$ -	\$ 104,878	\$ (202,486)	\$ 15,574,775	\$ 1,641,055	\$ (408,609)	\$ 3,229,602	\$ (611,095)
32	Jun-19	Actual \$ -	\$ -	\$ 104,216	\$ (202,486)	\$ 15,476,505	\$ 1,423,233	\$ (1,588,547)	\$ 3,064,288	\$ (1,791,033)
33	Jul-19	Actual \$ -	\$ -	\$ 103,550	\$ (202,486)	\$ 15,377,569	\$ 1,368,585	\$ (1,641,055)	\$ 2,791,818	\$ (1,843,541)
34	Aug-19	Actual \$ -	\$ -	\$ 102,880	\$ (202,486)	\$ 15,277,963	\$ 487,759	\$ (1,423,233)	\$ 1,856,344	\$ (1,625,719)
35	Sep-19	Actual \$ -	\$ -	\$ 102,204	\$ (202,486)	\$ 15,177,681	\$ 47,477	\$ (1,368,585)	\$ 535,236	\$ (1,571,071)
36	Oct-19	Actual \$ -	\$ -	\$ 101,524	\$ (202,486)	\$ 15,076,719	\$ (18,595)	\$ (487,759)	\$ 28,882	\$ (690,245)
37	Nov-19	Actual \$ -	\$ -	\$ 100,840	\$ (202,486)	\$ 14,975,073	\$ 330,375	\$ (47,477)	\$ 311,780	\$ (249,963)
38	Dec-19	Actual \$ -	\$ -	\$ 100,151	\$ (202,486)	\$ 14,872,738	\$ 121,640	\$ 18,595	\$ 452,015	\$ (183,891)
39	Jan-20	Actual \$ -	\$ -	\$ 99,457	\$ (202,486)	\$ 14,769,709	\$ 77,416	\$ (330,375)	\$ 199,056	\$ (532,861)
40	Feb-20	Actual \$ -	\$ -	\$ 98,759	\$ (202,486)	\$ 14,665,982	\$ 25,184	\$ (121,640)	\$ 102,600	\$ (324,126)
41	Mar-20	Actual \$ -	\$ -	\$ 98,055	\$ (202,486)	\$ 14,561,551	\$ 27,631	\$ (77,416)	\$ 52,815	\$ (279,902)
42	Apr-20	Actual \$ -	\$ -	\$ 97,347	\$ (202,486)	\$ 14,456,412	\$ 50,807	\$ (25,184)	\$ 78,438	\$ (227,670)
43	May-20	Actual \$ -	\$ -	\$ 96,635	\$ (202,486)	\$ 14,350,561	\$ 82,538	\$ (50,807)	\$ 133,345	\$ (230,117)
44	Jun-20	Actual \$ -	\$ -	\$ 95,917	\$ (202,486)	\$ 14,243,992	\$ -	\$ (82,538)	\$ 82,538	\$ (253,293)
45	Jul-20	Actual \$ -	\$ -	\$ 95,194	\$ (202,486)	\$ 14,136,700	\$ -	\$ -	\$ -	\$ (205,024)
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

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of May 2020

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

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of May 2020

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)		\$ 9,780,129	\$ (9,780,129)		(34,078,449)

Monthly Amortization Amount

(285,024)

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending May 2020

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	158,161	-	2	-	158,159
Dollars	\$ 16,725.87	\$ -	\$ 0.22	\$ -	\$ 16,725.65
\$/Allowance	\$ 0.105752	\$ -	\$ 0.110000	\$ -	\$ 0.105752
NO_x Allowances - Annual					
Quantity	10,258	-	4	-	10,254
Dollars	\$ 3,115.05	\$ -	\$ 1.20	\$ -	\$ 3,113.85
\$/Allowance	\$ 0.303670	\$ -	\$ 0.300000	\$ -	\$ 0.303672
NO_x Allowances - Seasonal					
Quantity	1,528	-	3	-	1,525
Dollars	\$ 705.39	\$ -	\$ 1.38	\$ -	\$ 704.01
\$/Allowance	\$ 0.461643	\$ -	\$ 0.460000	\$ -	\$ 0.461646
Total Emission Allowances					
Quantity	169,947	-	9	-	169,938
Dollars	\$ 20,546.31	\$ -	\$ 2.80	\$ -	\$ 20,543.51

(a) Note: The SO₂ 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 May 2020

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
1	Ammonia	502020		\$ -
2	Lime	502040	\$ 70	70
3	Hydrated Lime	502040		-
4	Total		\$ 70	\$ 70

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 May 2020

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge
					(2) - (5)
Jun-19	\$ 11,487,026			\$ 1,138,649	\$ 10,348,377
Jul-19	13,524,273			734,203	12,790,070
Aug-19	12,261,118			613,630	11,647,488
Sep-19	12,108,304			540,297	11,568,007
Oct-19	10,517,865			833,088	9,684,777
Nov-19	8,743,548			534,343	8,209,205
Dec-19	12,807,518			480,713	12,326,805
Jan-20	13,276,696			679,953	12,596,743
Feb-20	10,929,297			809,008	10,120,289
Mar-20	10,255,525			647,369	9,608,156
Apr-20	8,888,124			500,432	8,387,692
May-20	\$ 9,017,343			\$ 603,729	\$ 8,413,614
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 10,475,102
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 26,844,928
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					39.02%

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)
Jun-19	\$ 19,945,443	\$ 5,235,309	\$ 1,537,295	\$ 1,968,000	\$ 17,977,443	\$ 11,204,839
Jul-19	19,726,822	5,582,336	582,168	1,125,025	18,601,797	12,437,293
Aug-19	17,808,671	5,629,529	(777,050)	969,080	16,839,591	11,987,112
Sep-19	18,431,519	5,357,488	214,486	842,610	17,588,909	12,016,935
Oct-19	18,843,454	5,442,045	54,598	1,494,804	17,348,650	11,852,007
Nov-19	16,478,475	4,862,659	367,980	1,020,231	15,458,244	10,227,605
Dec-19	19,084,712	5,004,531	2,796,137	621,419	18,463,293	10,662,625
Jan-20	18,930,685	4,927,423	2,622,874	846,776	18,083,909	10,533,612
Feb-20	16,003,003	4,714,130	(309,499)	1,246,361	14,756,642	10,352,011
Mar-20	15,995,194	4,652,202	27,058	1,052,545	14,942,649	10,263,389
Apr-20	14,522,031	4,102,392	274,534	841,134	13,680,897	9,303,971
May-20	\$ 13,648,175	\$ 3,839,129	\$ 106,367	\$ 952,293	\$ 12,695,882	\$ 8,750,386
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 16,369,826	\$ 10,799,315
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 26,844,928	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					60.98%	

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 June 2020

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	858,768
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	10,527,115
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		8.16%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,317,531
Jurisdictional R(m)	ES Form 1.10, Line 16		\$	10,761,696
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		12.24%

Effective Date for Billing: July 30, 2020

Submitted by: Theodore H. Czupik Jr.

Title: Rates & Regulatory Strategy Manager

Date Submitted: July 20, 2020

ES FORM 1.10

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

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of June 2020

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	\$ 63,619,777
2	RB ÷ 12 months	(1) ÷ 12	\$ 5,301,648
3	Pretax Rate of Return (ROR)	ES Form 1.20	7.905%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 419,095
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 1,795,787
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 2,214,882
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	98.91%
9	Jurisdictional E(m)	(7) x (8)	\$ 2,190,739
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ (14,440)
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 2,176,299
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 24,143

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	39.46%	60.54%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 858,768	\$ 1,317,531
16	R(m) Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	ES Form 3.00 ES Form 3.00	\$ 10,527,115	\$ 10,761,696
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	8.16%	12.24%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 26,679,699	98.91%
19	Sales for Resale	Company Records	\$ 293,765	1.09%
20	Total Revenue		\$ 26,973,464	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	5.835%	1.710%	0.100%		0.100%
2	Long-term Debt	45.931%	4.028%	1.850%		1.850%
3	Common Equity	48.234%	9.250%	4.462%	1.3346139	5.955%
4	Total	100.000%		6.412%		7.905%

Note: Capital structure, cost of debt and tax rate gross-up factor as approved in Case No. 2019-00271. 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 June 2020

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant)	ES Form 2.10	\$ 69,481,974
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	-
3	Subtotal		\$ 69,481,974
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 20,370
6	Subtotal		\$ 20,370
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 1,626,361
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	4,256,206
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 5,882,567
12	Environmental Compliance Rate Base		\$ 63,619,777
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 142,865
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 79,681
16	Monthly Amortization Expense	ES Form 2.20	\$ 336,303
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 174
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 1,236,764
19	Total Environmental Compliance Operating Expense		\$ 1,795,787
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x 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		\$ 1,206,997
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		1,221,437
27	(Over) / Under Recovery		\$ (14,440)

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 June 2020

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project No.	Description	Gross Plant in-Service as of June-20	Accumulated Depreciation as of June-20	Net Plant in-Service as of June-20	CWIP Excluding AFUDC as of June-20	Accumulated Deferred ITC as of June-20	Accumulated Deferred Tax Balance as of June-20	Monthly Depreciation Expense	Monthly Property Tax Expense
				(2)-(3)					
1	EB020290 Lined Retention Basin West	\$ 10,604,187	\$ 410,246	\$ 10,193,941	\$ -	\$ -	\$ 1,235,675	\$ 21,827	\$ 11,971
2	EB020745 Lined Retention Basin East	\$ 10,367,714	\$ 124,457	\$ 10,243,257	\$ -	\$ -	\$ 154,851	\$ 21,217	\$ 12,028
3	EB020298 East Bend SW/PW Reroute	\$ 31,360,491	\$ 951,859	\$ 30,408,632	\$ -	\$ -	\$ 2,826,260	\$ 64,539	\$ 35,708
4	EB021281 East Bend Landfill Cell 2	\$ 17,149,582	\$ 139,799	\$ 17,009,783	\$ -	\$ -	\$ 39,420	\$ 35,282	\$ 19,974
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 69,481,974	\$ 1,626,361	\$ 67,855,613	\$ -	\$ -	\$ 4,256,206	\$ 142,865	\$ 79,681

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of June 2020

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	\$ 1,588,547	\$ (150,851)	\$ 1,997,156	\$ (353,337)
31	May-19	Actual \$ -	\$ -	\$ 104,878	\$ (202,486)	\$ 15,574,775	\$ 1,641,055	\$ (408,609)	\$ 3,229,602	\$ (611,095)
32	Jun-19	Actual \$ -	\$ -	\$ 104,216	\$ (202,486)	\$ 15,476,505	\$ 1,423,233	\$ (1,588,547)	\$ 3,064,288	\$ (1,791,033)
33	Jul-19	Actual \$ -	\$ -	\$ 103,550	\$ (202,486)	\$ 15,377,569	\$ 1,368,585	\$ (1,641,055)	\$ 2,791,818	\$ (1,843,541)
34	Aug-19	Actual \$ -	\$ -	\$ 102,880	\$ (202,486)	\$ 15,277,963	\$ 487,759	\$ (1,423,233)	\$ 1,856,344	\$ (1,625,719)
35	Sep-19	Actual \$ -	\$ -	\$ 102,204	\$ (202,486)	\$ 15,177,681	\$ 47,477	\$ (1,368,585)	\$ 535,236	\$ (1,571,071)
36	Oct-19	Actual \$ -	\$ -	\$ 101,524	\$ (202,486)	\$ 15,076,719	\$ (18,595)	\$ (487,759)	\$ 28,882	\$ (690,245)
37	Nov-19	Actual \$ -	\$ -	\$ 100,840	\$ (202,486)	\$ 14,975,073	\$ 330,375	\$ (47,477)	\$ 311,780	\$ (249,963)
38	Dec-19	Actual \$ -	\$ -	\$ 100,151	\$ (202,486)	\$ 14,872,738	\$ 121,640	\$ 18,595	\$ 452,015	\$ (183,891)
39	Jan-20	Actual \$ -	\$ -	\$ 99,457	\$ (202,486)	\$ 14,769,709	\$ 77,416	\$ (330,375)	\$ 199,056	\$ (532,861)
40	Feb-20	Actual \$ -	\$ -	\$ 98,759	\$ (202,486)	\$ 14,665,982	\$ 25,184	\$ (121,640)	\$ 102,600	\$ (324,126)
41	Mar-20	Actual \$ -	\$ -	\$ 98,055	\$ (202,486)	\$ 14,561,551	\$ 27,631	\$ (77,416)	\$ 52,815	\$ (279,902)
42	Apr-20	Actual \$ -	\$ -	\$ 97,347	\$ (202,486)	\$ 14,456,412	\$ 50,807	\$ (25,184)	\$ 78,438	\$ (227,670)
43	May-20	Actual \$ -	\$ -	\$ 96,635	\$ (202,486)	\$ 14,350,561	\$ 82,538	\$ (27,631)	\$ 133,345	\$ (230,117)
44	Jun-20	Actual \$ -	\$ -	\$ 95,917	\$ (202,486)	\$ 14,243,992	\$ 133,817	\$ (50,807)	\$ 216,355	\$ (253,293)
45	Jul-20	Actual \$ -	\$ -	\$ 95,194	\$ (202,486)	\$ 14,136,700	\$ -	\$ (82,538)	\$ 133,817	\$ (285,024)
46	Aug-20	Actual \$ -	\$ -	\$ 94,467	\$ (202,486)	\$ 14,028,681	\$ -	\$ (133,817)	\$ -	\$ (336,303)
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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of June 2020

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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of June 2020

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)	\$ 9,913,946	\$ (9,913,946)		(34,212,266)

Monthly Amortization Amount

(336,303)

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending June 2020

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	158,159	-	268	-	157,891
Dollars	\$ 16,725.65	\$ -	\$ 29.48	\$ -	\$ 16,696.17
\$/Allowance	\$ 0.105752	\$ -	\$ 0.110000	\$ -	\$ 0.105745
NO_x Allowances - Annual					
Quantity	10,254	-	190	-	10,064
Dollars	\$ 3,113.85	\$ -	\$ 57.00	\$ -	\$ 3,056.85
\$/Allowance	\$ 0.303672	\$ -	\$ 0.300000	\$ -	\$ 0.303741
NO_x Allowances - Seasonal					
Quantity	1,525	-	190	-	1,335
Dollars	\$ 704.01	\$ -	\$ 87.40	\$ -	\$ 616.61
\$/Allowance	\$ 0.461646	\$ -	\$ 0.460000	\$ -	\$ 0.461880
Total Emission Allowances					
Quantity	169,938	-	648	-	169,290
Dollars	\$ 20,543.51	\$ -	\$ 173.88	\$ -	\$ 20,369.63

(a) Note: The SO₂ 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 June 2020

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
1	Ammonia	502020	\$ 32,107	\$ 32,107
2	Lime	502040	\$ 1,149,161	1,149,161
3	Hydrated Lime	502040	55,496	55,496
4	Total		\$ 1,236,764	\$ 1,236,764

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 June 2020

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge
					(2) - (5)
Jul-19	\$ 13,524,273			\$ 734,203	\$ 12,790,070
Aug-19	12,261,118			613,630	11,647,488
Sep-19	12,108,304			540,297	11,568,007
Oct-19	10,517,865			833,088	9,684,777
Nov-19	8,743,548			534,343	8,209,205
Dec-19	12,807,518			480,713	12,326,805
Jan-20	13,276,696			679,953	12,596,743
Feb-20	10,929,297			809,007	10,120,290
Mar-20	10,255,525			647,368	9,608,157
Apr-20	8,888,124			500,432	8,387,692
May-20	9,017,343			603,729	8,413,614
Jun-20	\$ 11,464,102			\$ 491,576	\$ 10,972,526
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 10,527,115
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 26,679,699
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					39.46%

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)
Jul-19	\$ 19,726,822	\$ 5,582,336	\$ 582,168	\$ 1,125,025	\$ 18,601,797	\$ 12,437,293
Aug-19	17,808,671	5,629,529	(777,050)	969,080	16,839,591	11,987,112
Sep-19	18,431,519	5,357,488	214,486	842,610	17,588,909	12,016,935
Oct-19	18,843,454	5,442,045	54,598	1,494,804	17,348,650	11,852,007
Nov-19	16,478,475	4,862,659	367,980	1,020,231	15,458,244	10,227,605
Dec-19	19,084,712	5,004,531	2,796,137	621,419	18,463,293	10,662,625
Jan-20	18,930,685	4,927,423	2,622,874	846,776	18,083,909	10,533,612
Feb-20	16,003,003	4,714,129	(309,498)	1,246,362	14,756,641	10,352,010
Mar-20	15,995,196	4,652,202	27,058	1,052,546	14,942,650	10,263,390
Apr-20	14,522,031	4,102,392	274,534	841,134	13,680,897	9,303,971
May-20	13,648,175	3,839,129	106,367	952,293	12,695,882	8,750,386
Jun-20	\$ 16,100,402	\$ 4,526,716	\$ 90,417	\$ 729,861	\$ 15,370,541	\$ 10,753,408
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 16,152,584	\$ 10,761,696
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 26,679,699	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					60.54%	

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 July 2020

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	927,512
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	10,572,557
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		8.77%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,402,921
Jurisdictional R(m)	ES Form 1.10, Line 16		\$	10,715,490
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		13.09%

Effective Date for Billing: August 28, 2020

Submitted by: Theodore H. Czupik Jr.

Title: Rates & Regulatory Strategy Manager

Date Submitted: August 18, 2020

ES FORM 1.10

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of July 2020

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	\$ 63,476,421
2	RB ÷ 12 months	(1) ÷ 12	\$ 5,289,702
3	Pretax Rate of Return (ROR)	ES Form 1.20	7.905%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 418,151
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 2,161,384
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 2,579,535
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	98.95%
9	Jurisdictional E(m)	(7) x (8)	\$ 2,552,450
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ (222,017)
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 2,330,433
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 27,085

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	39.80% 60.20%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 927,512 \$ 1,402,921
16	R(m) Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	ES Form 3.00 ES Form 3.00	\$ 10,572,557 \$ 10,715,490
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	8.77% 13.09%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 26,562,751	98.95%
19	Sales for Resale	Company Records	\$ 282,621	1.05%
20	Total Revenue		\$ 26,845,372	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	5.835%	1.710%	0.100%		0.100%
2	Long-term Debt	45.931%	4.028%	1.850%		1.850%
3	Common Equity	48.234%	9.250%	4.462%	1.3346139	5.955%
4	Total	100.000%		6.412%		7.905%

Note: Capital structure, cost of debt and tax rate gross-up factor as approved in Case No. 2019-00271. 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 July 2020

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant)	ES Form 2.10	\$ 69,519,617
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	-
3	Subtotal		\$ 69,519,617
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 20,158
6	Subtotal		\$ 20,158
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 1,769,379
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	4,293,975
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 6,063,354
12	Environmental Compliance Rate Base		\$ 63,476,421
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 143,017
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 79,558
16	Monthly Amortization Expense	ES Form 2.20	\$ 329,979
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 211
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 1,608,619
19	Total Environmental Compliance Operating Expense		\$ 2,161,384
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x 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		\$ 1,303,459
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		1,525,476
27	(Over) / Under Recovery		\$ (222,017)

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 July 2020

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project		Gross Plant in-Service as of July-20	Accumulated Depreciation as of July-20	Net Plant in-Service as of July-20	CWIP Excluding AFUDC as of July-20	Accumulated Deferred ITC as of July-20	Accumulated Deferred Tax Balance as of July-20	Monthly Depreciation Expense	Monthly Property Tax Expense
No.	Description			(2)-(3)					
1	EB020290 Lined Retention Basin West	\$ 10,604,187	\$ 432,073	\$ 10,172,114	\$ -	\$ -	\$ 1,238,710	\$ 21,827	\$ 11,945
2	EB020745 Lined Retention Basin East	\$ 10,365,822	\$ 145,797	\$ 10,220,025	\$ -	\$ -	\$ 164,520	\$ 21,340	\$ 12,001
3	EB020298 East Bend SW/PW Reroute	\$ 31,391,456	\$ 1,016,410	\$ 30,375,046	\$ -	\$ -	\$ 2,844,082	\$ 64,550	\$ 35,669
4	EB021281 East Bend Landfill Cell 2	\$ 17,158,152	\$ 175,099	\$ 16,983,053	\$ -	\$ -	\$ 46,663	\$ 35,300	\$ 19,943
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 69,519,617	\$ 1,769,379	\$ 67,750,238	\$ -	\$ -	\$ 4,293,975	\$ 143,017	\$ 79,558

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of July 2020

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	\$ 1,588,547	\$ (150,851)	\$ 1,997,156	\$ (353,337)
31	May-19	Actual \$ -	\$ -	\$ 104,878	\$ (202,486)	\$ 15,574,775	\$ 1,641,055	\$ (408,609)	\$ 3,229,602	\$ (611,095)
32	Jun-19	Actual \$ -	\$ -	\$ 104,216	\$ (202,486)	\$ 15,476,505	\$ 1,423,233	\$ (1,588,547)	\$ 3,064,288	\$ (1,791,033)
33	Jul-19	Actual \$ -	\$ -	\$ 103,550	\$ (202,486)	\$ 15,377,569	\$ 1,368,585	\$ (1,641,055)	\$ 2,791,818	\$ (1,843,541)
34	Aug-19	Actual \$ -	\$ -	\$ 102,880	\$ (202,486)	\$ 15,277,963	\$ 487,759	\$ (1,423,233)	\$ 1,856,344	\$ (1,625,719)
35	Sep-19	Actual \$ -	\$ -	\$ 102,204	\$ (202,486)	\$ 15,177,681	\$ 47,477	\$ (1,368,585)	\$ 535,236	\$ (1,571,071)
36	Oct-19	Actual \$ -	\$ -	\$ 101,524	\$ (202,486)	\$ 15,076,719	\$ (18,595)	\$ (487,759)	\$ 28,882	\$ (690,245)
37	Nov-19	Actual \$ -	\$ -	\$ 100,840	\$ (202,486)	\$ 14,975,073	\$ 330,375	\$ (47,477)	\$ 311,780	\$ (249,963)
38	Dec-19	Actual \$ -	\$ -	\$ 100,151	\$ (202,486)	\$ 14,872,738	\$ 121,640	\$ 18,595	\$ 452,015	\$ (183,891)
39	Jan-20	Actual \$ -	\$ -	\$ 99,457	\$ (202,486)	\$ 14,769,709	\$ 77,416	\$ (330,375)	\$ 199,056	\$ (532,861)
40	Feb-20	Actual \$ -	\$ -	\$ 98,759	\$ (202,486)	\$ 14,665,982	\$ 25,184	\$ (121,640)	\$ 102,600	\$ (324,126)
41	Mar-20	Actual \$ -	\$ -	\$ 98,055	\$ (202,486)	\$ 14,561,551	\$ 27,631	\$ (77,416)	\$ 52,815	\$ (279,902)
42	Apr-20	Actual \$ -	\$ -	\$ 97,347	\$ (202,486)	\$ 14,456,412	\$ 50,807	\$ (25,184)	\$ 78,438	\$ (227,670)
43	May-20	Actual \$ -	\$ -	\$ 96,635	\$ (202,486)	\$ 14,350,561	\$ 82,538	\$ (27,631)	\$ 133,345	\$ (230,117)
44	Jun-20	Actual \$ -	\$ -	\$ 95,917	\$ (202,486)	\$ 14,243,992	\$ 133,817	\$ (50,807)	\$ 216,355	\$ (253,293)
45	Jul-20	Actual \$ -	\$ -	\$ 95,194	\$ (202,486)	\$ 14,136,700	\$ 127,493	\$ (82,538)	\$ 261,310	\$ (285,024)
46	Aug-20	Actual \$ -	\$ -	\$ 94,467	\$ (202,486)	\$ 14,028,681	\$ -	\$ (133,817)	\$ 127,493	\$ (336,303)
47	Sep-20	Actual \$ -	\$ -	\$ 93,735	\$ (202,486)	\$ 13,919,930	\$ -	\$ (127,493)	\$ -	\$ (329,979)
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

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of July 2020

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

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of July 2020

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)		\$ 10,041,439	\$ (10,041,439)		(34,339,759)

Monthly Amortization Amount

(329,979)

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending July 2020

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	157,891	-	345	-	157,546
Dollars	\$ 16,696.17	\$ -	\$ 37.95	\$ -	\$ 16,658.22
\$/Allowance	\$ 0.105745	\$ -	\$ 0.110000	\$ -	\$ 0.105736
NO_x Allowances - Annual					
Quantity	10,064	-	228	-	9,836
Dollars	\$ 3,056.85	\$ -	\$ 68.40	\$ -	\$ 2,988.45
\$/Allowance	\$ 0.303741	\$ -	\$ 0.300000	\$ -	\$ 0.303828
NO_x Allowances - Seasonal					
Quantity	1,335	-	228	-	1,107
Dollars	\$ 616.61	\$ -	\$ 104.88	\$ -	\$ 511.73
\$/Allowance	\$ 0.461880	\$ -	\$ 0.460000	\$ -	\$ 0.462267
Total Emission Allowances					
Quantity	169,290	-	801	-	168,489
Dollars	\$ 20,369.63	\$ -	\$ 211.23	\$ -	\$ 20,158.40

(a) Note: The SO₂ 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 July 2020

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
1	Ammonia	502020	\$ 48,665	\$ 48,665
2	Lime	502040	\$ 1,459,699	1,459,699
3	Hydrated Lime	502040	100,255	100,255
4	Total		\$ 1,608,619	\$ 1,608,619

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 July 2020

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge (2) - (5)
Aug-19	\$ 12,261,118			\$ 613,630	\$ 11,647,488
Sep-19	12,108,304			540,297	11,568,007
Oct-19	10,517,865			833,088	9,684,777
Nov-19	8,743,548			534,343	8,209,205
Dec-19	12,807,518			480,713	12,326,805
Jan-20	13,276,696			679,953	12,596,743
Feb-20	10,929,297			809,007	10,120,290
Mar-20	10,255,525			647,368	9,608,157
Apr-20	8,888,124			500,432	8,387,692
May-20	9,017,343			603,729	8,413,614
Jun-20	11,464,102			491,576	10,972,526
Jul-20	\$ 13,984,655			\$ 649,272	\$ 13,335,383
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 10,572,557
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 26,562,751
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					39.80%

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)
Aug-19	\$ 17,808,671	\$ 5,629,529	\$ (777,050)	\$ 969,080	\$ 16,839,591	\$ 11,987,112
Sep-19	18,431,519	5,357,488	214,486	842,610	17,588,909	12,016,935
Oct-19	18,843,454	5,442,045	54,598	1,494,804	17,348,650	11,852,007
Nov-19	16,478,475	4,862,659	367,980	1,020,231	15,458,244	10,227,605
Dec-19	19,084,712	5,004,531	2,796,137	621,419	18,463,293	10,662,625
Jan-20	18,930,685	4,927,423	2,622,874	846,776	18,083,909	10,533,612
Feb-20	16,003,003	4,714,129	(309,498)	1,246,362	14,756,641	10,352,010
Mar-20	15,995,196	4,652,202	27,058	1,052,546	14,942,650	10,263,390
Apr-20	14,522,031	4,102,392	274,534	841,134	13,680,897	9,303,971
May-20	13,648,175	3,839,129	106,367	952,293	12,695,882	8,750,386
Jun-20	16,100,402	4,526,716	90,417	729,861	15,370,541	10,753,408
Jul-20	\$ 17,529,327	\$ 5,284,701	\$ (514,400)	\$ 876,204	\$ 16,653,123	\$ 11,882,822
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 15,990,194	\$ 10,715,490
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 26,562,751	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					60.20%	

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 August 2020

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	655,804
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	10,645,247
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		6.16%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	980,434
Jurisdictional R(m)	ES Form 1.10, Line 16		\$	10,698,642
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		9.16%

Effective Date for Billing: September 29, 2020

Submitted by: Theodore H. Czupik Jr.

Title: Rates & Regulatory Strategy Manager

Date Submitted: September 18, 2020

ES FORM 1.10

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

Calculation of Current Month Environmental Surcharge Factors
 For the Expense Month of August 2020

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	\$ 61,257,898
2	RB ÷ 12 months	(1) ÷ 12	\$ 5,104,825
3	Pretax Rate of Return (ROR)	ES Form 1.20	7.905%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 403,536
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 1,934,781
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 2,338,317
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	98.93%
9	Jurisdictional E(m)	(7) x (8)	\$ 2,313,297
10	Prior Period Adjustment (if necessary)	(A)	+ \$ (380,992)
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ (296,067)
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 1,636,238
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 25,020

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	40.08%	59.92%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 655,804	\$ 980,434
16	R(m) Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	ES Form 3.00 ES Form 3.00	\$ 10,645,247	\$ 10,698,642
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	6.16%	9.16%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 26,562,729	98.93%
19	Sales for Resale	Company Records	\$ 286,722	1.07%
20	Total Revenue		\$ 26,849,451	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	5.835%	1.710%	0.100%		0.100%
2	Long-term Debt	45.931%	4.028%	1.850%		1.850%
3	Common Equity	48.234%	9.250%	4.462%	1.3346139	5.955%
4	Total	100.000%		6.412%		7.905%

Note: Capital structure, cost of debt and tax rate gross-up factor as approved in Case No. 2019-00271. 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 August 2020

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant)	ES Form 2.10	\$ 67,428,604
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	-
3	Subtotal		<u>\$ 67,428,604</u>
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 19,974
6	Subtotal		<u>\$ 19,974</u>
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 1,843,352
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	4,347,328
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		<u>\$ 6,190,680</u>
12	Environmental Compliance Rate Base		\$ 61,257,898
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 138,783
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 77,016
16	Monthly Amortization Expense	ES Form 2.20	\$ 266,638
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 184
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 1,452,160
19	Total Environmental Compliance Operating Expense		<u>\$ 1,934,781</u>
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		<u>\$ -</u>
22	NOx Allowances Sales		-
23	Total Emission Allowance Sales		<u>\$ -</u>
24	<u>(Over) / Under Recovery</u>		
25	Adjusted Jurisdictional E(m) Authorized for Expense Month two Months Prior		\$ 2,176,299
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		2,472,366
27	(Over) / Under Recovery		<u>\$ (296,067)</u>

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 August 2020

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project No.	Description	Gross Plant in-Service Excl. AFUDC as of August-20	Accumulated Depreciation as of August-20	Net Plant in-Service as of August-20 (2)-(3)	CWIP Excluding AFUDC as of August-20	Accumulated Deferred ITC as of August-20	Accumulated Deferred Tax Balance as of August-20	Monthly Depreciation Expense	Monthly Property Tax Expense
1	EB020290 Lined Retention Basin West	\$ 10,324,588	\$ 441,814	\$ 9,882,774	\$ -	\$ -	\$ 1,244,757	\$ 21,251	\$ 11,605
2	EB020745 Lined Retention Basin East	\$ 10,280,448	\$ 165,728	\$ 10,114,720	\$ -	\$ -	\$ 174,550	\$ 21,161	\$ 11,878
3	EB020298 East Bend SW/PW Reroute	\$ 29,878,511	\$ 1,028,065	\$ 28,850,446	\$ -	\$ -	\$ 2,873,479	\$ 61,499	\$ 33,879
4	EB021281 East Bend Landfill Cell 2	\$ 16,945,057	\$ 207,745	\$ 16,737,312	\$ -	\$ -	\$ 54,542	\$ 34,872	\$ 19,654
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 67,428,604	\$ 1,843,352	\$ 65,585,252	\$ -	\$ -	\$ 4,347,328	\$ 138,783	\$ 77,016

ES FORM 2.20

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

Amortization Calculation for Coal Ash ARO

For the Expense Month of August 2020

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	\$ 1,588,547	\$ (150,851)	\$ 1,997,156	\$ (353,337)
31	May-19 Actual	\$ -	\$ -	\$ 104,878	\$ (202,486)	\$ 15,574,775	\$ 1,641,055	\$ (408,609)	\$ 3,229,602	\$ (611,095)
32	Jun-19 Actual	\$ -	\$ -	\$ 104,216	\$ (202,486)	\$ 15,476,505	\$ 1,423,233	\$ (1,588,547)	\$ 3,064,288	\$ (1,791,033)
33	Jul-19 Actual	\$ -	\$ -	\$ 103,550	\$ (202,486)	\$ 15,377,569	\$ 1,368,585	\$ (1,641,055)	\$ 2,791,818	\$ (1,843,541)
34	Aug-19 Actual	\$ -	\$ -	\$ 102,880	\$ (202,486)	\$ 15,277,963	\$ 487,759	\$ (1,423,233)	\$ 1,856,344	\$ (1,625,719)
35	Sep-19 Actual	\$ -	\$ -	\$ 102,204	\$ (202,486)	\$ 15,177,681	\$ 47,477	\$ (1,368,585)	\$ 535,236	\$ (1,571,071)
36	Oct-19 Actual	\$ -	\$ -	\$ 101,524	\$ (202,486)	\$ 15,076,719	\$ (18,595)	\$ (487,759)	\$ 28,882	\$ (690,245)
37	Nov-19 Actual	\$ -	\$ -	\$ 100,840	\$ (202,486)	\$ 14,975,073	\$ 330,375	\$ (47,477)	\$ 311,780	\$ (249,963)
38	Dec-19 Actual	\$ -	\$ -	\$ 100,151	\$ (202,486)	\$ 14,872,738	\$ 121,640	\$ 18,595	\$ 452,015	\$ (183,891)
39	Jan-20 Actual	\$ -	\$ -	\$ 99,457	\$ (202,486)	\$ 14,769,709	\$ 77,416	\$ (330,375)	\$ 199,056	\$ (532,861)
40	Feb-20 Actual	\$ -	\$ -	\$ 98,759	\$ (202,486)	\$ 14,665,982	\$ 25,184	\$ (121,640)	\$ 102,600	\$ (324,126)
41	Mar-20 Actual	\$ -	\$ -	\$ 98,055	\$ (202,486)	\$ 14,561,551	\$ 27,631	\$ (77,416)	\$ 52,815	\$ (279,902)
42	Apr-20 Actual	\$ -	\$ -	\$ 97,347	\$ (202,486)	\$ 14,456,412	\$ 50,807	\$ (25,184)	\$ 78,438	\$ (227,670)
43	May-20 Actual	\$ -	\$ -	\$ 96,635	\$ (202,486)	\$ 14,350,561	\$ 82,538	\$ (27,631)	\$ 133,345	\$ (230,117)
44	Jun-20 Actual	\$ -	\$ -	\$ 95,917	\$ (202,486)	\$ 14,243,992	\$ 133,817	\$ (50,807)	\$ 216,355	\$ (253,293)
45	Jul-20 Actual	\$ -	\$ -	\$ 95,194	\$ (202,486)	\$ 14,136,700	\$ 127,493	\$ (82,538)	\$ 261,310	\$ (285,024)
46	Aug-20 Actual	\$ -	\$ -	\$ 94,467	\$ (202,486)	\$ 14,028,681	\$ 64,152	\$ (133,817)	\$ 191,645	\$ (336,303)
47	Sep-20 Actual	\$ -	\$ -	\$ 93,735	\$ (202,486)	\$ 13,919,930	\$ -	\$ (127,493)	\$ 64,152	\$ (329,979)
48	Oct-20 Actual	\$ -	\$ -	\$ 92,997	\$ (202,486)	\$ 13,810,441	\$ -	\$ (64,152)	\$ -	\$ (266,638)
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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of August 2020

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

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

Amortization Calculation for Coal Ash ARO

For the Expense Month of August 2020

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)		\$ 10,105,591	\$ (10,105,591)		(34,403,911)

Monthly Amortization Amount

(266,638)

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending August 2020

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	157,546	-	371	-	157,175
Dollars	\$ 16,658.22	\$ -	\$ 40.81	\$ -	\$ 16,617.41
\$/Allowance	\$ 0.105736	\$ -	\$ 0.110000	\$ -	\$ 0.105726
NO_x Allowances - Annual					
Quantity	9,836	-	189	-	9,647
Dollars	\$ 2,988.45	\$ -	\$ 56.70	\$ -	\$ 2,931.75
\$/Allowance	\$ 0.303828	\$ -	\$ 0.300000	\$ -	\$ 0.303903
NO_x Allowances - Seasonal					
Quantity	1,107	-	189	-	918
Dollars	\$ 511.73	\$ -	\$ 86.94	\$ -	\$ 424.79
\$/Allowance	\$ 0.462267	\$ -	\$ 0.460000	\$ -	\$ 0.462734
Total Emission Allowances					
Quantity	168,489	-	749	-	167,740
Dollars	\$ 20,158.40	\$ -	\$ 184.45	\$ -	\$ 19,973.95

(a) Note: The SO₂ 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 August 2020

<u>Line No.</u>	<u>Expense Type</u>	<u>Account Number</u>	<u>East Bend Unit 2</u>	<u>Total</u>
1	Ammonia	502020	\$ 52,715	\$ 52,715
2	Lime	502040	1,247,482	1,247,482
3	Hydrated Lime	502040	151,963	151,963
4	Total		\$ 1,452,160	\$ 1,452,160

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 August 2020

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge
					(2) - (5)
Sep-19	\$ 12,108,304			\$ 540,297	\$ 11,568,007
Oct-19	10,517,865			833,088	9,684,777
Nov-19	8,743,548			534,343	8,209,205
Dec-19	12,807,518			480,713	12,326,805
Jan-20	13,276,696			679,953	12,596,743
Feb-20	10,929,297			809,007	10,120,290
Mar-20	10,255,525			647,368	9,608,157
Apr-20	8,888,124			500,432	8,387,692
May-20	9,017,343			603,729	8,413,614
Jun-20	11,464,102			491,576	10,972,526
Jul-20	13,984,655			649,272	13,335,383
Aug-20	\$ 13,547,109			\$ 1,027,348	\$ 12,519,761
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 10,645,247
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 26,562,729
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					40.08%

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)
Sep-19	\$ 18,431,519	\$ 5,357,488	\$ 214,486	\$ 842,610	\$ 17,588,909	\$ 12,016,935
Oct-19	18,843,454	5,442,045	54,598	1,494,804	17,348,650	11,852,007
Nov-19	16,478,475	4,862,659	367,980	1,020,231	15,458,244	10,227,605
Dec-19	19,084,712	5,004,531	2,796,137	621,419	18,463,293	10,662,625
Jan-20	18,930,685	4,927,423	2,622,874	846,776	18,083,909	10,533,612
Feb-20	16,003,003	4,714,129	(309,498)	1,246,362	14,756,641	10,352,010
Mar-20	15,995,196	4,652,202	27,058	1,052,546	14,942,650	10,263,390
Apr-20	14,522,031	4,102,392	274,534	841,134	13,680,897	9,303,971
May-20	13,648,175	3,839,129	106,367	952,293	12,695,882	8,750,386
Jun-20	16,100,402	4,526,716	90,417	729,861	15,370,541	10,753,408
Jul-20	17,529,327	5,284,701	(514,400)	876,204	16,653,123	11,882,822
Aug-20	\$ 17,412,064	\$ 5,203,196	\$ (1,021,086)	\$ 1,445,018	\$ 15,967,046	\$ 11,784,936
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 15,917,482	\$ 10,698,642
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 26,562,729	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					59.92%	

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 September 2020

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	670,771
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	10,706,841
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		6.26%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	994,914
Jurisdictional R(m)	ES Form 1.10, Line 16		\$	10,667,495
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		9.33%

Effective Date for Billing: October 28, 2020

Submitted by: /s/ Theodore H. Czupik Jr.

Title: Rates & Regulatory Strategy Manager

Date Submitted: October 16, 2020

ES FORM 1.10

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

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of September 2020

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	\$ 61,513,066
2	RB ÷ 12 months	(1) ÷ 12	\$ 5,126,089
3	Pretax Rate of Return (ROR)	ES Form 1.20	7.905%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 405,217
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 1,553,858
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 1,959,075
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	99.18%
9	Jurisdictional E(m)	(7) x (8)	\$ 1,943,010
10	Prior Period Adjustment (if necessary)	(A)	+
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ (277,325)
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 1,665,685
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 16,065

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	40.27%	59.73%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 670,771	\$ 994,914
16	R(m) Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	ES Form 3.00 ES Form 3.00	\$ 10,706,841	\$ 10,667,495
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	6.26%	9.33%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 26,590,422	99.18%
19	Sales for Resale	Company Records	\$ 219,656	0.82%
20	Total Revenue		\$ 26,810,078	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	5.835%	1.710%	0.100%		0.100%
2	Long-term Debt	45.931%	4.028%	1.850%		1.850%
3	Common Equity	48.234%	9.250%	4.462%	1.3346139	5.955%
4	Total	100.000%		6.412%		7.905%

Note: Capital structure, cost of debt and tax rate gross-up factor as approved in Case No. 2019-00271. 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 September 2020

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant)	ES Form 2.10	\$ 67,432,273
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	-
3	Subtotal		\$ 67,432,273
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 19,875
6	Subtotal		\$ 19,875
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 1,982,142
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	3,956,940
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 5,939,082
12	Environmental Compliance Rate Base		\$ 61,513,066
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 138,791
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 76,857
16	Monthly Amortization Expense	ES Form 2.20	\$ 330,346
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 99
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 1,007,765
19	Total Environmental Compliance Operating Expense		\$ 1,553,858
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x 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		\$ 2,330,433
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		2,607,758
27	(Over) / Under Recovery		\$ (277,325)

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 September 2020

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project No.	Description	Gross Plant in-Service Excl. AFUDC as of September-20	Accumulated Depreciation as of September-20	Net Plant in-Service as of September-20 (2)-(3)	CWIP Excluding AFUDC as of September-20	Accumulated Deferred ITC as of September-20	Accumulated Deferred Tax Balance as of September-20	Monthly Depreciation Expense	Monthly Property Tax Expense
1	EB020290 Lined Retention Basin West	\$ 10,324,588	\$ 463,066	\$ 9,861,522	\$ -	\$ -	\$ 1,178,244	\$ 21,251	\$ 11,580
2	EB020745 Lined Retention Basin East	\$ 10,280,726	\$ 186,888	\$ 10,093,838	\$ -	\$ -	\$ 162,995	\$ 21,161	\$ 11,853
3	EB020298 East Bend SW/PW Reroute	\$ 29,882,379	\$ 1,089,565	\$ 28,792,815	\$ -	\$ -	\$ 2,607,759	\$ 61,500	\$ 33,811
4	EB021281 East Bend Landfill Cell 2	\$ 16,944,581	\$ 242,624	\$ 16,701,957	\$ -	\$ -	\$ 7,942	\$ 34,879	\$ 19,613
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 67,432,273	\$ 1,982,142	\$ 65,450,131	\$ -	\$ -	\$ 3,956,940	\$ 138,791	\$ 76,857

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of September 2020

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	\$ 1,588,547	\$ (150,851)	\$ 1,997,156	\$ (353,337)
31	May-19	Actual \$ -	\$ -	\$ 104,878	\$ (202,486)	\$ 15,574,775	\$ 1,641,055	\$ (408,609)	\$ 3,229,602	\$ (611,095)
32	Jun-19	Actual \$ -	\$ -	\$ 104,216	\$ (202,486)	\$ 15,476,505	\$ 1,423,233	\$ (1,588,547)	\$ 3,064,288	\$ (1,791,033)
33	Jul-19	Actual \$ -	\$ -	\$ 103,550	\$ (202,486)	\$ 15,377,569	\$ 1,368,585	\$ (1,641,055)	\$ 2,791,818	\$ (1,843,541)
34	Aug-19	Actual \$ -	\$ -	\$ 102,880	\$ (202,486)	\$ 15,277,963	\$ 487,759	\$ (1,423,233)	\$ 1,856,344	\$ (1,625,719)
35	Sep-19	Actual \$ -	\$ -	\$ 102,204	\$ (202,486)	\$ 15,177,681	\$ 47,477	\$ (1,368,585)	\$ 535,236	\$ (1,571,071)
36	Oct-19	Actual \$ -	\$ -	\$ 101,524	\$ (202,486)	\$ 15,076,719	\$ (18,595)	\$ (487,759)	\$ 28,882	\$ (690,245)
37	Nov-19	Actual \$ -	\$ -	\$ 100,840	\$ (202,486)	\$ 14,975,073	\$ 330,375	\$ (47,477)	\$ 311,780	\$ (249,963)
38	Dec-19	Actual \$ -	\$ -	\$ 100,151	\$ (202,486)	\$ 14,872,738	\$ 121,640	\$ 18,595	\$ 452,015	\$ (183,891)
39	Jan-20	Actual \$ -	\$ -	\$ 99,457	\$ (202,486)	\$ 14,769,709	\$ 77,416	\$ (330,375)	\$ 199,056	\$ (532,861)
40	Feb-20	Actual \$ -	\$ -	\$ 98,759	\$ (202,486)	\$ 14,665,982	\$ 25,184	\$ (121,640)	\$ 102,600	\$ (324,126)
41	Mar-20	Actual \$ -	\$ -	\$ 98,055	\$ (202,486)	\$ 14,561,551	\$ 27,631	\$ (77,416)	\$ 52,815	\$ (279,902)
42	Apr-20	Actual \$ -	\$ -	\$ 97,347	\$ (202,486)	\$ 14,456,412	\$ 50,807	\$ (25,184)	\$ 78,438	\$ (227,670)
43	May-20	Actual \$ -	\$ -	\$ 96,635	\$ (202,486)	\$ 14,350,561	\$ 82,538	\$ (27,631)	\$ 133,345	\$ (230,117)
44	Jun-20	Actual \$ -	\$ -	\$ 95,917	\$ (202,486)	\$ 14,243,992	\$ 133,817	\$ (50,807)	\$ 216,355	\$ (253,293)
45	Jul-20	Actual \$ -	\$ -	\$ 95,194	\$ (202,486)	\$ 14,136,700	\$ 127,493	\$ (82,538)	\$ 261,310	\$ (285,024)
46	Aug-20	Actual \$ -	\$ -	\$ 94,467	\$ (202,486)	\$ 14,028,681	\$ 64,152	\$ (133,817)	\$ 191,645	\$ (336,303)
47	Sep-20	Actual \$ -	\$ -	\$ 93,735	\$ (202,486)	\$ 13,919,930	\$ 127,860	\$ (127,493)	\$ 192,012	\$ (329,979)
48	Oct-20	Actual \$ -	\$ -	\$ 92,997	\$ (202,486)	\$ 13,810,441	\$ -	\$ (64,152)	\$ 127,860	\$ (266,638)
49	Nov-20	Actual \$ -	\$ -	\$ 92,255	\$ (202,486)	\$ 13,700,210	\$ -	\$ (127,860)	\$ -	\$ (330,346)
50	Dec-20	Actual \$ -	\$ -	\$ 91,508	\$ (202,486)	\$ 13,589,232	\$ -	\$ -	\$ -	\$ (202,486)

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of September 2020

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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of September 2020

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)	\$ 10,233,451	\$ (10,233,451)		(34,531,771)

Monthly Amortization Amount

(330,346)

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending September 2020

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	157,175	-	179	-	156,996
Dollars	\$ 16,617.41	\$ -	\$ 19.69	\$ -	\$ 16,597.72
\$/Allowance	\$ 0.105726	\$ -	\$ 0.110000	\$ -	\$ 0.105721
NO_x Allowances - Annual					
Quantity	9,647	-	104	-	9,543
Dollars	\$ 2,931.75	\$ -	\$ 31.61	\$ -	\$ 2,900.14
\$/Allowance	\$ 0.303903	\$ -	\$ 0.303902	\$ -	\$ 0.303903
NO_x Allowances - Seasonal					
Quantity	918	-	104	-	814
Dollars	\$ 424.79	\$ -	\$ 48.12	\$ -	\$ 376.67
\$/Allowance	\$ 0.462734	\$ -	\$ 0.462734	\$ -	\$ 0.462734
Total Emission Allowances					
Quantity	167,740	-	387	-	167,353
Dollars	\$ 19,973.95	\$ -	\$ 99.42	\$ -	\$ 19,874.53

(a) Note: The SO₂ 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 September 2020

<u>Line No.</u>	<u>Expense Type</u>	<u>Account Number</u>	<u>East Bend Unit 2</u>	<u>Total</u>
1	Ammonia	502020	\$ 29,308	\$ 29,308
2	Lime	502040	925,704	925,704
3	Hydrated Lime	502040	52,753	52,753
4	Total		\$ 1,007,765	\$ 1,007,765

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 September 2020

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge
					(2) - (5)
Oct-19	\$ 10,517,865			\$ 833,088	\$ 9,684,777
Nov-19	8,743,548			534,343	8,209,205
Dec-19	12,807,518			480,713	12,326,805
Jan-20	13,276,696			679,953	12,596,743
Feb-20	10,929,297			809,007	10,120,290
Mar-20	10,255,525			647,368	9,608,157
Apr-20	8,888,124			500,432	8,387,692
May-20	9,017,343			603,729	8,413,614
Jun-20	11,464,102			491,576	10,972,526
Jul-20	13,984,655			649,272	13,335,383
Aug-20	13,547,109			1,027,348	12,519,761
Sep-20	\$ 13,390,720			\$ 1,083,587	\$ 12,307,133
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 10,706,841
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 26,590,422
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					40.27%

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)
Oct-19	\$ 18,843,454	\$ 5,442,045	\$ 54,598	\$ 1,494,804	\$ 17,348,650	\$ 11,852,007
Nov-19	16,478,475	4,862,659	367,980	1,020,231	15,458,244	10,227,605
Dec-19	19,084,712	5,004,531	2,796,137	621,419	18,463,293	10,662,625
Jan-20	18,930,685	4,927,423	2,622,874	846,776	18,083,909	10,533,612
Feb-20	16,003,003	4,714,129	(309,498)	1,246,362	14,756,641	10,352,010
Mar-20	15,995,196	4,652,202	27,058	1,052,546	14,942,650	10,263,390
Apr-20	14,522,031	4,102,392	274,534	841,134	13,680,897	9,303,971
May-20	13,648,175	3,839,129	106,367	952,293	12,695,882	8,750,386
Jun-20	16,100,402	4,526,716	90,417	729,861	15,370,541	10,753,408
Jul-20	17,529,327	5,284,701	(514,400)	876,204	16,653,123	11,882,822
Aug-20	17,412,064	5,203,196	(1,021,086)	1,445,018	15,967,046	11,784,936
Sep-20	\$ 18,706,266	\$ 5,190,888	\$ 348,039	\$ 1,524,171	\$ 17,182,095	\$ 11,643,168
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 15,883,581	\$ 10,667,495
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 26,590,422	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					59.73%	

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 2020

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	578,989
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	10,620,612
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		5.45%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	854,151
Jurisdictional R(m)	ES Form 1.10, Line 16		\$	10,527,714
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		8.11%

Effective Date for Billing: December 1, 2020

Submitted by: /s/ Theodore H. Czupik Jr.

Title: Rates & Regulatory Strategy Manager

Date Submitted: November 20, 2020

ES FORM 1.10

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

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of October 2020

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	\$ 61,368,526.00
2	RB ÷ 12 months	(1) ÷ 12	\$ 5,114,044
3	Pretax Rate of Return (ROR)	ES Form 1.20	7.905%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 404,265.00
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 649,434.00
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 1,053,699
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	99.17%
9	Jurisdictional E(m)	(7) x (8)	\$ 1,044,953.00
10	Prior Period Adjustment (if necessary)	(A)	+ \$ 222,247
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ 165,940.00
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 1,433,140
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 8,746

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	40.40%	59.60%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 578,989	\$ 854,151
16	R(m) Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	ES Form 3.00 ES Form 3.00	\$ 10,620,612	\$ 10,527,714
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	5.45%	8.11%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 26,289,347	99.17%
19	Sales for Resale	Company Records	\$ 220,510	0.83%
20	Total Revenue		\$ 26,509,857	100.00%

Note: (A) Amounts determined by the Commission during six-month and two-year reviews.
 See Note 1 on ES FORM 2.50 and explanation in October 2020 expense month transmittal letter.

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	5.835%	1.710%	0.100%		0.100%
2	Long-term Debt	45.931%	4.028%	1.850%		1.850%
3	Common Equity	48.234%	9.250%	4.462%	1.3346139	5.955%
4	Total	100.000%		6.412%		7.905%

Note: Capital structure, cost of debt and tax rate gross-up factor as approved in Case No. 2019-00271. 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 2020

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant)	ES Form 2.10	\$ 67,432,274
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	-
3	Subtotal		\$ 67,432,274
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 19,872
6	Subtotal		\$ 19,872
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 2,120,933
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	3,962,687
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 6,083,620
12	Environmental Compliance Rate Base		\$ 61,368,526
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 138,791
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 76,694
16	Monthly Amortization Expense	ES Form 2.20	\$ 429,039
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 2
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 4,908
19	Total Environmental Compliance Operating Expense		\$ 649,434
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x 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		\$ 1,636,238
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		1,470,298
27	(Over) / Under Recovery		\$ 165,940

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 2020

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project No.	Description	Gross Plant in-Service Excl. AFUDC as of October-20	Accumulated Depreciation as of October-20	Net Plant in-Service as of October-20 (2)-(3)	CWIP Excluding AFUDC as of October-20	Accumulated Deferred ITC as of October-20	Accumulated Deferred Tax Balance as of October-20	Monthly Depreciation Expense	Monthly Property Tax Expense
1	EB020290 Lined Retention Basin West	\$ 10,324,588	\$ 484,317	\$ 9,840,271	\$ -	\$ -	\$ 1,181,422	\$ 21,251	\$ 11,555
2	EB020745 Lined Retention Basin East	\$ 10,280,726	\$ 208,049	\$ 10,072,677	\$ -	\$ -	\$ 172,718	\$ 21,161	\$ 11,828
3	EB020298 East Bend SW/PW Reroute	\$ 29,882,379	\$ 1,151,065	\$ 28,731,314	\$ -	\$ -	\$ 2,593,297	\$ 61,500	\$ 33,739
4	EB021281 East Bend Landfill Cell 2	\$ 16,944,581	\$ 277,502	\$ 16,667,079	\$ -	\$ -	\$ 15,250	\$ 34,879	\$ 19,572
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 67,432,274	\$ 2,120,933	\$ 65,311,341	\$ -	\$ -	\$ 3,962,687	\$ 138,791	\$ 76,694

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of October 2020

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	\$ 1,588,547	\$ (150,851)	\$ 1,997,156	\$ (353,337)
31	May-19	Actual \$ -	\$ -	\$ 104,878	\$ (202,486)	\$ 15,574,775	\$ 1,641,055	\$ (408,609)	\$ 3,229,602	\$ (611,095)
32	Jun-19	Actual \$ -	\$ -	\$ 104,216	\$ (202,486)	\$ 15,476,505	\$ 1,423,233	\$ (1,588,547)	\$ 3,064,288	\$ (1,791,033)
33	Jul-19	Actual \$ -	\$ -	\$ 103,550	\$ (202,486)	\$ 15,377,569	\$ 1,368,585	\$ (1,641,055)	\$ 2,791,818	\$ (1,843,541)
34	Aug-19	Actual \$ -	\$ -	\$ 102,880	\$ (202,486)	\$ 15,277,963	\$ 487,759	\$ (1,423,233)	\$ 1,856,344	\$ (1,625,719)
35	Sep-19	Actual \$ -	\$ -	\$ 102,204	\$ (202,486)	\$ 15,177,681	\$ 47,477	\$ (1,368,585)	\$ 535,236	\$ (1,571,071)
36	Oct-19	Actual \$ -	\$ -	\$ 101,524	\$ (202,486)	\$ 15,076,719	\$ (18,595)	\$ (487,759)	\$ 28,882	\$ (690,245)
37	Nov-19	Actual \$ -	\$ -	\$ 100,840	\$ (202,486)	\$ 14,975,073	\$ 330,375	\$ (47,477)	\$ 311,780	\$ (249,963)
38	Dec-19	Actual \$ -	\$ -	\$ 100,151	\$ (202,486)	\$ 14,872,738	\$ 121,640	\$ 18,595	\$ 452,015	\$ (183,891)
39	Jan-20	Actual \$ -	\$ -	\$ 99,457	\$ (202,486)	\$ 14,769,709	\$ 77,416	\$ (330,375)	\$ 199,056	\$ (532,861)
40	Feb-20	Actual \$ -	\$ -	\$ 98,759	\$ (202,486)	\$ 14,665,982	\$ 25,184	\$ (121,640)	\$ 102,600	\$ (324,126)
41	Mar-20	Actual \$ -	\$ -	\$ 98,055	\$ (202,486)	\$ 14,561,551	\$ 27,631	\$ (77,416)	\$ 52,815	\$ (279,902)
42	Apr-20	Actual \$ -	\$ -	\$ 97,347	\$ (202,486)	\$ 14,456,412	\$ 50,807	\$ (25,184)	\$ 78,438	\$ (227,670)
43	May-20	Actual \$ -	\$ -	\$ 96,635	\$ (202,486)	\$ 14,350,561	\$ 82,538	\$ (27,631)	\$ 133,345	\$ (230,117)
44	Jun-20	Actual \$ -	\$ -	\$ 95,917	\$ (202,486)	\$ 14,243,992	\$ 133,817	\$ (50,807)	\$ 216,355	\$ (253,293)
45	Jul-20	Actual \$ -	\$ -	\$ 95,194	\$ (202,486)	\$ 14,136,700	\$ 127,493	\$ (82,538)	\$ 261,310	\$ (285,024)
46	Aug-20	Actual \$ -	\$ -	\$ 94,467	\$ (202,486)	\$ 14,028,681	\$ 64,152	\$ (133,817)	\$ 191,645	\$ (336,303)
47	Sep-20	Actual \$ -	\$ -	\$ 93,735	\$ (202,486)	\$ 13,919,930	\$ 127,860	\$ (127,493)	\$ 192,012	\$ (329,979)
48	Oct-20	Actual \$ -	\$ -	\$ 92,997	\$ (202,486)	\$ 13,810,441	\$ 226,553	\$ (64,152)	\$ 354,413	\$ (266,638)
49	Nov-20	Actual \$ -	\$ -	\$ 92,255	\$ (202,486)	\$ 13,700,210	\$ -	\$ (127,860)	\$ 226,553	\$ (330,346)
50	Dec-20	Actual \$ -	\$ -	\$ 91,508	\$ (202,486)	\$ 13,589,232	\$ -	\$ (226,553)	\$ -	\$ (429,039)

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of October 2020

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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of October 2020

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)	\$ 10,460,004	\$ (10,460,004)		(34,758,324)

Monthly Amortization Amount

(429,039)

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending October 2020

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	156,996			-	156,996
Dollars	\$ 16,597.72			\$ -	\$ 16,597.72
\$/Allowance	\$ 0.105721	\$ -	\$ -	\$ -	\$ 0.105721
NO_x Allowances - Annual					
Quantity	9,543		8	-	9,535
Dollars	\$ 2,900.14	\$ -	\$ 2.40	\$ -	\$ 2,897.74
\$/Allowance	\$ 0.303902	\$ -	\$ 0.300000	\$ -	\$ 0.303906
NO_x Allowances - Seasonal					
Quantity	814			-	814
Dollars	\$ 376.67	\$ -	\$ -	\$ -	\$ 376.67
\$/Allowance	\$ 0.462734	\$ -	\$ -	\$ -	\$ 0.462734
Total Emission Allowances					
Quantity	167,353		8	-	167,345
Dollars	\$ 19,874.53	\$ -	\$ 2.40	\$ -	\$ 19,872.13

(a) Note: The SO₂ 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 October 2020

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
1	Ammonia	502020	\$ -	\$ -
2	Lime	502040		-
3	Hydrated Lime	502040	4,908	4,908
4	Magnesium Hydroxide ^(NOTE 1)	502040		-
5	Total		\$ 4,908	\$ 4,908

Note 1: East Bend Station's Flue Gas Desulfurization is a Magnesium Oxide based technology. It is the only one of its kind within Duke Energy's current portfolio. The Magnesium Oxide based technology requires a particular chemical construct of lime to function properly, and as such, the scrubber utilizes a "quicklime" material versus the nominal limestone which is considered a Calcium Carbonate based technology. In March of 2020 the vendor's mining facility supplying the quicklime material to East Bend discontinued operations. This facility's quicklime product contained the proper constituents including the Magnesium required for East Bend's optimal scrubber performance. Upon learning of this facility's closure, Duke Energy Kentucky began exploring different solutions to obtain scrubber material with the correct chemical composition, including different mine sources and adding chemicals to produce the correct product. The vendor made the commitment to continue meeting contractual obligations by supplying East Bend with a blended product (Dolomitic Lime and Quicklime) from an alternate facility. Unfortunately, contractually meeting the specifications of the blended commodity, the reactivity of the substitute dolomitic lime is insufficient and as a result, East Bend found itself not able to meet its scrubber limit. In order for East Bend Station to meet its SO2 scrubbing limit, the Company must add an additional chemical reagent, Magnesium Hydroxide, to the substitute blended lime to produce the correct chemical reaction and achieve East Bend's SO2 limit.

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 2020

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge
					(2) - (5)
Nov-19	\$ 8,743,548			\$ 534,343	\$ 8,209,205
Dec-19	12,807,518			480,713	12,326,805
Jan-20	13,276,696			679,953	12,596,743
Feb-20	10,929,297			809,007	10,120,290
Mar-20	10,255,525			647,368	9,608,157
Apr-20	8,888,124			500,432	8,387,692
May-20	9,017,343			603,729	8,413,614
Jun-20	11,464,102			491,576	10,972,526
Jul-20	13,984,655			649,272	13,335,383
Aug-20	13,547,109			1,027,348	12,519,761
Sep-20	13,390,720			1,083,587	12,307,133
Oct-20	\$ 9,186,084			\$ 536,044	\$ 8,650,040
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 10,620,612
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 26,289,347
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					40.40%

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-19	\$ 16,478,475	\$ 4,862,659	\$ 367,980	\$ 1,020,231	\$ 15,458,244	\$ 10,227,605
Dec-19	19,084,712	5,004,531	2,796,137	621,419	18,463,293	10,662,625
Jan-20	18,930,685	4,927,423	2,622,874	846,776	18,083,909	10,533,612
Feb-20	16,003,003	4,714,129	(309,498)	1,246,362	14,756,641	10,352,010
Mar-20	15,995,196	4,652,202	27,058	1,052,546	14,942,650	10,263,390
Apr-20	14,522,031	4,102,392	274,534	841,134	13,680,897	9,303,971
May-20	13,648,175	3,839,129	106,367	952,293	12,695,882	8,750,386
Jun-20	16,100,402	4,526,716	90,417	729,861	15,370,541	10,753,408
Jul-20	17,529,327	5,284,701	(514,400)	876,204	16,653,123	11,882,822
Aug-20	17,412,064	5,203,196	(1,021,086)	1,445,018	15,967,046	11,784,936
Sep-20	18,706,266	5,190,888	348,039	1,524,171	17,182,095	11,643,168
Oct-20	\$ 15,704,756	\$ 4,528,380	\$ 67,487	\$ 934,254	\$ 14,770,502	\$ 10,174,635
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 15,668,735	\$ 10,527,714
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 26,289,347	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					59.60%	

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 2020

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	683,801
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	10,640,943
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		6.43%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,000,022
Jurisdictional R(m)	ES Form 1.10, Line 16		\$	10,517,152
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		9.51%

Effective Date for Billing: January 4, 2021

Submitted by: /s/ Theodore H. Czupik Jr.

Title: Rates & Regulatory Strategy Manager

Date Submitted: December 18, 2020

ES FORM 1.10

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

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of November 2020

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	\$ 61,223,965
2	RB ÷ 12 months	(1) ÷ 12	\$ 5,101,997
3	Pretax Rate of Return (ROR)	ES Form 1.20	7.905%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 403,313
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 1,104,648
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 1,507,961
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	99.14%
9	Jurisdictional E(m)	(7) x (8)	\$ 1,494,993
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ 188,830
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 1,683,823
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 12,968

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	40.61%	59.39%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 683,801	\$ 1,000,022
16	<u>R(m)</u> 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	\$ 10,640,943	\$ 10,517,152
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	6.43%	9.51%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 26,200,419	99.14%
19	Sales for Resale	Company Records	\$ 227,105	0.86%
20	Total Revenue		\$ 26,427,524	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	5.835%	1.710%	0.100%		0.100%
2	Long-term Debt	45.931%	4.028%	1.850%		1.850%
3	Common Equity	48.234%	9.250%	4.462%	1.3346139	5.955%
4	Total	100.000%		6.412%		7.905%

Note: Capital structure, cost of debt and tax rate gross-up factor as approved in Case No. 2019-00271. 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 2020

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant)	ES Form 2.10	\$ 67,432,274
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	-
3	Subtotal		\$ 67,432,274
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 19,849
6	Subtotal		\$ 19,849
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 2,259,724
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	3,968,434
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 6,228,158
12	Environmental Compliance Rate Base		\$ 61,223,965
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 138,791
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 76,530
16	Monthly Amortization Expense	ES Form 2.20	\$ 625,806
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 24
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 263,497
19	Total Environmental Compliance Operating Expense		\$ 1,104,648
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x 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		\$ 1,665,685
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		1,476,855
27	(Over) / Under Recovery		\$ 188,830

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 2020

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project No.	Description	Gross Plant in-Service Excl. AFUDC as of November-20	Accumulated Depreciation as of November-20	Net Plant in-Service as of November-20 (2)-(3)	CWIP Excluding AFUDC as of November-20	Accumulated Deferred ITC as of November-20	Accumulated Deferred Tax Balance as of November-20	Monthly Depreciation Expense	Monthly Property Tax Expense
1	EB020290 Lined Retention Basin West	\$ 10,324,588	\$ 505,569	\$ 9,819,019	\$ -	\$ -	\$ 1,184,600	\$ 21,251	\$ 11,530
2	EB020745 Lined Retention Basin East	\$ 10,280,726	\$ 229,209	\$ 10,051,517	\$ -	\$ -	\$ 182,441	\$ 21,161	\$ 11,803
3	EB020298 East Bend SW/PW Reroute	\$ 29,882,379	\$ 1,212,565	\$ 28,669,814	\$ -	\$ -	\$ 2,578,835	\$ 61,500	\$ 33,666
4	EB021281 East Bend Landfill Cell 2	\$ 16,944,581	\$ 312,381	\$ 16,632,200	\$ -	\$ -	\$ 22,558	\$ 34,879	\$ 19,531
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 67,432,274	\$ 2,259,724	\$ 65,172,550	\$ -	\$ -	\$ 3,968,434	\$ 138,791	\$ 76,530

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of November 2020

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	\$ 1,588,547	\$ (150,851)	\$ 1,997,156	\$ (353,337)
31	May-19	Actual \$ -	\$ -	\$ 104,878	\$ (202,486)	\$ 15,574,775	\$ 1,641,055	\$ (408,609)	\$ 3,229,602	\$ (611,095)
32	Jun-19	Actual \$ -	\$ -	\$ 104,216	\$ (202,486)	\$ 15,476,505	\$ 1,423,233	\$ (1,588,547)	\$ 3,064,288	\$ (1,791,033)
33	Jul-19	Actual \$ -	\$ -	\$ 103,550	\$ (202,486)	\$ 15,377,569	\$ 1,368,585	\$ (1,641,055)	\$ 2,791,818	\$ (1,843,541)
34	Aug-19	Actual \$ -	\$ -	\$ 102,880	\$ (202,486)	\$ 15,277,963	\$ 487,759	\$ (1,423,233)	\$ 1,856,344	\$ (1,625,719)
35	Sep-19	Actual \$ -	\$ -	\$ 102,204	\$ (202,486)	\$ 15,177,681	\$ 47,477	\$ (1,368,585)	\$ 535,236	\$ (1,571,071)
36	Oct-19	Actual \$ -	\$ -	\$ 101,524	\$ (202,486)	\$ 15,076,719	\$ (18,595)	\$ (487,759)	\$ 28,882	\$ (690,245)
37	Nov-19	Actual \$ -	\$ -	\$ 100,840	\$ (202,486)	\$ 14,975,073	\$ 330,375	\$ (47,477)	\$ 311,780	\$ (249,963)
38	Dec-19	Actual \$ -	\$ -	\$ 100,151	\$ (202,486)	\$ 14,872,738	\$ 121,640	\$ 18,595	\$ 452,015	\$ (183,891)
39	Jan-20	Actual \$ -	\$ -	\$ 99,457	\$ (202,486)	\$ 14,769,709	\$ 77,416	\$ (330,375)	\$ 199,056	\$ (532,861)
40	Feb-20	Actual \$ -	\$ -	\$ 98,759	\$ (202,486)	\$ 14,665,982	\$ 25,184	\$ (121,640)	\$ 102,600	\$ (324,126)
41	Mar-20	Actual \$ -	\$ -	\$ 98,055	\$ (202,486)	\$ 14,561,551	\$ 27,631	\$ (77,416)	\$ 52,815	\$ (279,902)
42	Apr-20	Actual \$ -	\$ -	\$ 97,347	\$ (202,486)	\$ 14,456,412	\$ 50,807	\$ (25,184)	\$ 78,438	\$ (227,670)
43	May-20	Actual \$ -	\$ -	\$ 96,635	\$ (202,486)	\$ 14,350,561	\$ 82,538	\$ (27,631)	\$ 133,345	\$ (230,117)
44	Jun-20	Actual \$ -	\$ -	\$ 95,917	\$ (202,486)	\$ 14,243,992	\$ 133,817	\$ (50,807)	\$ 216,355	\$ (253,293)
45	Jul-20	Actual \$ -	\$ -	\$ 95,194	\$ (202,486)	\$ 14,136,700	\$ 127,493	\$ (82,538)	\$ 261,310	\$ (285,024)
46	Aug-20	Actual \$ -	\$ -	\$ 94,467	\$ (202,486)	\$ 14,028,681	\$ 64,152	\$ (133,817)	\$ 191,645	\$ (336,303)
47	Sep-20	Actual \$ -	\$ -	\$ 93,735	\$ (202,486)	\$ 13,919,930	\$ 127,860	\$ (127,493)	\$ 192,012	\$ (329,979)
48	Oct-20	Actual \$ -	\$ -	\$ 92,997	\$ (202,486)	\$ 13,810,441	\$ 226,553	\$ (64,152)	\$ 354,413	\$ (266,638)
49	Nov-20	Actual \$ -	\$ -	\$ 92,255	\$ (202,486)	\$ 13,700,210	\$ 423,320	\$ (127,860)	\$ 649,873	\$ (330,346)
50	Dec-20	Actual \$ -	\$ -	\$ 91,508	\$ (202,486)	\$ 13,589,232	\$ -	\$ (226,553)	\$ 423,320	\$ (429,039)

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of November 2020

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	-	(423,320)	-	(625,806)
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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of November 2020

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)		\$ 10,883,324	\$ (10,883,324)		(35,181,644)

Monthly Amortization Amount

(625,806)

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending November 2020

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	156,996		44	-	156,952
Dollars	\$ 16,597.72		\$ 4.84	\$ -	\$ 16,592.88
\$/Allowance	\$ 0.105721	\$ -	\$ 0.110000	\$ -	\$ 0.105719
NO_x Allowances - Annual					
Quantity	9,535		61	-	9,474
Dollars	\$ 2,897.74		\$ 18.30	\$ -	\$ 2,879.44
\$/Allowance	\$ 0.303906	\$ -	\$ 0.300000	\$ -	\$ 0.303931
NO_x Allowances - Seasonal					
Quantity	814	-	1	-	813
Dollars	\$ 376.67	\$ -	\$ 0.46	\$ -	\$ 376.21
\$/Allowance	\$ 0.462740	\$ -	\$ 0.460000	\$ -	\$ 0.462743
Total Emission Allowances					
Quantity	167,345	-	106	-	167,239
Dollars	\$ 19,872.13	\$ -	\$ 23.60	\$ -	\$ 19,848.53

(a) Note: The SO₂ 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 2020

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
1	Ammonia	502020	\$ 6,444	\$ 6,444
2	Lime	502040	207,189	207,189
3	Hydrated Lime	502040	30,239	30,239
4	Magnesium Hydroxide ^(NOTE 1)	502040	19,625	19,625
5	Total		\$ 263,497	\$ 263,497

Note 1: East Bend Station's Flue Gas Desulfurization is a Magnesium Oxide based technology. It is the only one of its kind within Duke Energy's current portfolio. The Magnesium Oxide based technology requires a particular chemical construct of lime to function properly, and as such, the scrubber utilizes a "quicklime" material versus the nominal limestone which is considered a Calcium Carbonate based technology. In March of 2020 the vendor's mining facility supplying the quicklime material to East Bend discontinued operations. This facility's quicklime product contained the proper constituents including the Magnesium required for East Bend's optimal scrubber performance. Upon learning of this facility's closure, Duke Energy Kentucky began exploring different solutions to obtain scrubber material with the correct chemical composition, including different mine sources and adding chemicals to produce the correct product. The vendor made the commitment to continue meeting contractual obligations by supplying East Bend with a blended product (Dolomitic Lime and Quicklime) from an alternate facility. Unfortunately, contractually meeting the specifications of the blended commodity, the reactivity of the substitute dolomitic lime is insufficient and as a result, East Bend found itself not able to meet its scrubber limit. In order for East Bend Station to meet its SO2 scrubbing limit, the Company must add an additional chemical reagent, Magnesium Hydroxide, to the substitute blended lime to produce the correct chemical reaction and achieve East Bend's SO2 limit.

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 2020

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge
					(2) - (5)
Dec-19	\$ 12,807,518			\$ 480,713	\$ 12,326,805
Jan-20	13,276,696			679,953	12,596,743
Feb-20	10,929,297			809,007	10,120,290
Mar-20	10,255,525			647,368	9,608,157
Apr-20	8,888,124			500,432	8,387,692
May-20	9,017,343			603,729	8,413,614
Jun-20	11,464,102			491,576	10,972,526
Jul-20	13,984,655			649,272	13,335,383
Aug-20	13,547,109			1,027,348	12,519,761
Sep-20	13,390,720			1,083,587	12,307,133
Oct-20	9,186,084			536,044	8,650,040
Nov-20	\$ 8,985,465			\$ 532,292	\$ 8,453,173
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 10,640,943
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 26,200,419
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					40.61%

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-19	\$ 19,084,712	\$ 5,004,531	\$ 2,796,137	\$ 621,419	\$ 18,463,293	\$ 10,662,625
Jan-20	18,930,685	4,927,423	2,622,874	846,776	18,083,909	10,533,612
Feb-20	16,003,003	4,714,129	(309,498)	1,246,362	14,756,641	10,352,010
Mar-20	15,995,196	4,652,202	27,058	1,052,546	14,942,650	10,263,390
Apr-20	14,522,031	4,102,392	274,534	841,134	13,680,897	9,303,971
May-20	13,648,175	3,839,129	106,367	952,293	12,695,882	8,750,386
Jun-20	16,100,402	4,526,716	90,417	729,861	15,370,541	10,753,408
Jul-20	17,529,327	5,284,701	(514,400)	876,204	16,653,123	11,882,822
Aug-20	17,412,064	5,203,196	(1,021,086)	1,445,018	15,967,046	11,784,936
Sep-20	18,706,266	5,190,888	348,039	1,524,171	17,182,095	11,643,168
Oct-20	15,704,756	4,528,380	67,487	934,254	14,770,502	10,174,635
Nov-20	\$ 15,091,693	\$ 4,462,425	\$ (416,161)	\$ 944,563	\$ 14,147,130	\$ 10,100,866
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 15,559,476	\$ 10,517,152
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 26,200,419	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					59.39%	

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 2020

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,209,251
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	10,630,970
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		11.37%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,748,077
Jurisdictional R(m)	ES Form 1.10, Line 16		\$	10,506,069
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		16.64%

Effective Date for Billing: February 2, 2021

Submitted by: /s/ Theodore H. Czupik Jr.

Title: Rates & Regulatory Strategy Manager

Date Submitted: January 22, 2021

ES FORM 1.10

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

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of December 2020

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	\$ 61,079,347
2	RB ÷ 12 months	(1) ÷ 12	\$ 5,089,946
3	Pretax Rate of Return (ROR)	ES Form 1.20	7.905%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 402,360
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 2,687,904
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 3,090,264
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	98.67%
9	Jurisdictional E(m)	(7) x (8)	\$ 3,049,163
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ (91,835)
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 2,957,328
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 41,101

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	40.89%	59.11%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 1,209,251	\$ 1,748,077
16	R(m) Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	ES Form 3.00 ES Form 3.00	\$ 10,630,970	\$ 10,506,069
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	11.37%	16.64%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 25,995,954	98.67%
19	Sales for Resale	Company Records	\$ 350,625	1.33%
20	Total Revenue		\$ 26,346,579	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	5.835%	1.710%	0.100%		0.100%
2	Long-term Debt	45.931%	4.028%	1.850%		1.850%
3	Common Equity	48.234%	9.250%	4.462%	1.3346139	5.955%
4	Total	100.000%		6.412%		7.905%

Note: Capital structure, cost of debt and tax rate gross-up factor as approved in Case No. 2019-00271. 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 2020

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant)	ES Form 2.10	\$ 67,432,275
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	-
3	Subtotal		\$ 67,432,275
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 19,766
6	Subtotal		\$ 19,766
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 2,398,513
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	3,974,181
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 6,372,694
12	Environmental Compliance Rate Base		\$ 61,079,347
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 138,791
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 72,746
16	Monthly Amortization Expense	ES Form 2.20	\$ 497,839
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 83
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 1,978,445
19	Total Environmental Compliance Operating Expense		\$ 2,687,904
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x 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		\$ 1,433,140
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		1,524,975
27	(Over) / Under Recovery		\$ (91,835)

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 2020

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project No.	Description	Gross Plant in-Service Excl. AFUDC as of December-20	Accumulated Depreciation as of December-20	Net Plant in-Service as of December-20	CWIP Excluding AFUDC as of December-20	Accumulated Deferred ITC as of December-20	Accumulated Deferred Tax Balance as of December-20	Monthly Depreciation Expense	Monthly Property Tax Expense
				(2)-(3)					
1	EB020290 Lined Retention Basin West	\$ 10,324,588	\$ 526,820	\$ 9,797,768	\$ -	\$ -	\$ 1,187,778	\$ 21,251	\$ 10,960
2	EB020745 Lined Retention Basin East	\$ 10,280,726	\$ 250,370	\$ 10,030,356	\$ -	\$ -	\$ 192,165	\$ 21,161	\$ 11,220
3	EB020298 East Bend SW/PW Reroute	\$ 29,882,379	\$ 1,274,064	\$ 28,608,315	\$ -	\$ -	\$ 2,564,372	\$ 61,500	\$ 32,001
4	EB021281 East Bend Landfill Cell 2	\$ 16,944,582	\$ 347,259	\$ 16,597,323	\$ -	\$ -	\$ 29,866	\$ 34,879	\$ 18,565
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 67,432,275	\$ 2,398,513	\$ 65,033,762	\$ -	\$ -	\$ 3,974,181	\$ 138,791	\$ 72,746

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of December 2020

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	\$ 1,588,547	\$ (150,851)	\$ 1,997,156	\$ (353,337)
31	May-19	Actual \$ -	\$ -	\$ 104,878	\$ (202,486)	\$ 15,574,775	\$ 1,641,055	\$ (408,609)	\$ 3,229,602	\$ (611,095)
32	Jun-19	Actual \$ -	\$ -	\$ 104,216	\$ (202,486)	\$ 15,476,505	\$ 1,423,233	\$ (1,588,547)	\$ 3,064,288	\$ (1,791,033)
33	Jul-19	Actual \$ -	\$ -	\$ 103,550	\$ (202,486)	\$ 15,377,569	\$ 1,368,585	\$ (1,641,055)	\$ 2,791,818	\$ (1,843,541)
34	Aug-19	Actual \$ -	\$ -	\$ 102,880	\$ (202,486)	\$ 15,277,963	\$ 487,759	\$ (1,423,233)	\$ 1,856,344	\$ (1,625,719)
35	Sep-19	Actual \$ -	\$ -	\$ 102,204	\$ (202,486)	\$ 15,177,681	\$ 47,477	\$ (1,368,585)	\$ 535,236	\$ (1,571,071)
36	Oct-19	Actual \$ -	\$ -	\$ 101,524	\$ (202,486)	\$ 15,076,719	\$ (18,595)	\$ (487,759)	\$ 28,882	\$ (690,245)
37	Nov-19	Actual \$ -	\$ -	\$ 100,840	\$ (202,486)	\$ 14,975,073	\$ 330,375	\$ (47,477)	\$ 311,780	\$ (249,963)
38	Dec-19	Actual \$ -	\$ -	\$ 100,151	\$ (202,486)	\$ 14,872,738	\$ 121,640	\$ 18,595	\$ 452,015	\$ (183,891)
39	Jan-20	Actual \$ -	\$ -	\$ 99,457	\$ (202,486)	\$ 14,769,709	\$ 77,416	\$ (330,375)	\$ 199,056	\$ (532,861)
40	Feb-20	Actual \$ -	\$ -	\$ 98,759	\$ (202,486)	\$ 14,665,982	\$ 25,184	\$ (121,640)	\$ 102,600	\$ (324,126)
41	Mar-20	Actual \$ -	\$ -	\$ 98,055	\$ (202,486)	\$ 14,561,551	\$ 27,631	\$ (77,416)	\$ 52,815	\$ (279,902)
42	Apr-20	Actual \$ -	\$ -	\$ 97,347	\$ (202,486)	\$ 14,456,412	\$ 50,807	\$ (25,184)	\$ 78,438	\$ (227,670)
43	May-20	Actual \$ -	\$ -	\$ 96,635	\$ (202,486)	\$ 14,350,561	\$ 82,538	\$ (27,631)	\$ 133,345	\$ (230,117)
44	Jun-20	Actual \$ -	\$ -	\$ 95,917	\$ (202,486)	\$ 14,243,992	\$ 133,817	\$ (50,807)	\$ 216,355	\$ (253,293)
45	Jul-20	Actual \$ -	\$ -	\$ 95,194	\$ (202,486)	\$ 14,136,700	\$ 127,493	\$ (82,538)	\$ 261,310	\$ (285,024)
46	Aug-20	Actual \$ -	\$ -	\$ 94,467	\$ (202,486)	\$ 14,028,681	\$ 64,152	\$ (133,817)	\$ 191,645	\$ (336,303)
47	Sep-20	Actual \$ -	\$ -	\$ 93,735	\$ (202,486)	\$ 13,919,930	\$ 127,860	\$ (127,493)	\$ 192,012	\$ (329,979)
48	Oct-20	Actual \$ -	\$ -	\$ 92,997	\$ (202,486)	\$ 13,810,441	\$ 226,553	\$ (64,152)	\$ 354,413	\$ (266,638)
49	Nov-20	Actual \$ -	\$ -	\$ 92,255	\$ (202,486)	\$ 13,700,210	\$ 423,320	\$ (127,860)	\$ 649,873	\$ (330,346)
50	Dec-20	Actual \$ -	\$ -	\$ 91,508	\$ (202,486)	\$ 13,589,232	\$ 295,353	\$ (226,553)	\$ 718,673	\$ (429,039)

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of December 2020

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	-	(423,320)	295,353	(625,806)
52	Feb-21	Actual	-	89,998	(202,486)	13,365,014	-	(295,353)	-	(497,839)
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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of December 2020

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)	\$ 11,178,677	\$ (11,178,677)		(35,476,997)

Monthly Amortization Amount

(497,839)

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending December 2020

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	156,952	-	212	-	156,740
Dollars	\$ 16,592.88	\$ -	\$ 23.32	\$ -	\$ 16,569.56
\$/Allowance	\$ 0.105719	\$ -	\$ 0.110000	\$ -	\$ 0.105714
NO_x Allowances - Annual					
Quantity	9,474	-	199	-	9,275
Dollars	\$ 2,879.44	\$ -	\$ 59.70	\$ -	\$ 2,819.74
\$/Allowance	\$ 0.303931	\$ -	\$ 0.300000	\$ -	\$ 0.304015
NO_x Allowances - Seasonal					
Quantity	813	-	-	-	813
Dollars	\$ 376.21	\$ -	\$ -	\$ -	\$ 376.21
\$/Allowance	\$ 0.462738	\$ -	\$ -	\$ -	\$ 0.462738
Total Emission Allowances					
Quantity	167,239	-	411	-	166,828
Dollars	\$ 19,848.53	\$ -	\$ 83.02	\$ -	\$ 19,765.51

(a) Note: The SO₂ 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 December 2020

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
1	Ammonia	502020	\$ 58,489	\$ 58,489
2	Lime	502040	1,737,236	1,737,236
3	Hydrated Lime	502040	72,011	72,011
4	Magnesium Hydroxide ^(NOTE 1)	502040	110,709	110,709
5	Total		\$ 1,978,445	\$ 1,978,445

Note 1: East Bend Station's Flue Gas Desulfurization is a Magnesium Oxide based technology. It is the only one of its kind within Duke Energy's current portfolio. The Magnesium Oxide based technology requires a particular chemical construct of lime to function properly, and as such, the scrubber utilizes a "quicklime" material versus the nominal limestone which is considered a Calcium Carbonate based technology. In March of 2020 the vendor's mining facility supplying the quicklime material to East Bend discontinued operations. This facility's quicklime product contained the proper constituents including the Magnesium required for East Bend's optimal scrubber performance. Upon learning of this facility's closure, Duke Energy Kentucky began exploring different solutions to obtain scrubber material with the correct chemical composition, including different mine sources and adding chemicals to produce the correct product. The vendor made the commitment to continue meeting contractual obligations by supplying East Bend with a blended product (Dolomitic Lime and Quicklime) from an alternate facility. Unfortunately, contractually meeting the specifications of the blended commodity, the reactivity of the substitute dolomitic lime is insufficient and as a result, East Bend found itself not able to meet its scrubber limit. In order for East Bend Station to meet its SO2 scrubbing limit, the Company must add an additional chemical reagent, Magnesium Hydroxide, to the substitute blended lime to produce the correct chemical reaction and achieve East Bend's SO2 limit.

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 December 2020

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge
					(2) - (5)
Jan-20	\$ 13,276,696			\$ 679,953	\$ 12,596,743
Feb-20	10,929,297			809,007	10,120,290
Mar-20	10,255,525			647,368	9,608,157
Apr-20	8,888,124			500,432	8,387,692
May-20	9,017,343			603,729	8,413,614
Jun-20	11,464,102			491,576	10,972,526
Jul-20	13,984,655			649,272	13,335,383
Aug-20	13,547,109			1,027,348	12,519,761
Sep-20	13,390,720			1,083,587	12,307,133
Oct-20	9,186,084			536,044	8,650,040
Nov-20	8,985,465			532,292	8,453,173
Dec-20	\$ 12,875,238			\$ 668,111	\$ 12,207,127
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 10,630,970
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 25,995,954
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					40.89%

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)
Jan-20	\$ 18,930,685	\$ 4,927,423	\$ 2,622,874	\$ 846,776	\$ 18,083,909	\$ 10,533,612
Feb-20	16,003,003	4,714,129	(309,498)	1,246,362	14,756,641	10,352,010
Mar-20	15,995,196	4,652,202	27,058	1,052,546	14,942,650	10,263,390
Apr-20	14,522,031	4,102,392	274,534	841,134	13,680,897	9,303,971
May-20	13,648,175	3,839,129	106,367	952,293	12,695,882	8,750,386
Jun-20	16,100,402	4,526,716	90,417	729,861	15,370,541	10,753,408
Jul-20	17,529,327	5,284,701	(514,400)	876,204	16,653,123	11,882,822
Aug-20	17,412,064	5,203,196	(1,021,086)	1,445,018	15,967,046	11,784,936
Sep-20	18,706,266	5,190,888	348,039	1,524,171	17,182,095	11,643,168
Oct-20	15,704,756	4,528,380	67,487	934,254	14,770,502	10,174,635
Nov-20	15,091,693	4,462,425	(416,161)	944,563	14,147,130	10,100,866
Dec-20	\$ 16,986,250	\$ 4,909,495	\$ 690,267	\$ 856,864	\$ 16,129,386	\$ 10,529,624
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 15,364,984	\$ 10,506,069
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 25,995,954	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					59.11%	

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 2021

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	793,119
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	10,735,346
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		7.39%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,120,316
Jurisdictional R(m)	ES Form 1.10, Line 16		\$	10,505,187
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		10.66%

Effective Date for Billing: March 3, 2021

Submitted by: /s/ Theodore H. Czupik Jr.

Title: Rates & Regulatory Strategy Manager

Date Submitted: February 19, 2021

ES FORM 1.10

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

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of January 2021

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	\$ 60,909,021
2	RB ÷ 12 months	(1) ÷ 12	\$ 5,075,752
3	Pretax Rate of Return (ROR)	ES Form 1.20	7.905%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 401,238
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 1,758,145
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 2,159,383
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	98.44%
9	Jurisdictional E(m)	(7) x (8)	\$ 2,125,697
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ (212,262)
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 1,913,435
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 33,686

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	41.45%	58.55%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 793,119	\$ 1,120,316
16	<u>R(m)</u> 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	\$ 10,735,346	\$ 10,505,187
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	7.39%	10.66%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 25,901,443	98.44%
19	Sales for Resale	Company Records	\$ 411,629	1.56%
20	Total Revenue		\$ 26,313,072	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	5.835%	1.710%	0.100%		0.100%
2	Long-term Debt	45.931%	4.028%	1.850%		1.850%
3	Common Equity	48.234%	9.250%	4.462%	1.3346139	5.955%
4	Total	100.000%		6.412%		7.905%

Note: Capital structure, cost of debt and tax rate gross-up factor as approved in Case No. 2019-00271. 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 2021

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant) Excluding AFUDC	ES Form 2.10	\$ 67,432,275
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	-
3	Subtotal		\$ 67,432,275
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 19,715
6	Subtotal		\$ 19,715
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 2,537,304
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	4,005,665
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 6,542,969
12	Environmental Compliance Rate Base		\$ 60,909,021
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 138,791
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 72,590
16	Monthly Amortization Expense	ES Form 2.20	\$ 282,814
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 51
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 1,263,899
19	Total Environmental Compliance Operating Expense		\$ 1,758,145
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x 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		\$ 1,683,823
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		1,896,085
27	(Over) / Under Recovery		\$ (212,262)

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 2021

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project No.	Description	Gross Plant in-Service Excl. AFUDC as of January-21	Accumulated Depreciation as of January-21	Net Plant in-Service as of January-21	CWIP Excluding AFUDC as of January-21	Accumulated Deferred ITC as of January-21	Accumulated Deferred Tax Balance as of January-21	Monthly Depreciation Expense	Monthly Property Tax Expense
				(2)-(3)					
1	EB020290 Lined Retention Basin West	\$ 10,324,588	\$ 548,072	\$ 9,776,516	\$ -	\$ -	\$ 1,190,321	\$ 21,251	\$ 10,936
2	EB020745 Lined Retention Basin East	\$ 10,280,726	\$ 271,531	\$ 10,009,195	\$ -	\$ -	\$ 201,314	\$ 21,161	\$ 11,196
3	EB020298 East Bend SW/PW Reroute	\$ 29,882,379	\$ 1,335,564	\$ 28,546,815	\$ -	\$ -	\$ 2,577,581	\$ 61,500	\$ 31,932
4	EB021281 East Bend Landfill Cell 2	\$ 16,944,582	\$ 382,138	\$ 16,562,444	\$ -	\$ -	\$ 36,449	\$ 34,879	\$ 18,526
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 67,432,275	\$ 2,537,304	\$ 64,894,971	\$ -	\$ -	\$ 4,005,665	\$ 138,791	\$ 72,590

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of January 2021

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	\$ (477,672)
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	\$ 1,588,547	\$ (150,851)	\$ 1,997,156	\$ (353,337)
31	May-19	Actual \$ -	\$ -	\$ 104,878	\$ (202,486)	\$ 15,574,775	\$ 1,641,055	\$ (408,609)	\$ 3,229,602	\$ (611,095)
32	Jun-19	Actual \$ -	\$ -	\$ 104,216	\$ (202,486)	\$ 15,476,505	\$ 1,423,233	\$ (1,588,547)	\$ 3,064,288	\$ (1,791,033)
33	Jul-19	Actual \$ -	\$ -	\$ 103,550	\$ (202,486)	\$ 15,377,569	\$ 1,368,585	\$ (1,641,055)	\$ 2,791,818	\$ (1,843,541)
34	Aug-19	Actual \$ -	\$ -	\$ 102,880	\$ (202,486)	\$ 15,277,963	\$ 487,759	\$ (1,423,233)	\$ 1,856,344	\$ (1,625,719)
35	Sep-19	Actual \$ -	\$ -	\$ 102,204	\$ (202,486)	\$ 15,177,681	\$ 47,477	\$ (1,368,585)	\$ 535,236	\$ (1,571,071)
36	Oct-19	Actual \$ -	\$ -	\$ 101,524	\$ (202,486)	\$ 15,076,719	\$ (18,595)	\$ (487,759)	\$ 28,882	\$ (690,245)
37	Nov-19	Actual \$ -	\$ -	\$ 100,840	\$ (202,486)	\$ 14,975,073	\$ 330,375	\$ (47,477)	\$ 311,780	\$ (249,963)
38	Dec-19	Actual \$ -	\$ -	\$ 100,151	\$ (202,486)	\$ 14,872,738	\$ 121,640	\$ 18,595	\$ 452,015	\$ (183,891)
39	Jan-20	Actual \$ -	\$ -	\$ 99,457	\$ (202,486)	\$ 14,769,709	\$ 77,416	\$ (330,375)	\$ 199,056	\$ (532,861)
40	Feb-20	Actual \$ -	\$ -	\$ 98,759	\$ (202,486)	\$ 14,665,982	\$ 25,184	\$ (121,640)	\$ 102,600	\$ (324,126)
41	Mar-20	Actual \$ -	\$ -	\$ 98,055	\$ (202,486)	\$ 14,561,551	\$ 27,631	\$ (77,416)	\$ 52,815	\$ (279,902)
42	Apr-20	Actual \$ -	\$ -	\$ 97,347	\$ (202,486)	\$ 14,456,412	\$ 50,807	\$ (25,184)	\$ 78,438	\$ (227,670)
43	May-20	Actual \$ -	\$ -	\$ 96,635	\$ (202,486)	\$ 14,350,561	\$ 82,538	\$ (27,631)	\$ 133,345	\$ (230,117)
44	Jun-20	Actual \$ -	\$ -	\$ 95,917	\$ (202,486)	\$ 14,243,992	\$ 133,817	\$ (50,807)	\$ 216,355	\$ (253,293)
45	Jul-20	Actual \$ -	\$ -	\$ 95,194	\$ (202,486)	\$ 14,136,700	\$ 127,493	\$ (82,538)	\$ 261,310	\$ (285,024)
46	Aug-20	Actual \$ -	\$ -	\$ 94,467	\$ (202,486)	\$ 14,028,681	\$ 64,152	\$ (133,817)	\$ 191,645	\$ (336,303)
47	Sep-20	Actual \$ -	\$ -	\$ 93,735	\$ (202,486)	\$ 13,919,930	\$ 127,860	\$ (127,493)	\$ 192,012	\$ (329,979)
48	Oct-20	Actual \$ -	\$ -	\$ 92,997	\$ (202,486)	\$ 13,810,441	\$ 226,553	\$ (64,152)	\$ 354,413	\$ (266,638)
49	Nov-20	Actual \$ -	\$ -	\$ 92,255	\$ (202,486)	\$ 13,700,210	\$ 423,320	\$ (127,860)	\$ 649,873	\$ (330,346)
50	Dec-20	Actual \$ -	\$ -	\$ 91,508	\$ (202,486)	\$ 13,589,232	\$ 295,353	\$ (226,553)	\$ 718,673	\$ (429,039)

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of January 2021

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	80,328	(423,320)	375,681	(625,806)
52	Feb-21	Actual	-	89,998	(202,486)	13,365,014	-	(295,353)	80,328	(497,839)
53	Mar-21	Actual	-	89,235	(202,486)	13,251,763	-	(80,328)	-	(282,814)
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)	12,907,364	-	-	-	(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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of January 2021

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)		\$ 11,259,005	\$ (11,259,005)		(35,557,325)

Monthly Amortization Amount

(282,814)

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending January 2021

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	156,740	25,041	191	-	181,590
Dollars	\$ 16,569.56	\$ -	\$ 17.19	\$ -	\$ 16,552.37
\$/Allowance	\$ 0.105714	\$ -	\$ 0.090000	\$ -	\$ 0.091152
NO_x Allowances - Annual					
Quantity	9,275	3,292	151	-	12,416
Dollars	\$ 2,819.74	\$ -	\$ 33.22	\$ -	\$ 2,786.52
\$/Allowance	\$ 0.304015	\$ -	\$ 0.220000	\$ -	\$ 0.224430
NO_x Allowances - Seasonal					
Quantity	813	913	1	-	1,725
Dollars	\$ 376.21	\$ -	\$ 0	\$ -	\$ 375.99
\$/Allowance	\$ 0.462738	\$ -	\$ 0.220000	\$ -	\$ 0.217963
Total Emission Allowances					
Quantity	166,828	29,246	343	-	195,731
Dollars	\$ 19,765.51	\$ -	\$ 50.63	\$ -	\$ 19,714.88

(a) Note: The SO₂ 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 January 2021

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
1	Ammonia	502020	\$ 54,039	\$ 54,039
2	Lime	502040	\$ 1,102,304	1,102,304
3	Hydrated Lime	502040	\$ 65,841	65,841
4	Magnesium Hydroxide ^(NOTE 1)	502040	\$ 41,715	41,715
5	Total		\$ 1,263,899	\$ 1,263,899

Note 1: East Bend Station's Flue Gas Desulfurization is a Magnesium Oxide based technology. It is the only one of its kind within Duke Energy's current portfolio. The Magnesium Oxide based technology requires a particular chemical construct of lime to function properly, and as such, the scrubber utilizes a "quicklime" material versus the nominal limestone which is considered a Calcium Carbonate based technology. In March of 2020 the vendor's mining facility supplying the quicklime material to East Bend discontinued operations. This facility's quicklime product contained the proper constituents including the Magnesium required for East Bend's optimal scrubber performance. Upon learning of this facility's closure, Duke Energy Kentucky began exploring different solutions to obtain scrubber material with the correct chemical composition, including different mine sources and adding chemicals to produce the correct product. The vendor made the commitment to continue meeting contractual obligations by supplying East Bend with a blended product (Dolomitic Lime and Quicklime) from an alternate facility. Unfortunately, contractually meeting the specifications of the blended commodity, the reactivity of the substitute dolomitic lime is insufficient and as a result, East Bend found itself not able to meet its scrubber limit. In order for East Bend Station to meet its SO2 scrubbing limit, the Company must add an additional chemical reagent, Magnesium Hydroxide, to the substitute blended lime to produce the correct chemical reaction and achieve East Bend's SO2 limit.

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 January 2021

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge (2) - (5)
Feb-20	\$ 10,929,297			\$ 809,007	\$ 10,120,290
Mar-20	10,255,525			647,368	9,608,157
Apr-20	8,888,124			500,432	8,387,692
May-20	9,017,343			603,729	8,413,614
Jun-20	11,464,102			491,576	10,972,526
Jul-20	13,984,655			649,272	13,335,383
Aug-20	13,547,109			1,027,348	12,519,761
Sep-20	13,390,720			1,083,587	12,307,133
Oct-20	9,186,084			536,044	8,650,040
Nov-20	8,985,465			532,292	8,453,173
Dec-20	12,875,238			668,111	12,207,127
Jan-21	\$ 14,742,627			\$ 893,375	\$ 13,849,252
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 10,735,346
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 25,901,443
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					41.45%

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-20	\$ 16,003,003	\$ 4,714,129	\$ (309,498)	\$ 1,246,362	\$ 14,756,641	\$ 10,352,010
Mar-20	15,995,196	4,652,202	27,058	1,052,546	14,942,650	10,263,390
Apr-20	14,522,031	4,102,392	274,534	841,134	13,680,897	9,303,971
May-20	13,648,175	3,839,129	106,367	952,293	12,695,882	8,750,386
Jun-20	16,100,402	4,526,716	90,417	729,861	15,370,541	10,753,408
Jul-20	17,529,327	5,284,701	(514,400)	876,204	16,653,123	11,882,822
Aug-20	17,412,064	5,203,196	(1,021,086)	1,445,018	15,967,046	11,784,936
Sep-20	18,706,266	5,190,888	348,039	1,524,171	17,182,095	11,643,168
Oct-20	15,704,756	4,528,380	67,487	934,254	14,770,502	10,174,635
Nov-20	15,091,693	4,462,425	(416,161)	944,563	14,147,130	10,100,866
Dec-20	16,986,250	4,909,495	690,267	856,864	16,129,386	10,529,624
Jan-21	\$ 16,699,986	\$ 4,868,625	\$ 305,629	\$ 1,002,710	\$ 15,697,276	\$ 10,523,022
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 15,166,097	\$ 10,505,187
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 25,901,443	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					58.55%	

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 2021

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	901,174
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	10,993,693
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		8.20%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,242,436
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	10,515,235
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		11.82%

Effective Date for Billing: April 1, 2021

Submitted by: /s/ Theodore H. Czupik Jr.

Title: Rates & Regulatory Strategy Manager

Date Submitted: March 22, 2021

ES FORM 1.10

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

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of February 2021

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	\$ 60,738,685
2	RB ÷ 12 months	(1) ÷ 12	\$ 5,061,557
3	Pretax Rate of Return (ROR)	ES Form 1.20	7.905%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 400,116
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 2,035,004
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 2,435,120
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	98.07%
9	Jurisdictional E(m)	(7) x (8)	\$ 2,388,122
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ (244,512)
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 2,143,610
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 46,998

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	42.04%	57.96%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 901,174	\$ 1,242,436
16	<u>R(m)</u> 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	\$ 10,993,693	\$ 10,515,235
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	8.20%	11.82%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 26,149,047	98.07%
19	Sales for Resale	Company Records	\$ 515,280	1.93%
20	Total Revenue		\$ 26,664,327	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	5.835%	1.710%	0.100%		0.100%
2	Long-term Debt	45.931%	4.028%	1.850%		1.850%
3	Common Equity	48.234%	9.250%	4.462%	1.3346139	5.955%
4	Total	100.000%		6.412%		7.905%

Note: Capital structure, cost of debt and tax rate gross-up factor as approved in Case No. 2019-00271. 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 2021

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant) Excluding AFUDC	ES Form 2.10	\$ 67,432,275
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	-
3	Subtotal		\$ 67,432,275
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 19,655
6	Subtotal		\$ 19,655
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 2,676,094
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	4,037,151
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 6,713,245
12	Environmental Compliance Rate Base		\$ 60,738,685
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 138,791
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 72,434
16	Monthly Amortization Expense	ES Form 2.20	\$ 289,296
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 60
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 1,534,423
19	Total Environmental Compliance Operating Expense		\$ 2,035,004
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x 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		\$ 2,957,328
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		3,201,840
27	(Over) / Under Recovery		\$ (244,512)

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 2021

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project No.	Description	Gross Plant in-Service Excl. AFUDC as of February-21	Accumulated Depreciation as of February-21	Net Plant in-Service as of February-21	CWIP Excluding AFUDC as of February-21	Accumulated Deferred ITC as of February-21	Accumulated Deferred Tax Balance as of February-21	Monthly Depreciation Expense	Monthly Property Tax Expense
				(2)-(3)					
1	EB020290 Lined Retention Basin West	\$ 10,324,588	\$ 569,323	\$ 9,755,265	\$ -	\$ -	\$ 1,192,864	\$ 21,251	\$ 10,912
2	EB020745 Lined Retention Basin East	\$ 10,280,726	\$ 292,691	\$ 9,988,035	\$ -	\$ -	\$ 210,464	\$ 21,161	\$ 11,172
3	EB020298 East Bend SW/PW Reroute	\$ 29,882,379	\$ 1,397,064	\$ 28,485,315	\$ -	\$ -	\$ 2,590,790	\$ 61,500	\$ 31,863
4	EB021281 East Bend Landfill Cell 2	\$ 16,944,582	\$ 417,016	\$ 16,527,566	\$ -	\$ -	\$ 43,033	\$ 34,879	\$ 18,487
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 67,432,275	\$ 2,676,094	\$ 64,756,181	\$ -	\$ -	\$ 4,037,151	\$ 138,791	\$ 72,434

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of February 2021

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	\$ 1,588,547	\$ (150,851)	\$ 1,997,156	\$ (353,337)
31	May-19	Actual \$ -	\$ -	\$ 104,878	\$ (202,486)	\$ 15,574,775	\$ 1,641,055	\$ (408,609)	\$ 3,229,602	\$ (611,095)
32	Jun-19	Actual \$ -	\$ -	\$ 104,216	\$ (202,486)	\$ 15,476,505	\$ 1,423,233	\$ (1,588,547)	\$ 3,064,288	\$ (1,791,033)
33	Jul-19	Actual \$ -	\$ -	\$ 103,550	\$ (202,486)	\$ 15,377,569	\$ 1,368,585	\$ (1,641,055)	\$ 2,791,818	\$ (1,843,541)
34	Aug-19	Actual \$ -	\$ -	\$ 102,880	\$ (202,486)	\$ 15,277,963	\$ 487,759	\$ (1,423,233)	\$ 1,856,344	\$ (1,625,719)
35	Sep-19	Actual \$ -	\$ -	\$ 102,204	\$ (202,486)	\$ 15,177,681	\$ 47,477	\$ (1,368,585)	\$ 535,236	\$ (1,571,071)
36	Oct-19	Actual \$ -	\$ -	\$ 101,524	\$ (202,486)	\$ 15,076,719	\$ (18,595)	\$ (487,759)	\$ 28,882	\$ (690,245)
37	Nov-19	Actual \$ -	\$ -	\$ 100,840	\$ (202,486)	\$ 14,975,073	\$ 330,375	\$ (47,477)	\$ 311,780	\$ (249,963)
38	Dec-19	Actual \$ -	\$ -	\$ 100,151	\$ (202,486)	\$ 14,872,738	\$ 121,640	\$ 18,595	\$ 452,015	\$ (183,891)
39	Jan-20	Actual \$ -	\$ -	\$ 99,457	\$ (202,486)	\$ 14,769,709	\$ 77,416	\$ (330,375)	\$ 199,056	\$ (532,861)
40	Feb-20	Actual \$ -	\$ -	\$ 98,759	\$ (202,486)	\$ 14,665,982	\$ 25,184	\$ (121,640)	\$ 102,600	\$ (324,126)
41	Mar-20	Actual \$ -	\$ -	\$ 98,055	\$ (202,486)	\$ 14,561,551	\$ 27,631	\$ (77,416)	\$ 52,815	\$ (279,902)
42	Apr-20	Actual \$ -	\$ -	\$ 97,347	\$ (202,486)	\$ 14,456,412	\$ 50,807	\$ (25,184)	\$ 78,438	\$ (227,670)
43	May-20	Actual \$ -	\$ -	\$ 96,635	\$ (202,486)	\$ 14,350,561	\$ 82,538	\$ (27,631)	\$ 133,345	\$ (230,117)
44	Jun-20	Actual \$ -	\$ -	\$ 95,917	\$ (202,486)	\$ 14,243,992	\$ 133,817	\$ (50,807)	\$ 216,355	\$ (253,293)
45	Jul-20	Actual \$ -	\$ -	\$ 95,194	\$ (202,486)	\$ 14,136,700	\$ 127,493	\$ (82,538)	\$ 261,310	\$ (285,024)
46	Aug-20	Actual \$ -	\$ -	\$ 94,467	\$ (202,486)	\$ 14,028,681	\$ 64,152	\$ (133,817)	\$ 191,645	\$ (336,303)
47	Sep-20	Actual \$ -	\$ -	\$ 93,735	\$ (202,486)	\$ 13,919,930	\$ 127,860	\$ (127,493)	\$ 192,012	\$ (329,979)
48	Oct-20	Actual \$ -	\$ -	\$ 92,997	\$ (202,486)	\$ 13,810,441	\$ 226,553	\$ (64,152)	\$ 354,413	\$ (266,638)
49	Nov-20	Actual \$ -	\$ -	\$ 92,255	\$ (202,486)	\$ 13,700,210	\$ 423,320	\$ (127,860)	\$ 649,873	\$ (330,346)
50	Dec-20	Actual \$ -	\$ -	\$ 91,508	\$ (202,486)	\$ 13,589,232	\$ 295,353	\$ (226,553)	\$ 718,673	\$ (429,039)

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of February 2021

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	80,328	(423,320)	375,681	(625,806)
52	Feb-21	Actual	-	89,998	(202,486)	13,365,014	86,810	(295,353)	167,138	(497,839)
53	Mar-21	Actual	-	89,235	(202,486)	13,251,763	-	(80,328)	86,810	(282,814)
54	Apr-21	Actual	-	88,468	(202,486)	13,137,745	-	(86,810)	-	(289,296)
55	May-21	Actual	-	87,695	(202,486)	13,022,954	-	-	-	(202,486)
56	Jun-21	Actual	-	86,916	(202,486)	12,907,364	-	-	-	(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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of February 2021

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)		\$ 11,345,815	\$ (11,345,815)		(35,644,135)

Monthly Amortization Amount

(289,296)

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending February 2021

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	181,590	-	225	-	181,365
Dollars	\$ 16,552.37	\$ -	\$ 20.25	\$ -	\$ 16,532.12
\$/Allowance	\$ 0.091152	\$ -	\$ 0.090000	\$ -	\$ 0.091154
NO_x Allowances - Annual					
Quantity	12,416	-	182	-	12,234
Dollars	\$ 2,786.52	\$ -	\$ 40.04	\$ -	\$ 2,746.48
\$/Allowance	\$ 0.224430	\$ -	\$ 0.220000	\$ -	\$ 0.224496
NO_x Allowances - Seasonal					
Quantity	1,726	-	-	-	1,726
Dollars	\$ 376.21	\$ -	\$ -	\$ -	\$ 376.21
\$/Allowance	\$ 0.217964	\$ -	\$ -	\$ -	\$ 0.217964
Total Emission Allowances					
Quantity	195,732	-	407	-	195,325
Dollars	\$ 19,715.10	\$ -	\$ 60.29	\$ -	\$ 19,654.81

(a) Note: The SO₂ 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 February 2021

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
1	Ammonia	502020	\$ 58,395	\$ 58,395
2	Lime	502040	1,398,426	1,398,426
3	Hydrated Lime	502040	68,526	68,526
4	Magnesium Hydroxide ^(NOTE 1)	502040	9,076	9,076
5	Total		\$ 1,534,423	\$ 1,534,423

Note 1: East Bend Station's Flue Gas Desulfurization is a Magnesium Oxide based technology. It is the only one of its kind within Duke Energy's current portfolio. The Magnesium Oxide based technology requires a particular chemical construct of lime to function properly, and as such, the scrubber utilizes a "quicklime" material versus the nominal limestone which is considered a Calcium Carbonate based technology. In March of 2020 the vendor's mining facility supplying the quicklime material to East Bend discontinued operations. This facility's quicklime product contained the proper constituents including the Magnesium required for East Bend's optimal scrubber performance. Upon learning of this facility's closure, Duke Energy Kentucky began exploring different solutions to obtain scrubber material with the correct chemical composition, including different mine sources and adding chemicals to produce the correct product. The vendor made the commitment to continue meeting contractual obligations by supplying East Bend with a blended product (Dolomitic Lime and Quicklime) from an alternate facility. Unfortunately, contractually meeting the specifications of the blended commodity, the reactivity of the substitute dolomitic lime is insufficient and as a result, East Bend found itself not able to meet its scrubber limit. In order for East Bend Station to meet its SO2 scrubbing limit, the Company must add an additional chemical reagent, Magnesium Hydroxide, to the substitute blended lime to produce the correct chemical reaction and achieve East Bend's SO2 limit.

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 2021

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge (2) - (5)
Mar-20	\$ 10,255,525			\$ 647,368	\$ 9,608,157
Apr-20	8,888,124			500,432	8,387,692
May-20	9,017,343			603,729	8,413,614
Jun-20	11,464,102			491,576	10,972,526
Jul-20	13,984,655			649,272	13,335,383
Aug-20	13,547,109			1,027,348	12,519,761
Sep-20	13,390,720			1,083,587	12,307,133
Oct-20	9,186,084			536,044	8,650,040
Nov-20	8,985,465			532,292	8,453,173
Dec-20	12,875,238			668,111	12,207,127
Jan-21	14,742,627			893,375	13,849,252
Feb-21	\$ 14,728,045			\$ 1,507,582	\$ 13,220,463
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 10,993,693
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 26,149,047
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					42.04%

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)
Mar-20	\$ 15,995,196	\$ 4,652,202	\$ 27,058	\$ 1,052,546	\$ 14,942,650	\$ 10,263,390
Apr-20	14,522,031	4,102,392	274,534	841,134	13,680,897	9,303,971
May-20	13,648,175	3,839,129	106,367	952,293	12,695,882	8,750,386
Jun-20	16,100,402	4,526,716	90,417	729,861	15,370,541	10,753,408
Jul-20	17,529,327	5,284,701	(514,400)	876,204	16,653,123	11,882,822
Aug-20	17,412,064	5,203,196	(1,021,086)	1,445,018	15,967,046	11,784,936
Sep-20	18,706,266	5,190,888	348,039	1,524,171	17,182,095	11,643,168
Oct-20	15,704,756	4,528,380	67,487	934,254	14,770,502	10,174,635
Nov-20	15,091,693	4,462,425	(416,161)	944,563	14,147,130	10,100,866
Dec-20	16,986,250	4,909,495	690,267	856,864	16,129,386	10,529,624
Jan-21	16,699,986	4,868,625	305,629	1,002,710	15,697,276	10,523,022
Feb-21	\$ 16,321,973	\$ 4,355,270	\$ (200,141)	\$ 1,694,258	\$ 14,627,715	\$ 10,472,586
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 15,155,354	\$ 10,515,235
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 26,149,047	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					57.96%	

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 2021

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,007,843
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	11,108,072
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		9.07%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,370,829
Jurisdictional R(m)	ES Form 1.10, Line 16		\$	10,469,933
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		13.09%

Effective Date for Billing: May 3, 2021

Submitted by: /s/ Theodore H. Czupik Jr.

Title: Rates & Regulatory Strategy Manager

Date Submitted: April 23, 2021

ES FORM 1.10

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

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of March 2021

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	\$ 60,568,351
2	RB ÷ 12 months	(1) ÷ 12	\$ 5,047,363
3	Pretax Rate of Return (ROR)	ES Form 1.20	7.905%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 398,994
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 2,007,830
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 2,406,824
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	97.89%
9	Jurisdictional E(m)	(7) x (8)	\$ 2,356,040
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ 22,632
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 2,378,672
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 50,784

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	42.37%	57.63%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 1,007,843	\$ 1,370,829
16	R(m) Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	ES Form 3.00 ES Form 3.00	\$ 11,108,072	\$ 10,469,933
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	9.07%	13.09%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 26,215,198	97.89%
19	Sales for Resale	Company Records	\$ 566,422	2.11%
20	Total Revenue		\$ 26,781,620	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	5.835%	1.710%	0.100%		0.100%
2	Long-term Debt	45.931%	4.028%	1.850%		1.850%
3	Common Equity	48.234%	9.250%	4.462%	1.3346139	5.955%
4	Total	100.000%		6.412%		7.905%

Note: Capital structure, cost of debt and tax rate gross-up factor as approved in Case No. 2019-00271. 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 2021

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant) Excluding AFUDC	ES Form 2.10	\$ 67,432,275
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	-
3	Subtotal		\$ 67,432,275
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 19,596
6	Subtotal		\$ 19,596
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 2,814,885
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	4,068,635
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 6,883,520
12	Environmental Compliance Rate Base		\$ 60,568,351
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 138,791
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 72,279
16	Monthly Amortization Expense	ES Form 2.20	\$ 273,821
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 59
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 1,522,880
19	Total Environmental Compliance Operating Expense		\$ 2,007,830
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x 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		\$ 1,913,435
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		1,890,803
27	(Over) / Under Recovery		\$ 22,632

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 2021

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project No.	Description	Gross Plant in-Service Excl. AFUDC as of March-21	Accumulated Depreciation as of March-21	Net Plant in-Service as of March-21	CWIP Excluding AFUDC as of March-21	Accumulated Deferred ITC as of March-21	Accumulated Deferred Tax Balance as of March-21	Monthly Depreciation Expense	Monthly Property Tax Expense
				(2)-(3)					
1	EB020290 Lined Retention Basin West	\$ 10,324,588	\$ 590,574	\$ 9,734,014	\$ -	\$ -	\$ 1,195,407	\$ 21,251	\$ 10,888
2	EB020745 Lined Retention Basin East	\$ 10,280,726	\$ 313,852	\$ 9,966,874	\$ -	\$ -	\$ 219,613	\$ 21,161	\$ 11,149
3	EB020298 East Bend SW/PW Reroute	\$ 29,882,379	\$ 1,458,564	\$ 28,423,815	\$ -	\$ -	\$ 2,603,999	\$ 61,500	\$ 31,794
4	EB021281 East Bend Landfill Cell 2	\$ 16,944,582	\$ 451,895	\$ 16,492,687	\$ -	\$ -	\$ 49,616	\$ 34,879	\$ 18,448
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 67,432,275	\$ 2,814,885	\$ 64,617,390	\$ -	\$ -	\$ 4,068,635	\$ 138,791	\$ 72,279

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of March 2021

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	\$ 1,588,547	\$ (150,851)	\$ 1,997,156	\$ (353,337)
31	May-19	Actual \$ -	\$ -	\$ 104,878	\$ (202,486)	\$ 15,574,775	\$ 1,641,055	\$ (408,609)	\$ 3,229,602	\$ (611,095)
32	Jun-19	Actual \$ -	\$ -	\$ 104,216	\$ (202,486)	\$ 15,476,505	\$ 1,423,233	\$ (1,588,547)	\$ 3,064,288	\$ (1,791,033)
33	Jul-19	Actual \$ -	\$ -	\$ 103,550	\$ (202,486)	\$ 15,377,569	\$ 1,368,585	\$ (1,641,055)	\$ 2,791,818	\$ (1,843,541)
34	Aug-19	Actual \$ -	\$ -	\$ 102,880	\$ (202,486)	\$ 15,277,963	\$ 487,759	\$ (1,423,233)	\$ 1,856,344	\$ (1,625,719)
35	Sep-19	Actual \$ -	\$ -	\$ 102,204	\$ (202,486)	\$ 15,177,681	\$ 47,477	\$ (1,368,585)	\$ 535,236	\$ (1,571,071)
36	Oct-19	Actual \$ -	\$ -	\$ 101,524	\$ (202,486)	\$ 15,076,719	\$ (18,595)	\$ (487,759)	\$ 28,882	\$ (690,245)
37	Nov-19	Actual \$ -	\$ -	\$ 100,840	\$ (202,486)	\$ 14,975,073	\$ 330,375	\$ (47,477)	\$ 311,780	\$ (249,963)
38	Dec-19	Actual \$ -	\$ -	\$ 100,151	\$ (202,486)	\$ 14,872,738	\$ 121,640	\$ 18,595	\$ 452,015	\$ (183,891)
39	Jan-20	Actual \$ -	\$ -	\$ 99,457	\$ (202,486)	\$ 14,769,709	\$ 77,416	\$ (330,375)	\$ 199,056	\$ (532,861)
40	Feb-20	Actual \$ -	\$ -	\$ 98,759	\$ (202,486)	\$ 14,665,982	\$ 25,184	\$ (121,640)	\$ 102,600	\$ (324,126)
41	Mar-20	Actual \$ -	\$ -	\$ 98,055	\$ (202,486)	\$ 14,561,551	\$ 27,631	\$ (77,416)	\$ 52,815	\$ (279,902)
42	Apr-20	Actual \$ -	\$ -	\$ 97,347	\$ (202,486)	\$ 14,456,412	\$ 50,807	\$ (25,184)	\$ 78,438	\$ (227,670)
43	May-20	Actual \$ -	\$ -	\$ 96,635	\$ (202,486)	\$ 14,350,561	\$ 82,538	\$ (27,631)	\$ 133,345	\$ (230,117)
44	Jun-20	Actual \$ -	\$ -	\$ 95,917	\$ (202,486)	\$ 14,243,992	\$ 133,817	\$ (50,807)	\$ 216,355	\$ (253,293)
45	Jul-20	Actual \$ -	\$ -	\$ 95,194	\$ (202,486)	\$ 14,136,700	\$ 127,493	\$ (82,538)	\$ 261,310	\$ (285,024)
46	Aug-20	Actual \$ -	\$ -	\$ 94,467	\$ (202,486)	\$ 14,028,681	\$ 64,152	\$ (133,817)	\$ 191,645	\$ (336,303)
47	Sep-20	Actual \$ -	\$ -	\$ 93,735	\$ (202,486)	\$ 13,919,930	\$ 127,860	\$ (127,493)	\$ 192,012	\$ (329,979)
48	Oct-20	Actual \$ -	\$ -	\$ 92,997	\$ (202,486)	\$ 13,810,441	\$ 226,553	\$ (64,152)	\$ 354,413	\$ (266,638)
49	Nov-20	Actual \$ -	\$ -	\$ 92,255	\$ (202,486)	\$ 13,700,210	\$ 423,320	\$ (127,860)	\$ 649,873	\$ (330,346)
50	Dec-20	Actual \$ -	\$ -	\$ 91,508	\$ (202,486)	\$ 13,589,232	\$ 295,353	\$ (226,553)	\$ 718,673	\$ (429,039)

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of March 2021

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	80,328	(423,320)	375,681	(625,806)
52	Feb-21	Actual	-	89,998	(202,486)	13,365,014	86,810	(295,353)	167,138	(497,839)
53	Mar-21	Actual	-	89,235	(202,486)	13,251,763	71,335	(80,328)	158,145	(282,814)
54	Apr-21	Actual	-	88,468	(202,486)	13,137,745	-	(86,810)	71,335	(289,296)
55	May-21	Actual	-	87,695	(202,486)	13,022,954	-	(71,335)	-	(273,821)
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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of March 2021

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)		\$ 11,417,150	\$ (11,417,150)		(35,715,470)

Monthly Amortization Amount

(273,821)

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending March 2021

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	181,365	-	199	-	181,166
Dollars	\$ 16,532.12	\$ -	\$ 17.91	\$ -	\$ 16,514.21
\$/Allowance	\$ 0.091154	\$ -	\$ 0.090000	\$ -	\$ 0.091155
NO_x Allowances - Annual					
Quantity	12,234	-	185	-	12,049
Dollars	\$ 2,746.48	\$ -	\$ 40.70	\$ -	\$ 2,705.78
\$/Allowance	\$ 0.224496	\$ -	\$ 0.220000	\$ -	\$ 0.224565
NO_x Allowances - Seasonal					
Quantity	1,726	-	-	-	1,726
Dollars	\$ 376.21	\$ -	\$ -	\$ -	\$ 376.21
\$/Allowance	\$ 0.217964	\$ -	\$ -	\$ -	\$ 0.217964
Total Emission Allowances					
Quantity	195,325	-	384	-	194,941
Dollars	\$ 19,654.81	\$ -	\$ 58.61	\$ -	\$ 19,596.20

(a) Note: The SO₂ 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 March 2021

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
1	Ammonia	502020	\$ 73,871	\$ 73,871
2	Lime	502040	1,344,773	1,344,773
3	Hydrated Lime	502040	104,236	104,236
4	Magnesium Hydroxide ^(NOTE 1)	502040	-	-
5	Total		\$ 1,522,880	\$ 1,522,880

Note 1: East Bend Station's Flue Gas Desulfurization is a Magnesium Oxide based technology. It is the only one of its kind within Duke Energy's current portfolio. The Magnesium Oxide based technology requires a particular chemical construct of lime to function properly, and as such, the scrubber utilizes a "quicklime" material versus the nominal limestone which is considered a Calcium Carbonate based technology. In March of 2020 the vendor's mining facility supplying the quicklime material to East Bend discontinued operations. This facility's quicklime product contained the proper constituents including the Magnesium required for East Bend's optimal scrubber performance. Upon learning of this facility's closure, Duke Energy Kentucky began exploring different solutions to obtain scrubber material with the correct chemical composition, including different mine sources and adding chemicals to produce the correct product. The vendor made the commitment to continue meeting contractual obligations by supplying East Bend with a blended product (Dolomitic Lime and Quicklime) from an alternate facility. Unfortunately, contractually meeting the specifications of the blended commodity, the reactivity of the substitute dolomitic lime is insufficient and as a result, East Bend found itself not able to meet its scrubber limit. In order for East Bend Station to meet its SO2 scrubbing limit, the Company must add an additional chemical reagent, Magnesium Hydroxide, to the substitute blended lime to produce the correct chemical reaction and achieve East Bend's SO2 limit.

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 2021

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge (2) - (5)
Apr-20	\$ 8,888,124			\$ 500,432	\$ 8,387,692
May-20	9,017,343			603,729	8,413,614
Jun-20	11,464,102			491,576	10,972,526
Jul-20	13,984,655			649,272	13,335,383
Aug-20	13,547,109			1,027,348	12,519,761
Sep-20	13,390,720			1,083,587	12,307,133
Oct-20	9,186,084			536,044	8,650,040
Nov-20	8,985,465			532,292	8,453,173
Dec-20	12,875,238			668,111	12,207,127
Jan-21	14,742,627			893,375	13,849,252
Feb-21	14,728,045			1,507,582	13,220,463
Mar-21	\$ 11,796,806			\$ 816,104	\$ 10,980,702
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 11,108,072
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 26,215,198
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					42.37%

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-20	\$ 14,522,031	\$ 4,102,392	\$ 274,534	\$ 841,134	\$ 13,680,897	\$ 9,303,971
May-20	13,648,175	3,839,129	106,367	952,293	12,695,882	8,750,386
Jun-20	16,100,402	4,526,716	90,417	729,861	15,370,541	10,753,408
Jul-20	17,529,327	5,284,701	(514,400)	876,204	16,653,123	11,882,822
Aug-20	17,412,064	5,203,196	(1,021,086)	1,445,018	15,967,046	11,784,936
Sep-20	18,706,266	5,190,888	348,039	1,524,171	17,182,095	11,643,168
Oct-20	15,704,756	4,528,380	67,487	934,254	14,770,502	10,174,635
Nov-20	15,091,693	4,462,425	(416,161)	944,563	14,147,130	10,100,866
Dec-20	16,986,250	4,909,495	690,267	856,864	16,129,386	10,529,624
Jan-21	16,699,986	4,868,625	305,629	1,002,710	15,697,276	10,523,022
Feb-21	16,321,973	4,355,270	(200,141)	1,694,258	14,627,715	10,472,586
Mar-21	\$ 15,438,614	\$ 4,686,246	\$ (42,102)	\$ 1,074,699	\$ 14,363,915	\$ 9,719,771
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 15,107,126	\$ 10,469,933
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 26,215,198	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					57.63%	

**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 April 2021

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	919,121
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	11,152,574
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		8.24%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,253,743
Jurisdictional R(m)	ES Form 1.10, Line 16		\$	10,540,183
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		11.89%

Effective Date for Billing: June 2, 2021

Submitted by: /s/ Theodore H. Czupik Jr.

Title: Rates & Regulatory Strategy Manager

Date Submitted: May 21, 2021

ES FORM 1.10

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of April 2021

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	\$ 60,398,019
2	RB ÷ 12 months	(1) ÷ 12	\$ 5,033,168
3	Pretax Rate of Return (ROR)	ES Form 1.20	7.905%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 397,872
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 1,635,699
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 2,033,571
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	97.49%
9	Jurisdictional E(m)	(7) x (8)	\$ 1,982,528
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ 190,336
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 2,172,864
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 51,043

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	42.30%	57.70%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 919,121	\$ 1,253,743
16	<u>R(m)</u> 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	\$ 11,152,574	\$ 10,540,183
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	8.24%	11.89%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 26,364,925	97.49%
19	Sales for Resale	Company Records	\$ 677,729	2.51%
20	Total Revenue		\$ 27,042,654	100.00%

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

**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	5.835%	1.710%	0.100%		0.100%
2	Long-term Debt	45.931%	4.028%	1.850%		1.850%
3	Common Equity	48.234%	9.250%	4.462%	1.3346139	5.955%
4	Total	100.000%		6.412%		7.905%

Note: Capital structure, cost of debt and tax rate gross-up factor as approved in Case No. 2019-00271. 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 April 2021

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant) Excluding AFUDC	ES Form 2.10	\$ 67,432,275
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	-
3	Subtotal		\$ 67,432,275
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 19,541
6	Subtotal		\$ 19,541
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 2,953,676
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	4,100,121
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 7,053,797
12	Environmental Compliance Rate Base		\$ 60,398,019
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 138,791
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 72,125
16	Monthly Amortization Expense	ES Form 2.20	\$ 292,989
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 55
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 1,131,739
19	Total Environmental Compliance Operating Expense		\$ 1,635,699
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x 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		\$ 2,143,610
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		1,953,274
27	(Over) / Under Recovery		\$ 190,336

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 April 2021

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project No.	Description	Gross Plant in-Service Excl. AFUDC as of April-21	Accumulated Depreciation as of April-21	Net Plant in-Service as of April-21 (2)-(3)	CWIP Excluding AFUDC as of April-21	Accumulated Deferred ITC as of April-21	Accumulated Deferred Tax Balance as of April-21	Monthly Depreciation Expense	Monthly Property Tax Expense
1	EB020290 Lined Retention Basin West	\$ 10,324,588	\$ 611,826	\$ 9,712,762	\$ -	\$ -	\$ 1,197,950	\$ 21,251	\$ 10,865
2	EB020745 Lined Retention Basin East	\$ 10,280,726	\$ 335,012	\$ 9,945,714	\$ -	\$ -	\$ 228,763	\$ 21,161	\$ 11,125
3	EB020298 East Bend SW/PW Reroute	\$ 29,882,379	\$ 1,520,064	\$ 28,362,315	\$ -	\$ -	\$ 2,617,208	\$ 61,500	\$ 31,726
4	EB021281 East Bend Landfill Cell 2	\$ 16,944,582	\$ 486,774	\$ 16,457,808	\$ -	\$ -	\$ 56,200	\$ 34,879	\$ 18,409
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 67,432,275	\$ 2,953,676	\$ 64,478,599	\$ -	\$ -	\$ 4,100,121	\$ 138,791	\$ 72,125

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of April 2021

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	\$ 1,588,547	\$ (150,851)	\$ 1,997,156	\$ (353,337)
31	May-19	Actual \$ -	\$ -	\$ 104,878	\$ (202,486)	\$ 15,574,775	\$ 1,641,055	\$ (408,609)	\$ 3,229,602	\$ (611,095)
32	Jun-19	Actual \$ -	\$ -	\$ 104,216	\$ (202,486)	\$ 15,476,505	\$ 1,423,233	\$ (1,588,547)	\$ 3,064,288	\$ (1,791,033)
33	Jul-19	Actual \$ -	\$ -	\$ 103,550	\$ (202,486)	\$ 15,377,569	\$ 1,368,585	\$ (1,641,055)	\$ 2,791,818	\$ (1,843,541)
34	Aug-19	Actual \$ -	\$ -	\$ 102,880	\$ (202,486)	\$ 15,277,963	\$ 487,759	\$ (1,423,233)	\$ 1,856,344	\$ (1,625,719)
35	Sep-19	Actual \$ -	\$ -	\$ 102,204	\$ (202,486)	\$ 15,177,681	\$ 47,477	\$ (1,368,585)	\$ 535,236	\$ (1,571,071)
36	Oct-19	Actual \$ -	\$ -	\$ 101,524	\$ (202,486)	\$ 15,076,719	\$ (18,595)	\$ (487,759)	\$ 28,882	\$ (690,245)
37	Nov-19	Actual \$ -	\$ -	\$ 100,840	\$ (202,486)	\$ 14,975,073	\$ 330,375	\$ (47,477)	\$ 311,780	\$ (249,963)
38	Dec-19	Actual \$ -	\$ -	\$ 100,151	\$ (202,486)	\$ 14,872,738	\$ 121,640	\$ 18,595	\$ 452,015	\$ (183,891)
39	Jan-20	Actual \$ -	\$ -	\$ 99,457	\$ (202,486)	\$ 14,769,709	\$ 77,416	\$ (330,375)	\$ 199,056	\$ (532,861)
40	Feb-20	Actual \$ -	\$ -	\$ 98,759	\$ (202,486)	\$ 14,665,982	\$ 25,184	\$ (121,640)	\$ 102,600	\$ (324,126)
41	Mar-20	Actual \$ -	\$ -	\$ 98,055	\$ (202,486)	\$ 14,561,551	\$ 27,631	\$ (77,416)	\$ 52,815	\$ (279,902)
42	Apr-20	Actual \$ -	\$ -	\$ 97,347	\$ (202,486)	\$ 14,456,412	\$ 50,807	\$ (25,184)	\$ 78,438	\$ (227,670)
43	May-20	Actual \$ -	\$ -	\$ 96,635	\$ (202,486)	\$ 14,350,561	\$ 82,538	\$ (27,631)	\$ 133,345	\$ (230,117)
44	Jun-20	Actual \$ -	\$ -	\$ 95,917	\$ (202,486)	\$ 14,243,992	\$ 133,817	\$ (50,807)	\$ 216,355	\$ (253,293)
45	Jul-20	Actual \$ -	\$ -	\$ 95,194	\$ (202,486)	\$ 14,136,700	\$ 127,493	\$ (82,538)	\$ 261,310	\$ (285,024)
46	Aug-20	Actual \$ -	\$ -	\$ 94,467	\$ (202,486)	\$ 14,028,681	\$ 64,152	\$ (133,817)	\$ 191,645	\$ (336,303)
47	Sep-20	Actual \$ -	\$ -	\$ 93,735	\$ (202,486)	\$ 13,919,930	\$ 127,860	\$ (127,493)	\$ 192,012	\$ (329,979)
48	Oct-20	Actual \$ -	\$ -	\$ 92,997	\$ (202,486)	\$ 13,810,441	\$ 226,553	\$ (64,152)	\$ 354,413	\$ (266,638)
49	Nov-20	Actual \$ -	\$ -	\$ 92,255	\$ (202,486)	\$ 13,700,210	\$ 423,320	\$ (127,860)	\$ 649,873	\$ (330,346)
50	Dec-20	Actual \$ -	\$ -	\$ 91,508	\$ (202,486)	\$ 13,589,232	\$ 295,353	\$ (226,553)	\$ 718,673	\$ (429,039)

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of April 2021

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	80,328	(423,320)	375,681	(625,806)
52	Feb-21	Actual	-	89,998	(202,486)	13,365,014	86,810	(295,353)	167,138	(497,839)
53	Mar-21	Actual	-	89,235	(202,486)	13,251,763	71,335	(80,328)	158,145	(282,814)
54	Apr-21	Actual	-	88,468	(202,486)	13,137,745	90,503	(86,810)	161,838	(289,296)
55	May-21	Actual	-	87,695	(202,486)	13,022,954	-	(71,335)	90,503	(273,821)
56	Jun-21	Actual	-	86,916	(202,486)	12,907,364	-	(90,503)	-	(292,989)
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

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of April 2021

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)		\$ 11,507,653	\$ (11,507,653)		(35,805,973)

Monthly Amortization Amount

(292,989)

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending April 2021

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	181,161		146	-	181,015
Dollars	\$ 16,514.66		\$ 13.14	\$ -	\$ 16,501.52
\$/Allowance	\$ 0.091160	\$ -	\$ 0.090000	\$ -	\$ 0.091161
NO_x Allowances - Annual					
Quantity	12,045		189	-	11,856
Dollars	\$ 2,704.90		\$ 41.58	\$ -	\$ 2,663.32
\$/Allowance	\$ 0.224566	\$ -	\$ 0.220000	\$ -	\$ 0.224639
NO_x Allowances - Seasonal					
Quantity	1,726			-	1,726
Dollars	\$ 376.21			\$ -	\$ 376.21
\$/Allowance	\$ 0.217964	\$ -	\$ -	\$ -	\$ 0.217964
Total Emission Allowances					
Quantity	194,932		335	-	194,597
Dollars	\$ 19,595.77	\$ -	\$ 54.72	\$ -	\$ 19,541.05

(a) Note: The SO₂ 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 April 2021

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
1	Ammonia	502020	\$ 52,900	\$ 52,900
2	Lime	502040	1,017,734	1,017,734
3	Hydrated Lime	502040	60,560	60,560
4	Magnesium Hydroxide ^(NOTE 1)	502040	545	545
5	Total		\$ 1,131,739	\$ 1,131,739

Note 1: East Bend Station's Flue Gas Desulfurization is a Magnesium Oxide based technology. It is the only one of its kind within Duke Energy's current portfolio. The Magnesium Oxide based technology requires a particular chemical construct of lime to function properly, and as such, the scrubber utilizes a "quicklime" material versus the nominal limestone which is considered a Calcium Carbonate based technology. In March of 2020 the vendor's mining facility supplying the quicklime material to East Bend discontinued operations. This facility's quicklime product contained the proper constituents including the Magnesium required for East Bend's optimal scrubber performance. Upon learning of this facility's closure, Duke Energy Kentucky began exploring different solutions to obtain scrubber material with the correct chemical composition, including different mine sources and adding chemicals to produce the correct product. The vendor made the commitment to continue meeting contractual obligations by supplying East Bend with a blended product (Dolomitic Lime and Quicklime) from an alternate facility. Unfortunately, contractually meeting the specifications of the blended commodity, the reactivity of the substitute dolomitic lime is insufficient and as a result, East Bend found itself not able to meet its scrubber limit. In order for East Bend Station to meet its SO2 scrubbing limit, the Company must add an additional chemical reagent, Magnesium Hydroxide, to the substitute blended lime to produce the correct chemical reaction and achieve East Bend's SO2 limit.

ES FORM 3.00

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

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

For the Expense Month of April 2021

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge
					(2) - (5)
May-20	\$ 9,017,343			\$ 603,729	\$ 8,413,614
Jun-20	11,464,102			491,576	10,972,526
Jul-20	13,984,655			649,272	13,335,383
Aug-20	13,547,109			1,027,348	12,519,761
Sep-20	13,390,720			1,083,587	12,307,133
Oct-20	9,186,084			536,044	8,650,040
Nov-20	8,985,465			532,292	8,453,173
Dec-20	12,875,238			668,111	12,207,127
Jan-21	14,742,627			893,375	13,849,252
Feb-21	14,728,045			1,507,582	13,220,463
Mar-21	11,796,806			816,104	10,980,702
Apr-21	\$ 9,657,401			\$ 735,692	\$ 8,921,709
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 11,152,574
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 26,364,925
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					42.30%

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)
May-20	\$ 13,648,175	\$ 3,839,129	\$ 106,367	\$ 952,293	\$ 12,695,882	\$ 8,750,386
Jun-20	16,100,402	4,526,716	90,417	729,861	15,370,541	10,753,408
Jul-20	17,529,327	5,284,701	(514,400)	876,204	16,653,123	11,882,822
Aug-20	17,412,064	5,203,196	(1,021,086)	1,445,018	15,967,046	11,784,936
Sep-20	18,706,266	5,190,888	348,039	1,524,171	17,182,095	11,643,168
Oct-20	15,704,756	4,528,380	67,487	934,254	14,770,502	10,174,635
Nov-20	15,091,693	4,462,425	(416,161)	944,563	14,147,130	10,100,866
Dec-20	16,986,250	4,909,495	690,267	856,864	16,129,386	10,529,624
Jan-21	16,699,986	4,868,625	305,629	1,002,710	15,697,276	10,523,022
Feb-21	16,321,973	4,355,270	(200,141)	1,694,258	14,627,715	10,472,586
Mar-21	15,438,614	4,686,246	(42,102)	1,074,699	14,363,915	9,719,771
Apr-21	\$ 16,161,183	\$ 4,584,228	\$ 212,405	\$ 1,217,582	\$ 14,943,601	\$ 10,146,968
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 15,212,351	\$ 10,540,183
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 26,364,925	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					57.70%	

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 May 2021

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,008,658
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	11,202,031
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		9.00%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,384,363
Jurisdictional R(m)	ES Form 1.10, Line 16		\$	10,626,015
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		13.03%

Effective Date for Billing: July 1, 2021

Submitted by: /s/ Theodore H. Czupik Jr.

Title: Rates & Regulatory Strategy Manager

Date Submitted: June 21, 2021

ES FORM 1.10

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

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of May 2021

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	\$ 60,227,663
2	RB ÷ 12 months	(1) ÷ 12	\$ 5,018,972
3	Pretax Rate of Return (ROR)	ES Form 1.20	7.905%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 396,750
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 1,783,691
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 2,180,441
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	97.03%
9	Jurisdictional E(m)	(7) x (8)	\$ 2,115,682
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ 277,339
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 2,393,021
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 64,759

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	42.15%	57.85%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 1,008,658	\$ 1,384,363
16	R(m) Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	ES Form 3.00 ES Form 3.00	\$ 11,202,031	\$ 10,626,015
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	9.00%	13.03%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 26,574,643	97.03%
19	Sales for Resale	Company Records	\$ 813,902	2.97%
20	Total Revenue		\$ 27,388,545	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	5.835%	1.710%	0.100%		0.100%
2	Long-term Debt	45.931%	4.028%	1.850%		1.850%
3	Common Equity	48.234%	9.250%	4.462%	1.3346139	5.955%
4	Total	100.000%		6.412%		7.905%

Note: Capital structure, cost of debt and tax rate gross-up factor as approved in Case No. 2019-00271. 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 May 2021

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant) Excluding AFUDC	ES Form 2.10	\$ 67,432,275
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	-
3	Subtotal		\$ 67,432,275
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 19,459
6	Subtotal		\$ 19,459
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 3,092,466
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	4,131,605
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 7,224,071
12	Environmental Compliance Rate Base		\$ 60,227,663
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 138,791
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 71,969
16	Monthly Amortization Expense	ES Form 2.20	\$ 411,307
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 82
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 1,161,542
19	Total Environmental Compliance Operating Expense		\$ 1,783,691
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x 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		\$ 2,378,672
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		2,101,333
27	(Over) / Under Recovery		\$ 277,339

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 May 2021

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project No.	Description	Gross Plant in-Service Excl. AFUDC as of May-21	Accumulated Depreciation as of May-21	Net Plant in-Service as of May-21 (2)-(3)	CWIP Excluding AFUDC as of May-21	Accumulated Deferred ITC as of May-21	Accumulated Deferred Tax Balance as of May-21	Monthly Depreciation Expense	Monthly Property Tax Expense
1	EB020290 Lined Retention Basin West	\$ 10,324,588	\$ 633,077	\$ 9,691,511	\$ -	\$ -	\$ 1,200,493	\$ 21,251	\$ 10,841
2	EB020745 Lined Retention Basin East	\$ 10,280,726	\$ 356,173	\$ 9,924,553	\$ -	\$ -	\$ 237,912	\$ 21,161	\$ 11,101
3	EB020298 East Bend SW/PW Reroute	\$ 29,882,379	\$ 1,581,564	\$ 28,300,815	\$ -	\$ -	\$ 2,630,417	\$ 61,500	\$ 31,657
4	EB021281 East Bend Landfill Cell 2	\$ 16,944,582	\$ 521,652	\$ 16,422,930	\$ -	\$ -	\$ 62,783	\$ 34,879	\$ 18,370
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 67,432,275	\$ 3,092,466	\$ 64,339,809	\$ -	\$ -	\$ 4,131,605	\$ 138,791	\$ 71,969

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of May 2021

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	\$ 1,588,547	\$ (150,851)	\$ 1,997,156	\$ (353,337)
31	May-19	Actual \$ -	\$ -	\$ 104,878	\$ (202,486)	\$ 15,574,775	\$ 1,641,055	\$ (408,609)	\$ 3,229,602	\$ (611,095)
32	Jun-19	Actual \$ -	\$ -	\$ 104,216	\$ (202,486)	\$ 15,476,505	\$ 1,423,233	\$ (1,588,547)	\$ 3,064,288	\$ (1,791,033)
33	Jul-19	Actual \$ -	\$ -	\$ 103,550	\$ (202,486)	\$ 15,377,569	\$ 1,368,585	\$ (1,641,055)	\$ 2,791,818	\$ (1,843,541)
34	Aug-19	Actual \$ -	\$ -	\$ 102,880	\$ (202,486)	\$ 15,277,963	\$ 487,759	\$ (1,423,233)	\$ 1,856,344	\$ (1,625,719)
35	Sep-19	Actual \$ -	\$ -	\$ 102,204	\$ (202,486)	\$ 15,177,681	\$ 47,477	\$ (1,368,585)	\$ 535,236	\$ (1,571,071)
36	Oct-19	Actual \$ -	\$ -	\$ 101,524	\$ (202,486)	\$ 15,076,719	\$ (18,595)	\$ (487,759)	\$ 28,882	\$ (690,245)
37	Nov-19	Actual \$ -	\$ -	\$ 100,840	\$ (202,486)	\$ 14,975,073	\$ 330,375	\$ (47,477)	\$ 311,780	\$ (249,963)
38	Dec-19	Actual \$ -	\$ -	\$ 100,151	\$ (202,486)	\$ 14,872,738	\$ 121,640	\$ 18,595	\$ 452,015	\$ (183,891)
39	Jan-20	Actual \$ -	\$ -	\$ 99,457	\$ (202,486)	\$ 14,769,709	\$ 77,416	\$ (330,375)	\$ 199,056	\$ (532,861)
40	Feb-20	Actual \$ -	\$ -	\$ 98,759	\$ (202,486)	\$ 14,665,982	\$ 25,184	\$ (121,640)	\$ 102,600	\$ (324,126)
41	Mar-20	Actual \$ -	\$ -	\$ 98,055	\$ (202,486)	\$ 14,561,551	\$ 27,631	\$ (77,416)	\$ 52,815	\$ (279,902)
42	Apr-20	Actual \$ -	\$ -	\$ 97,347	\$ (202,486)	\$ 14,456,412	\$ 50,807	\$ (25,184)	\$ 78,438	\$ (227,670)
43	May-20	Actual \$ -	\$ -	\$ 96,635	\$ (202,486)	\$ 14,350,561	\$ 82,538	\$ (27,631)	\$ 133,345	\$ (230,117)
44	Jun-20	Actual \$ -	\$ -	\$ 95,917	\$ (202,486)	\$ 14,243,992	\$ 133,817	\$ (50,807)	\$ 216,355	\$ (253,293)
45	Jul-20	Actual \$ -	\$ -	\$ 95,194	\$ (202,486)	\$ 14,136,700	\$ 127,493	\$ (82,538)	\$ 261,310	\$ (285,024)
46	Aug-20	Actual \$ -	\$ -	\$ 94,467	\$ (202,486)	\$ 14,028,681	\$ 64,152	\$ (133,817)	\$ 191,645	\$ (336,303)
47	Sep-20	Actual \$ -	\$ -	\$ 93,735	\$ (202,486)	\$ 13,919,930	\$ 127,860	\$ (127,493)	\$ 192,012	\$ (329,979)
48	Oct-20	Actual \$ -	\$ -	\$ 92,997	\$ (202,486)	\$ 13,810,441	\$ 226,553	\$ (64,152)	\$ 354,413	\$ (266,638)
49	Nov-20	Actual \$ -	\$ -	\$ 92,255	\$ (202,486)	\$ 13,700,210	\$ 423,320	\$ (127,860)	\$ 649,873	\$ (330,346)
50	Dec-20	Actual \$ -	\$ -	\$ 91,508	\$ (202,486)	\$ 13,589,232	\$ 295,353	\$ (226,553)	\$ 718,673	\$ (429,039)

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of May 2021

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	80,328	(423,320)	375,681	(625,806)
52	Feb-21	Actual	-	89,998	(202,486)	13,365,014	86,810	(295,353)	167,138	(497,839)
53	Mar-21	Actual	-	89,235	(202,486)	13,251,763	71,335	(80,328)	158,145	(282,814)
54	Apr-21	Actual	-	88,468	(202,486)	13,137,745	90,503	(86,810)	161,838	(289,296)
55	May-21	Actual	-	87,695	(202,486)	13,022,954	208,821	(71,335)	299,324	(273,821)
56	Jun-21	Actual	-	86,916	(202,486)	12,907,384	-	(90,503)	208,821	(292,989)
57	Jul-21	Actual	-	86,133	(202,486)	12,791,031	-	(208,821)	-	(411,307)
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

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of May 2021

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)	\$ 11,716,474	\$ (11,716,474)		(36,014,794)

Monthly Amortization Amount

(411,307)

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending May 2021

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	181,015	-	180	-	180,835
Dollars	\$ 16,501.52	\$ -	\$ 16.20	\$ -	\$ 16,485.32
\$/Allowance	\$ 0.091161	\$ -	\$ 0.090000	\$ -	\$ 0.091162
NO_x Allowances - Annual					
Quantity	11,856	-	151	-	11,705
Dollars	\$ 2,663.32	\$ -	\$ 33.22	\$ -	\$ 2,630.10
\$/Allowance	\$ 0.224639	\$ -	\$ 0.220000	\$ -	\$ 0.224699
NO_x Allowances - Seasonal					
Quantity	1,726	-	147	-	1,579
Dollars	\$ 376.21	\$ -	\$ 32	\$ -	\$ 343.87
\$/Allowance	\$ 0.217964	\$ -	\$ 0.220000	\$ -	\$ 0.217774
Total Emission Allowances					
Quantity	194,597	-	478	-	194,119
Dollars	\$ 19,541.05	\$ -	\$ 81.76	\$ -	\$ 19,459.29

(a) Note: The SO₂ 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 May 2021

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
1	Ammonia	502020	\$ 70,240	\$ 70,240
2	Lime	502040	1,034,894	1,034,894
3	Hydrated Lime	502040	56,408	56,408
4	Magnesium Hydroxide ^(NOTE 1)	502040	-	-
5	Total		\$ 1,161,542	\$ 1,161,542

Note 1: East Bend Station's Flue Gas Desulfurization is a Magnesium Oxide based technology. It is the only one of its kind within Duke Energy's current portfolio. The Magnesium Oxide based technology requires a particular chemical construct of lime to function properly, and as such, the scrubber utilizes a "quicklime" material versus the nominal limestone which is considered a Calcium Carbonate based technology. In March of 2020 the vendor's mining facility supplying the quicklime material to East Bend discontinued operations. This facility's quicklime product contained the proper constituents including the Magnesium required for East Bend's optimal scrubber performance. Upon learning of this facility's closure, Duke Energy Kentucky began exploring different solutions to obtain scrubber material with the correct chemical composition, including different mine sources and adding chemicals to produce the correct product. The vendor made the commitment to continue meeting contractual obligations by supplying East Bend with a blended product (Dolomitic Lime and Quicklime) from an alternate facility. Unfortunately, contractually meeting the specifications of the blended commodity, the reactivity of the substitute dolomitic lime is insufficient and as a result, East Bend found itself not able to meet its scrubber limit. In order for East Bend Station to meet its SO2 scrubbing limit, the Company must add an additional chemical reagent, Magnesium Hydroxide, to the substitute blended lime to produce the correct chemical reaction and achieve East Bend's SO2 limit.

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 May 2021

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge
					(2) - (5)
Jun-20	\$ 11,464,102			\$ 491,576	\$ 10,972,526
Jul-20	13,984,655			649,272	13,335,383
Aug-20	13,547,109			1,027,348	12,519,761
Sep-20	13,390,720			1,083,587	12,307,133
Oct-20	9,186,084			536,044	8,650,040
Nov-20	8,985,465			532,292	8,453,173
Dec-20	12,875,238			668,111	12,207,127
Jan-21	14,742,627			893,375	13,849,252
Feb-21	14,728,045			1,507,582	13,220,463
Mar-21	11,796,806			816,104	10,980,702
Apr-21	9,657,401			735,692	8,921,709
May-21	\$ 9,828,781			\$ 821,674	\$ 9,007,107
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 11,202,031
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 26,574,643
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					42.15%

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)
Jun-20	\$ 16,100,402	\$ 4,526,716	\$ 90,417	\$ 729,861	\$ 15,370,541	\$ 10,753,408
Jul-20	17,529,327	5,284,701	(514,400)	876,204	16,653,123	11,882,822
Aug-20	17,412,064	5,203,196	(1,021,086)	1,445,018	15,967,046	11,784,936
Sep-20	18,706,266	5,190,888	348,039	1,524,171	17,182,095	11,643,168
Oct-20	15,704,756	4,528,380	67,487	934,254	14,770,502	10,174,635
Nov-20	15,091,693	4,462,425	(416,161)	944,563	14,147,130	10,100,866
Dec-20	16,986,250	4,909,495	690,267	856,864	16,129,386	10,529,624
Jan-21	16,699,986	4,868,625	305,629	1,002,710	15,697,276	10,523,022
Feb-21	16,321,973	4,355,270	(200,141)	1,694,258	14,627,715	10,472,586
Mar-21	15,438,614	4,686,246	(42,102)	1,074,699	14,363,915	9,719,771
Apr-21	16,161,183	4,584,228	212,405	1,217,582	14,943,601	10,146,968
May-21	\$ 15,898,669	\$ 4,475,095	\$ 363,547	\$ 1,279,659	\$ 14,619,010	\$ 9,780,368
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 15,372,612	\$ 10,626,015
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 26,574,643	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					57.85%	

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 June 2021

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	992,522
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	11,260,692
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		8.81%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,362,216
Jurisdictional R(m)	ES Form 1.10, Line 16		\$	10,643,126
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		12.80%

Effective Date for Billing: August 2, 2021

Submitted by: /s/ Theodore H. Czupik Jr.

Title: Rates & Regulatory Strategy Manager

Date Submitted: July 23, 2021

ES FORM 1.10

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

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of June 2021

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	\$ 60,057,277
2	RB ÷ 12 months	(1) ÷ 12	\$ 5,004,773
3	Pretax Rate of Return (ROR)	ES Form 1.20	7.905%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 395,627
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 2,135,431
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 2,531,058
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	96.86%
9	Jurisdictional E(m)	(7) x (8)	\$ 2,451,583
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ (96,845)
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 2,354,738
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 79,475

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	42.15%	57.85%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 992,522	\$ 1,362,216
16	R(m) Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	ES Form 3.00 ES Form 3.00	\$ 11,260,692	\$ 10,643,126
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	8.81%	12.80%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 26,716,130	96.86%
19	Sales for Resale	Company Records	\$ 865,389	3.14%
20	Total Revenue		\$ 27,581,519	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	5.835%	1.710%	0.100%		0.100%
2	Long-term Debt	45.931%	4.028%	1.850%		1.850%
3	Common Equity	48.234%	9.250%	4.462%	1.3346139	5.955%
4	Total	100.000%		6.412%		7.905%

Note: Capital structure, cost of debt and tax rate gross-up factor as approved in Case No. 2019-00271. 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 June 2021

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant) Excluding AFUDC	ES Form 2.10	\$ 67,432,275
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	-
3	Subtotal		\$ 67,432,275
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 19,350
6	Subtotal		\$ 19,350
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 3,231,257
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	4,163,091
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 7,394,348
12	Environmental Compliance Rate Base		\$ 60,057,277
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 138,791
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 71,814
16	Monthly Amortization Expense	ES Form 2.20	\$ 447,503
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 110
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 1,477,213
19	Total Environmental Compliance Operating Expense		\$ 2,135,431
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x 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		\$ 2,172,864
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		2,269,709
27	(Over) / Under Recovery		\$ (96,845)

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 June 2021

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project No.	Description	Gross Plant in-Service Excl. AFUDC as of June-21	Accumulated Depreciation as of June-21	Net Plant in-Service as of June-21	CWIP Excluding AFUDC as of June-21	Accumulated Deferred ITC as of June-21	Accumulated Deferred Tax Balance as of June-21	Monthly Depreciation Expense	Monthly Property Tax Expense
				(2)-(3)					
1	EB020290 Lined Retention Basin West	\$ 10,324,588	\$ 654,329	\$ 9,670,259	\$ -	\$ -	\$ 1,203,036	\$ 21,251	\$ 10,817
2	EB020745 Lined Retention Basin East	\$ 10,280,726	\$ 377,333	\$ 9,903,393	\$ -	\$ -	\$ 247,062	\$ 21,161	\$ 11,078
3	EB020298 East Bend SW/PW Reroute	\$ 29,882,379	\$ 1,643,064	\$ 28,239,315	\$ -	\$ -	\$ 2,643,626	\$ 61,500	\$ 31,588
4	EB021281 East Bend Landfill Cell 2	\$ 16,944,582	\$ 556,531	\$ 16,388,051	\$ -	\$ -	\$ 69,367	\$ 34,879	\$ 18,331
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 67,432,275	\$ 3,231,257	\$ 64,201,018	\$ -	\$ -	\$ 4,163,091	\$ 138,791	\$ 71,814

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of June 2021

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	\$ 1,588,547	\$ (150,851)	\$ 1,997,156	\$ (353,337)
31	May-19	Actual \$ -	\$ -	\$ 104,878	\$ (202,486)	\$ 15,574,775	\$ 1,641,055	\$ (408,609)	\$ 3,229,602	\$ (611,095)
32	Jun-19	Actual \$ -	\$ -	\$ 104,216	\$ (202,486)	\$ 15,476,505	\$ 1,423,233	\$ (1,588,547)	\$ 3,064,288	\$ (1,791,033)
33	Jul-19	Actual \$ -	\$ -	\$ 103,550	\$ (202,486)	\$ 15,377,569	\$ 1,368,585	\$ (1,641,055)	\$ 2,791,818	\$ (1,843,541)
34	Aug-19	Actual \$ -	\$ -	\$ 102,880	\$ (202,486)	\$ 15,277,963	\$ 487,759	\$ (1,423,233)	\$ 1,856,344	\$ (1,625,719)
35	Sep-19	Actual \$ -	\$ -	\$ 102,204	\$ (202,486)	\$ 15,177,681	\$ 47,477	\$ (1,368,585)	\$ 535,236	\$ (1,571,071)
36	Oct-19	Actual \$ -	\$ -	\$ 101,524	\$ (202,486)	\$ 15,076,719	\$ (18,595)	\$ (487,759)	\$ 28,882	\$ (690,245)
37	Nov-19	Actual \$ -	\$ -	\$ 100,840	\$ (202,486)	\$ 14,975,073	\$ 330,375	\$ (47,477)	\$ 311,780	\$ (249,963)
38	Dec-19	Actual \$ -	\$ -	\$ 100,151	\$ (202,486)	\$ 14,872,738	\$ 121,640	\$ 18,595	\$ 452,015	\$ (183,891)
39	Jan-20	Actual \$ -	\$ -	\$ 99,457	\$ (202,486)	\$ 14,769,709	\$ 77,416	\$ (330,375)	\$ 199,056	\$ (532,861)
40	Feb-20	Actual \$ -	\$ -	\$ 98,759	\$ (202,486)	\$ 14,665,982	\$ 25,184	\$ (121,640)	\$ 102,600	\$ (324,126)
41	Mar-20	Actual \$ -	\$ -	\$ 98,055	\$ (202,486)	\$ 14,561,551	\$ 27,631	\$ (77,416)	\$ 52,815	\$ (279,902)
42	Apr-20	Actual \$ -	\$ -	\$ 97,347	\$ (202,486)	\$ 14,456,412	\$ 50,807	\$ (25,184)	\$ 78,438	\$ (227,670)
43	May-20	Actual \$ -	\$ -	\$ 96,635	\$ (202,486)	\$ 14,350,561	\$ 82,538	\$ (27,631)	\$ 133,345	\$ (230,117)
44	Jun-20	Actual \$ -	\$ -	\$ 95,917	\$ (202,486)	\$ 14,243,992	\$ 133,817	\$ (50,807)	\$ 216,355	\$ (253,293)
45	Jul-20	Actual \$ -	\$ -	\$ 95,194	\$ (202,486)	\$ 14,136,700	\$ 127,493	\$ (82,538)	\$ 261,310	\$ (285,024)
46	Aug-20	Actual \$ -	\$ -	\$ 94,467	\$ (202,486)	\$ 14,028,681	\$ 64,152	\$ (133,817)	\$ 191,645	\$ (336,303)
47	Sep-20	Actual \$ -	\$ -	\$ 93,735	\$ (202,486)	\$ 13,919,930	\$ 127,860	\$ (127,493)	\$ 192,012	\$ (329,979)
48	Oct-20	Actual \$ -	\$ -	\$ 92,997	\$ (202,486)	\$ 13,810,441	\$ 226,553	\$ (64,152)	\$ 354,413	\$ (266,638)
49	Nov-20	Actual \$ -	\$ -	\$ 92,255	\$ (202,486)	\$ 13,700,210	\$ 423,320	\$ (127,860)	\$ 649,873	\$ (330,346)
50	Dec-20	Actual \$ -	\$ -	\$ 91,508	\$ (202,486)	\$ 13,589,232	\$ 295,353	\$ (226,553)	\$ 718,673	\$ (429,039)

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of June 2021

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	80,328	(423,320)	375,681	(625,806)
52	Feb-21	Actual	-	89,998	(202,486)	13,365,014	86,810	(295,353)	167,138	(497,839)
53	Mar-21	Actual	-	89,235	(202,486)	13,251,763	71,335	(80,328)	158,145	(282,814)
54	Apr-21	Actual	-	88,468	(202,486)	13,137,745	90,503	(86,810)	161,838	(289,296)
55	May-21	Actual	-	87,695	(202,486)	13,022,954	208,821	(71,335)	299,324	(273,821)
56	Jun-21	Actual	-	86,916	(202,486)	12,907,384	245,017	(90,503)	453,838	(292,989)
57	Jul-21	Actual	-	86,133	(202,486)	12,791,031	-	(208,821)	245,017	(411,307)
58	Aug-21	Actual	-	85,344	(202,486)	12,673,889	-	(245,017)	-	(447,503)
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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of June 2021

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)	\$ 11,961,491	\$ (11,961,491)		(36,259,811)

Monthly Amortization Amount

(447,503)

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending June 2021

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	180,835	-	279	-	180,556
Dollars	\$ 16,485.32	\$ -	\$ 25.11	\$ -	\$ 16,460.21
\$/Allowance	\$ 0.091162	\$ -	\$ 0.090000	\$ -	\$ 0.091164
NO_x Allowances - Annual					
Quantity	11,705	-	192	-	11,513
Dollars	\$ 2,630.10	\$ -	\$ 42.24	\$ -	\$ 2,587.86
\$/Allowance	\$ 0.224699	\$ -	\$ 0.220000	\$ -	\$ 0.224777
NO_x Allowances - Seasonal					
Quantity	1,579	-	192	-	1,387
Dollars	\$ 343.87	\$ -	\$ 42	\$ -	\$ 301.63
\$/Allowance	\$ 0.217774	\$ -	\$ 0.220000	\$ -	\$ 0.217466
Total Emission Allowances					
Quantity	194,119	-	663	-	193,456
Dollars	\$ 19,459.29	\$ -	\$ 109.59	\$ -	\$ 19,349.70

(a) Note: The SO₂ 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 June 2021

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
1	Ammonia	502020	\$ 93,233	\$ 93,233
2	Lime	502040	1,305,619	1,305,619
3	Hydrated Lime	502040	78,361	78,361
4	Magnesium Hydroxide ^(NOTE 1)	502040	-	-
5	Total		\$ 1,477,213	\$ 1,477,213

Note 1: East Bend Station's Flue Gas Desulfurization is a Magnesium Oxide based technology. It is the only one of its kind within Duke Energy's current portfolio. The Magnesium Oxide based technology requires a particular chemical construct of lime to function properly, and as such, the scrubber utilizes a "quicklime" material versus the nominal limestone which is considered a Calcium Carbonate based technology. In March of 2020 the vendor's mining facility supplying the quicklime material to East Bend discontinued operations. This facility's quicklime product contained the proper constituents including the Magnesium required for East Bend's optimal scrubber performance. Upon learning of this facility's closure, Duke Energy Kentucky began exploring different solutions to obtain scrubber material with the correct chemical composition, including different mine sources and adding chemicals to produce the correct product. The vendor made the commitment to continue meeting contractual obligations by supplying East Bend with a blended product (Dolomitic Lime and Quicklime) from an alternate facility. Unfortunately, contractually meeting the specifications of the blended commodity, the reactivity of the substitute dolomitic lime is insufficient and as a result, East Bend found itself not able to meet its scrubber limit. In order for East Bend Station to meet its SO2 scrubbing limit, the Company must add an additional chemical reagent, Magnesium Hydroxide, to the substitute blended lime to produce the correct chemical reaction and achieve East Bend's SO2 limit.

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 June 2021

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge
					(2) - (5)
Jul-20	\$ 13,984,655			\$ 649,272	\$ 13,335,383
Aug-20	13,547,109			1,027,348	12,519,761
Sep-20	13,390,720			1,083,587	12,307,133
Oct-20	9,186,084			536,044	8,650,040
Nov-20	8,985,465			532,292	8,453,173
Dec-20	12,875,238			668,111	12,207,127
Jan-21	14,742,627			893,375	13,849,252
Feb-21	14,728,045			1,507,582	13,220,463
Mar-21	11,796,806			816,104	10,980,702
Apr-21	9,657,401			735,692	8,921,709
May-21	9,828,781			821,674	9,007,107
Jun-21	\$ 12,642,763			\$ 966,308	\$ 11,676,455
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 11,260,692
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 26,716,130
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					42.15%

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)
Jul-20	\$ 17,529,327	\$ 5,284,701	\$ (514,400)	\$ 876,204	\$ 16,653,123	\$ 11,882,822
Aug-20	17,412,064	5,203,196	(1,021,086)	1,445,018	15,967,046	11,784,936
Sep-20	18,706,266	5,190,888	348,039	1,524,171	17,182,095	11,643,168
Oct-20	15,704,756	4,528,380	67,487	934,254	14,770,502	10,174,635
Nov-20	15,091,693	4,462,425	(416,161)	944,563	14,147,130	10,100,866
Dec-20	16,986,250	4,909,495	690,267	856,864	16,129,386	10,529,624
Jan-21	16,699,986	4,868,625	305,629	1,002,710	15,697,276	10,523,022
Feb-21	16,321,973	4,355,270	(200,141)	1,694,258	14,627,715	10,472,586
Mar-21	15,438,614	4,686,246	(42,102)	1,074,699	14,363,915	9,719,771
Apr-21	16,161,183	4,584,228	212,405	1,217,582	14,943,601	10,146,968
May-21	15,898,669	4,475,095	363,547	1,279,659	14,619,010	9,780,368
Jun-21	\$ 17,667,857	\$ 4,997,702	\$ 408,011	\$ 1,303,401	\$ 16,364,456	\$ 10,958,743
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 15,455,438	\$ 10,643,126
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 26,716,130	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					57.85%	

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 July 2021

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	820,912
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	11,336,023
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		7.24%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,127,148
Jurisdictional R(m)	ES Form 1.10, Line 16		\$	10,635,821
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		10.60%

Effective Date for Billing: August 31, 2021

Submitted by: /s/ Theodore H. Czupik Jr.

Title: Rates & Regulatory Strategy Manager

Date Submitted: August 20, 2021

ES FORM 1.10

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

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of July 2021

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	\$ 59,886,890
2	RB ÷ 12 months	(1) ÷ 12	\$ 4,990,574
3	Pretax Rate of Return (ROR)	ES Form 1.20	7.905%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 394,505
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 2,055,586
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 2,450,091
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	97.04%
9	Jurisdictional E(m)	(7) x (8)	\$ 2,377,568
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ (429,508)
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 1,948,060
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 72,523

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	42.14%	57.86%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 820,912	\$ 1,127,148
16	R(m) Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	ES Form 3.00 ES Form 3.00	\$ 11,336,023	\$ 10,635,821
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	7.24%	10.60%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 26,898,983	97.04%
19	Sales for Resale	Company Records	\$ 819,637	2.96%
20	Total Revenue		\$ 27,718,620	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	5.835%	1.710%	0.100%		0.100%
2	Long-term Debt	45.931%	4.028%	1.850%		1.850%
3	Common Equity	48.234%	9.250%	4.462%	1.3346139	5.955%
4	Total	100.000%		6.412%		7.905%

Note: Capital structure, cost of debt and tax rate gross-up factor as approved in Case No. 2019-00271. 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 July 2021

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant) Excluding AFUDC	ES Form 2.10	\$ 67,432,275
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	-
3	Subtotal		\$ 67,432,275
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 19,237
6	Subtotal		\$ 19,237
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 3,370,047
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	4,194,575
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 7,564,622
12	Environmental Compliance Rate Base		\$ 59,886,890
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 138,791
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 71,658
16	Monthly Amortization Expense	ES Form 2.20	\$ 304,756
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 112
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 1,540,269
19	Total Environmental Compliance Operating Expense		\$ 2,055,586
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x 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		\$ 2,393,021
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		2,822,529
27	(Over) / Under Recovery		\$ (429,508)

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 July 2021

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project No.	Description	Gross Plant in-Service Excl. AFUDC as of July-21	Accumulated Depreciation as of July-21	Net Plant in-Service as of July-21	CWIP Excluding AFUDC as of July-21	Accumulated Deferred ITC as of July-21	Accumulated Deferred Tax Balance as of July-21	Monthly Depreciation Expense	Monthly Property Tax Expense
				(2)-(3)					
1	EB020290 Lined Retention Basin West	\$ 10,324,588	\$ 675,580	\$ 9,649,008	\$ -	\$ -	\$ 1,205,579	\$ 21,251	\$ 10,793
2	EB020745 Lined Retention Basin East	\$ 10,280,726	\$ 398,494	\$ 9,882,232	\$ -	\$ -	\$ 256,211	\$ 21,161	\$ 11,054
3	EB020298 East Bend SW/PW Reroute	\$ 29,882,379	\$ 1,704,564	\$ 28,177,815	\$ -	\$ -	\$ 2,656,835	\$ 61,500	\$ 31,519
4	EB021281 East Bend Landfill Cell 2	\$ 16,944,582	\$ 591,409	\$ 16,353,173	\$ -	\$ -	\$ 75,950	\$ 34,879	\$ 18,292
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 67,432,275	\$ 3,370,047	\$ 64,062,228	\$ -	\$ -	\$ 4,194,575	\$ 138,791	\$ 71,658

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of July 2021

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	\$ 1,588,547	\$ (150,851)	\$ 1,997,156	\$ (353,337)
31	May-19	Actual \$ -	\$ -	\$ 104,878	\$ (202,486)	\$ 15,574,775	\$ 1,641,055	\$ (408,609)	\$ 3,229,602	\$ (611,095)
32	Jun-19	Actual \$ -	\$ -	\$ 104,216	\$ (202,486)	\$ 15,476,505	\$ 1,423,233	\$ (1,588,547)	\$ 3,064,288	\$ (1,791,033)
33	Jul-19	Actual \$ -	\$ -	\$ 103,550	\$ (202,486)	\$ 15,377,569	\$ 1,368,585	\$ (1,641,055)	\$ 2,791,818	\$ (1,843,541)
34	Aug-19	Actual \$ -	\$ -	\$ 102,880	\$ (202,486)	\$ 15,277,963	\$ 487,759	\$ (1,423,233)	\$ 1,856,344	\$ (1,625,719)
35	Sep-19	Actual \$ -	\$ -	\$ 102,204	\$ (202,486)	\$ 15,177,681	\$ 47,477	\$ (1,368,585)	\$ 535,236	\$ (1,571,078)
36	Oct-19	Actual \$ -	\$ -	\$ 101,524	\$ (202,486)	\$ 15,076,719	\$ (18,595)	\$ (487,759)	\$ 28,882	\$ (690,245)
37	Nov-19	Actual \$ -	\$ -	\$ 100,840	\$ (202,486)	\$ 14,975,073	\$ 330,375	\$ (47,477)	\$ 311,780	\$ (249,963)
38	Dec-19	Actual \$ -	\$ -	\$ 100,151	\$ (202,486)	\$ 14,872,738	\$ 121,640	\$ 18,595	\$ 452,015	\$ (183,891)
39	Jan-20	Actual \$ -	\$ -	\$ 99,457	\$ (202,486)	\$ 14,769,709	\$ 77,416	\$ (330,375)	\$ 199,056	\$ (532,861)
40	Feb-20	Actual \$ -	\$ -	\$ 98,759	\$ (202,486)	\$ 14,665,982	\$ 25,184	\$ (121,640)	\$ 102,600	\$ (324,126)
41	Mar-20	Actual \$ -	\$ -	\$ 98,055	\$ (202,486)	\$ 14,561,551	\$ 27,631	\$ (77,416)	\$ 52,815	\$ (279,902)
42	Apr-20	Actual \$ -	\$ -	\$ 97,347	\$ (202,486)	\$ 14,456,412	\$ 50,807	\$ (25,184)	\$ 78,438	\$ (227,670)
43	May-20	Actual \$ -	\$ -	\$ 96,635	\$ (202,486)	\$ 14,350,561	\$ 82,538	\$ (27,631)	\$ 133,345	\$ (230,117)
44	Jun-20	Actual \$ -	\$ -	\$ 95,917	\$ (202,486)	\$ 14,243,992	\$ 133,817	\$ (50,807)	\$ 216,355	\$ (253,293)
45	Jul-20	Actual \$ -	\$ -	\$ 95,194	\$ (202,486)	\$ 14,136,700	\$ 127,493	\$ (82,538)	\$ 261,310	\$ (285,024)
46	Aug-20	Actual \$ -	\$ -	\$ 94,467	\$ (202,486)	\$ 14,028,681	\$ 64,152	\$ (133,817)	\$ 191,645	\$ (336,303)
47	Sep-20	Actual \$ -	\$ -	\$ 93,735	\$ (202,486)	\$ 13,919,930	\$ 127,860	\$ (127,493)	\$ 192,012	\$ (329,979)
48	Oct-20	Actual \$ -	\$ -	\$ 92,997	\$ (202,486)	\$ 13,810,441	\$ 226,553	\$ (64,152)	\$ 354,413	\$ (266,638)
49	Nov-20	Actual \$ -	\$ -	\$ 92,255	\$ (202,486)	\$ 13,700,210	\$ 423,320	\$ (127,860)	\$ 649,873	\$ (330,346)
50	Dec-20	Actual \$ -	\$ -	\$ 91,508	\$ (202,486)	\$ 13,589,232	\$ 295,353	\$ (226,553)	\$ 718,673	\$ (429,039)

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of July 2021

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	80,328	(423,320)	375,681	(625,806)
52	Feb-21	Actual	-	89,998	(202,486)	13,365,014	86,810	(295,353)	167,138	(497,839)
53	Mar-21	Actual	-	89,235	(202,486)	13,251,763	71,335	(80,328)	158,145	(282,814)
54	Apr-21	Actual	-	88,468	(202,486)	13,137,745	90,503	(86,810)	161,838	(289,296)
55	May-21	Actual	-	87,695	(202,486)	13,022,954	208,821	(71,335)	299,324	(273,821)
56	Jun-21	Actual	-	86,916	(202,486)	12,907,384	245,017	(90,503)	453,838	(292,989)
57	Jul-21	Actual	-	86,133	(202,486)	12,791,031	102,270	(208,821)	347,287	(411,307)
58	Aug-21	Actual	-	85,344	(202,486)	12,673,889	-	(245,017)	102,270	(447,503)
59	Sep-21	Actual	-	84,550	(202,486)	12,555,953	-	(102,270)	-	(304,756)
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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of July 2021

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)	\$ 12,063,761	\$ (12,063,761)		(36,362,081)

Monthly Amortization Amount

(304,756)

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending July 2021

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	180,556		252	-	180,304
Dollars	\$ 16,460.21		\$ 22.68	\$ -	\$ 16,437.53
\$/Allowance	\$ 0.091164	\$ -	\$ 0.090000	\$ -	\$ 0.091166
NO_x Allowances - Annual					
Quantity	11,513	-	204	-	11,309
Dollars	\$ 2,587.86	\$ -	\$ 44.88	\$ -	\$ 2,542.98
\$/Allowance	\$ 0.224777	\$ -	\$ 0.220000	\$ -	\$ 0.224863
NO_x Allowances - Seasonal					
Quantity	1,387	-	204	-	1,183
Dollars	\$ 301.63	\$ -	\$ 44.88	\$ -	\$ 256.75
\$/Allowance	\$ 0.217466	\$ -	\$ 0.220000	\$ -	\$ 0.217029
Total Emission Allowances					
Quantity	193,456	-	660	-	192,796
Dollars	\$ 19,349.70	\$ -	\$ 112.44	\$ -	\$ 19,237.26

(a) Note: The SO₂ 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 July 2021

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
1	Ammonia	502020	\$ 96,358	\$ 96,358
2	Lime	502040	1,355,197	1,355,197
3	Hydrated Lime	502040	88,714	88,714
4	Magnesium Hydroxide ^(Note 1)	502040	-	-
5	Total		\$ 1,540,269	\$ 1,540,269

Note 1: East Bend Station's Flue Gas Desulfurization is a Magnesium Oxide based technology. It is the only one of its kind within Duke Energy's current portfolio. The Magnesium Oxide based technology requires a particular chemical construct of lime to function properly, and as such, the scrubber utilizes a "quicklime" material versus the nominal limestone which is considered a Calcium Carbonate based technology. In March of 2020 the vendor's mining facility supplying the quicklime material to East Bend discontinued operations. This facility's quicklime product contained the proper constituents including the Magnesium required for East Bend's optimal scrubber performance. Upon learning of this facility's closure, Duke Energy Kentucky began exploring different solutions to obtain scrubber material with the correct chemical composition, including different mine sources and adding chemicals to produce the correct product. The vendor made the commitment to continue meeting contractual obligations by supplying East Bend with a blended product (Dolomitic Lime and Quicklime) from an alternate facility. Unfortunately, contractually meeting the specifications of the blended commodity, the reactivity of the substitute dolomitic lime is insufficient and as a result, East Bend found itself not able to meet its scrubber limit. In order for East Bend Station to meet its SO2 scrubbing limit, the Company must add an additional chemical reagent, Magnesium Hydroxide, to the substitute blended lime to produce the correct chemical reaction and achieve East Bend's SO2 limit.

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 July 2021

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge
					(2) - (5)
Aug-20	\$ 13,547,109			\$ 1,027,348	\$ 12,519,761
Sep-20	13,390,720			1,083,587	12,307,133
Oct-20	9,186,084			536,044	8,650,040
Nov-20	8,985,465			532,292	8,453,173
Dec-20	12,875,238			668,111	12,207,127
Jan-21	14,742,627			893,375	13,849,252
Feb-21	14,728,045			1,507,582	13,220,463
Mar-21	11,796,806			816,104	10,980,702
Apr-21	9,657,401			735,692	8,921,709
May-21	9,828,781			821,674	9,007,107
Jun-21	12,642,763			966,308	11,676,455
Jul-21	\$ 15,525,798			\$ 1,286,441	\$ 14,239,357
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 11,336,023
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 26,898,983
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					42.14%

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	Total Non-Fuel Revenue
					(2) - (5)	(6) - (3) - (4)
Aug-20	\$ 17,412,064	\$ 5,203,196	\$ (1,021,086)	\$ 1,445,018	\$ 15,967,046	\$ 11,784,936
Sep-20	18,706,266	5,190,888	348,039	1,524,171	17,182,095	11,643,168
Oct-20	15,704,756	4,528,380	67,487	934,254	14,770,502	10,174,635
Nov-20	15,091,693	4,462,425	(416,161)	944,563	14,147,130	10,100,866
Dec-20	16,986,250	4,909,495	690,267	856,864	16,129,386	10,529,624
Jan-21	16,699,986	4,868,625	305,629	1,002,710	15,697,276	10,523,022
Feb-21	16,321,973	4,355,270	(200,141)	1,694,258	14,627,715	10,472,586
Mar-21	15,438,614	4,686,246	(42,102)	1,074,699	14,363,915	9,719,771
Apr-21	16,161,183	4,584,228	212,405	1,217,582	14,943,601	10,146,968
May-21	15,898,669	4,475,095	363,547	1,279,659	14,619,010	9,780,368
Jun-21	17,667,857	4,997,702	408,011	1,303,401	16,364,456	10,958,743
Jul-21	\$ 19,479,472	\$ 5,416,023	\$ 732,198	\$ 1,536,088	\$ 17,943,384	\$ 11,795,163
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 15,562,960	\$ 10,635,821
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 26,898,983	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					57.86%	

**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 August 2021

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	666,118
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	11,441,763
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		5.82%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	911,240
Jurisdictional R(m)	ES Form 1.10, Line 16		\$	10,636,276
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		8.57%

Effective Date for Billing: September 30, 2021

Submitted by: /s/ Theodore H. Czupik Jr.

Title: Rates & Regulatory Strategy Manager

Date Submitted: September 20, 2021

ES FORM 1.10

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of August 2021

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	\$ 59,716,513
2	RB ÷ 12 months	(1) ÷ 12	\$ 4,976,376
3	Pretax Rate of Return (ROR)	ES Form 1.20	7.905%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 393,383
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 1,616,977
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 2,010,360
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	96.92%
9	Jurisdictional E(m)	(7) x (8)	\$ 1,948,441
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ (371,083)
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 1,577,358
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 61,919

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	42.23%	57.77%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 666,118	\$ 911,240
16	<u>R(m)</u> 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	\$ 11,441,763	\$ 10,636,276
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	5.82%	8.57%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 27,092,228	96.92%
19	Sales for Resale	Company Records	\$ 861,767	3.08%
20	Total Revenue		\$ 27,953,995	100.00%

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

**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	5.835%	1.710%	0.100%		0.100%
2	Long-term Debt	45.931%	4.028%	1.850%		1.850%
3	Common Equity	48.234%	9.250%	4.462%	1.3346139	5.955%
4	Total	100.000%		6.412%		7.905%

Note: Capital structure, cost of debt and tax rate gross-up factor as approved in Case No. 2019-00271. 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 August 2021

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant) Excluding AFUDC	ES Form 2.10	\$ 67,432,275
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	-
3	Subtotal		\$ 67,432,275
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 19,139
6	Subtotal		\$ 19,139
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 3,508,839
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	4,226,062
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 7,734,901
12	Environmental Compliance Rate Base		\$ 59,716,513
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 138,791
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 71,502
16	Monthly Amortization Expense	ES Form 2.20	\$ 202,486
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 99
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 1,204,099
19	Total Environmental Compliance Operating Expense		\$ 1,616,977
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x 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		\$ 2,354,738
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		2,725,821
27	(Over) / Under Recovery		\$ (371,083)

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 August 2021

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project No.	Description	Gross Plant in-Service Excl. AFUDC as of August-21	Accumulated Depreciation as of August-21	Net Plant in-Service as of August-21	CWIP Excluding AFUDC as of August-21	Accumulated Deferred ITC as of August-21	Accumulated Deferred Tax Balance as of August-21	Monthly Depreciation Expense	Monthly Property Tax Expense
				(2)-(3)					
1	EB020290 Lined Retention Basin West	\$ 10,324,588	\$ 696,832	\$ 9,627,756	\$ -	\$ -	\$ 1,208,123	\$ 21,251	\$ 10,769
2	EB020745 Lined Retention Basin East	\$ 10,280,726	\$ 419,655	\$ 9,861,071	\$ -	\$ -	\$ 265,361	\$ 21,161	\$ 11,030
3	EB020298 East Bend SW/PW Reroute	\$ 29,882,379	\$ 1,766,064	\$ 28,116,315	\$ -	\$ -	\$ 2,670,044	\$ 61,500	\$ 31,450
4	EB021281 East Bend Landfill Cell 2	\$ 16,944,582	\$ 626,288	\$ 16,318,294	\$ -	\$ -	\$ 82,534	\$ 34,879	\$ 18,253
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 67,432,275	\$ 3,508,839	\$ 63,923,436	\$ -	\$ -	\$ 4,226,062	\$ 138,791	\$ 71,502

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of August 2021

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	\$ 1,588,547	\$ (150,851)	\$ 1,997,156	\$ (353,337)
31	May-19	Actual \$ -	\$ -	\$ 104,878	\$ (202,486)	\$ 15,574,775	\$ 1,641,055	\$ (408,609)	\$ 3,229,602	\$ (611,095)
32	Jun-19	Actual \$ -	\$ -	\$ 104,216	\$ (202,486)	\$ 15,476,505	\$ 1,423,233	\$ (1,588,547)	\$ 3,064,288	\$ (1,791,033)
33	Jul-19	Actual \$ -	\$ -	\$ 103,550	\$ (202,486)	\$ 15,377,569	\$ 1,368,585	\$ (1,641,055)	\$ 2,791,818	\$ (1,843,541)
34	Aug-19	Actual \$ -	\$ -	\$ 102,880	\$ (202,486)	\$ 15,277,963	\$ 487,759	\$ (1,423,233)	\$ 1,856,344	\$ (1,625,719)
35	Sep-19	Actual \$ -	\$ -	\$ 102,204	\$ (202,486)	\$ 15,177,681	\$ 47,477	\$ (1,368,585)	\$ 535,236	\$ (1,571,071)
36	Oct-19	Actual \$ -	\$ -	\$ 101,524	\$ (202,486)	\$ 15,076,719	\$ (18,595)	\$ (487,759)	\$ 28,882	\$ (690,245)
37	Nov-19	Actual \$ -	\$ -	\$ 100,840	\$ (202,486)	\$ 14,975,073	\$ 330,375	\$ (47,477)	\$ 311,780	\$ (249,963)
38	Dec-19	Actual \$ -	\$ -	\$ 100,151	\$ (202,486)	\$ 14,872,738	\$ 121,640	\$ 18,595	\$ 452,015	\$ (183,891)
39	Jan-20	Actual \$ -	\$ -	\$ 99,457	\$ (202,486)	\$ 14,769,709	\$ 77,416	\$ (330,375)	\$ 199,056	\$ (532,861)
40	Feb-20	Actual \$ -	\$ -	\$ 98,759	\$ (202,486)	\$ 14,665,982	\$ 25,184	\$ (121,640)	\$ 102,600	\$ (324,126)
41	Mar-20	Actual \$ -	\$ -	\$ 98,055	\$ (202,486)	\$ 14,561,551	\$ 27,631	\$ (77,416)	\$ 52,815	\$ (279,902)
42	Apr-20	Actual \$ -	\$ -	\$ 97,347	\$ (202,486)	\$ 14,456,412	\$ 50,807	\$ (25,184)	\$ 78,438	\$ (227,670)
43	May-20	Actual \$ -	\$ -	\$ 96,635	\$ (202,486)	\$ 14,350,561	\$ 82,538	\$ (27,631)	\$ 133,345	\$ (230,117)
44	Jun-20	Actual \$ -	\$ -	\$ 95,917	\$ (202,486)	\$ 14,243,992	\$ 133,817	\$ (50,807)	\$ 216,355	\$ (253,293)
45	Jul-20	Actual \$ -	\$ -	\$ 95,194	\$ (202,486)	\$ 14,136,700	\$ 127,493	\$ (82,538)	\$ 261,310	\$ (285,024)
46	Aug-20	Actual \$ -	\$ -	\$ 94,467	\$ (202,486)	\$ 14,028,681	\$ 64,152	\$ (133,817)	\$ 191,645	\$ (336,303)
47	Sep-20	Actual \$ -	\$ -	\$ 93,735	\$ (202,486)	\$ 13,919,930	\$ 127,860	\$ (127,493)	\$ 192,012	\$ (329,979)
48	Oct-20	Actual \$ -	\$ -	\$ 92,997	\$ (202,486)	\$ 13,810,441	\$ 226,553	\$ (64,152)	\$ 354,413	\$ (266,638)
49	Nov-20	Actual \$ -	\$ -	\$ 92,255	\$ (202,486)	\$ 13,700,210	\$ 423,320	\$ (127,860)	\$ 649,873	\$ (330,346)
50	Dec-20	Actual \$ -	\$ -	\$ 91,508	\$ (202,486)	\$ 13,589,232	\$ 295,353	\$ (226,553)	\$ 718,673	\$ (429,039)

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of August 2021

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	80,328	(423,320)	375,681	(625,806)
52	Feb-21	Actual	-	89,998	(202,486)	13,365,014	86,810	(295,353)	167,138	(497,839)
53	Mar-21	Actual	-	89,235	(202,486)	13,251,763	71,335	(80,328)	158,145	(282,814)
54	Apr-21	Actual	-	88,468	(202,486)	13,137,745	90,503	(86,810)	161,838	(289,296)
55	May-21	Actual	-	87,695	(202,486)	13,022,954	208,821	(71,335)	299,324	(273,821)
56	Jun-21	Actual	-	86,916	(202,486)	12,907,384	245,017	(90,503)	453,838	(292,989)
57	Jul-21	Actual	-	86,133	(202,486)	12,791,031	102,270	(208,821)	347,287	(411,307)
58	Aug-21	Actual	-	85,344	(202,486)	12,673,889	-	(245,017)	102,270	(447,503)
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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of August 2021

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)		\$ 12,063,761	\$ (12,063,761)		(36,362,081)

Monthly Amortization Amount

(202,486)

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending August 2021

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	180,304	-	222	-	180,082
Dollars	\$ 16,437.53	\$ -	\$ 19.98	\$ -	\$ 16,417.55
\$/Allowance	\$ 0.091166	\$ -	\$ 0.090000	\$ -	\$ 0.091167
NO_x Allowances - Annual					
Quantity	11,309	-	179	-	11,130
Dollars	\$ 2,542.98	\$ -	\$ 39.38	\$ -	\$ 2,503.60
\$/Allowance	\$ 0.224863	\$ -	\$ 0.220000	\$ -	\$ 0.224942
NO_x Allowances - Seasonal					
Quantity	1,183	-	179	-	1,004
Dollars	\$ 256.75	\$ -	\$ 39.38	\$ -	\$ 217.37
\$/Allowance	\$ 0.217029	\$ -	\$ 0.220000	\$ -	\$ 0.216500
Total Emission Allowances					
Quantity	192,796	-	580	-	192,216
Dollars	\$ 19,237.26	\$ -	\$ 98.74	\$ -	\$ 19,138.52

(a) Note: The SO₂ 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 August 2021

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
1	Ammonia	502020	\$ 96,831	\$ 96,831
2	Lime	502040	1,017,772	1,017,772
3	Hydrated Lime	502040	89,496	89,496
4	Magnesium Hydroxide ^(Note 1)	502040	-	-
5	Total		\$ 1,204,099	\$ 1,204,099

Note 1: East Bend Station's Flue Gas Desulfurization is a Magnesium Oxide based technology. It is the only one of its kind within Duke Energy's current portfolio. The Magnesium Oxide based technology requires a particular chemical construct of lime to function properly, and as such, the scrubber utilizes a "quicklime" material versus the nominal limestone which is considered a Calcium Carbonate based technology. In March of 2020 the vendor's mining facility supplying the quicklime material to East Bend discontinued operations. This facility's quicklime product contained the proper constituents including the Magnesium required for East Bend's optimal scrubber performance. Upon learning of this facility's closure, Duke Energy Kentucky began exploring different solutions to obtain scrubber material with the correct chemical composition, including different mine sources and adding chemicals to produce the correct product. The vendor made the commitment to continue meeting contractual obligations by supplying East Bend with a blended product (Dolomitic Lime and Quicklime) from an alternate facility. Unfortunately, contractually meeting the specifications of the blended commodity, the reactivity of the substitute dolomitic lime is insufficient and as a result, East Bend found itself not able to meet its scrubber limit. In order for East Bend Station to meet its SO2 scrubbing limit, the Company must add an additional chemical reagent, Magnesium Hydroxide, to the substitute blended lime to produce the correct chemical reaction and achieve East Bend's SO2 limit.

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 August 2021

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge (2) - (5)
Sep-20	\$ 13,390,720			\$ 1,083,587	\$ 12,307,133
Oct-20	9,186,084			536,044	8,650,040
Nov-20	8,985,465			532,292	8,453,173
Dec-20	12,875,238			668,111	12,207,127
Jan-21	14,742,627			893,375	13,849,252
Feb-21	14,728,045			1,507,582	13,220,463
Mar-21	11,796,806			816,104	10,980,702
Apr-21	9,657,401			735,692	8,921,709
May-21	9,828,781			821,674	9,007,107
Jun-21	12,642,763			966,308	11,676,455
Jul-21	15,525,798			1,286,441	14,239,357
Aug-21	\$ 15,008,156			\$ 1,219,521	\$ 13,788,635
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 11,441,763
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 27,092,228
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					42.23%

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)
Sep-20	\$ 18,706,266	\$ 5,190,888	\$ 348,039	\$ 1,524,171	\$ 17,182,095	\$ 11,643,168
Oct-20	15,704,756	4,528,380	67,487	934,254	14,770,502	10,174,635
Nov-20	15,091,693	4,462,425	(416,161)	944,563	14,147,130	10,100,866
Dec-20	16,986,250	4,909,495	690,267	856,864	16,129,386	10,529,624
Jan-21	16,699,986	4,868,625	305,629	1,002,710	15,697,276	10,523,022
Feb-21	16,321,973	4,355,270	(200,141)	1,694,258	14,627,715	10,472,586
Mar-21	15,438,614	4,686,246	(42,102)	1,074,699	14,363,915	9,719,771
Apr-21	16,161,183	4,584,228	212,405	1,217,582	14,943,601	10,146,968
May-21	15,898,669	4,475,095	363,547	1,279,659	14,619,010	9,780,368
Jun-21	17,667,857	4,997,702	408,011	1,303,401	16,364,456	10,958,743
Jul-21	19,479,472	5,416,023	732,198	1,536,088	17,943,384	11,795,163
Aug-21	\$ 18,523,410	\$ 5,404,345	\$ (177,636)	\$ 1,506,300	\$ 17,017,110	\$ 11,790,401
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 15,650,465	\$ 10,636,276
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 27,092,228	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					57.77%	

**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 September 2021

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	385,098
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	11,573,605
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		3.33%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	523,152
Jurisdictional R(m)	ES Form 1.10, Line 16		\$	10,652,865
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		4.91%

Effective Date for Billing: October 29, 2021

Submitted by: /s/ Theodore H. Czupik Jr.

Title: Rates & Regulatory Strategy Manager

Date Submitted: October 19, 2021

ES FORM 1.10

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of September 2021

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	\$ 59,546,141
2	RB ÷ 12 months	(1) ÷ 12	\$ 4,962,178
3	Pretax Rate of Return (ROR)	ES Form 1.20	7.905%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 392,260
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 874,094
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 1,266,354
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	96.92%
9	Jurisdictional E(m)	(7) x (8)	\$ 1,227,350
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ (319,100)
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 908,250
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 39,004

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	42.40%	57.60%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 385,098	\$ 523,152
16	<u>R(m)</u> 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	\$ 11,573,605	\$ 10,652,865
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	3.33%	4.91%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 27,298,344	96.92%
19	Sales for Resale	Company Records	\$ 868,113	3.08%
20	Total Revenue		\$ 28,166,457	100.00%

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

**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	5.835%	1.710%	0.100%		0.100%
2	Long-term Debt	45.931%	4.028%	1.850%		1.850%
3	Common Equity	48.234%	9.250%	4.462%	1.3346139	5.955%
4	Total	100.000%		6.412%		7.905%

Note: Capital structure, cost of debt and tax rate gross-up factor as approved in Case No. 2019-00271. 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 September 2021

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant) Excluding AFUDC	ES Form 2.10	\$ 67,432,275
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	-
3	Subtotal		\$ 67,432,275
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 19,040
6	Subtotal		\$ 19,040
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 3,647,628
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	4,257,546
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 7,905,174
12	Environmental Compliance Rate Base		\$ 59,546,141
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 138,791
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 71,349
16	Monthly Amortization Expense	ES Form 2.20	\$ 202,486
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 99
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 461,369
19	Total Environmental Compliance Operating Expense		\$ 874,094
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x 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		\$ 1,948,060
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		2,267,160
27	(Over) / Under Recovery		\$ (319,100)

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 September 2021

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project No.	Description	Gross Plant in-Service Excl. AFUDC as of September-21	Accumulated Depreciation as of September-21	Net Plant in-Service as of September-21	CWIP Excluding AFUDC as of September-21	Accumulated Deferred ITC as of September-21	Accumulated Deferred Tax Balance as of September-21	Monthly Depreciation Expense	Monthly Property Tax Expense
				(2)-(3)					
1	EB020290 Lined Retention Basin West	\$ 10,324,588	\$ 718,083	\$ 9,606,505	\$ -	\$ -	\$ 1,210,666	\$ 21,251	\$ 10,746
2	EB020745 Lined Retention Basin East	\$ 10,280,726	\$ 440,815	\$ 9,839,911	\$ -	\$ -	\$ 274,510	\$ 21,161	\$ 11,007
3	EB020298 East Bend SW/PW Reroute	\$ 29,882,379	\$ 1,827,564	\$ 28,054,815	\$ -	\$ -	\$ 2,683,253	\$ 61,500	\$ 31,382
4	EB021281 East Bend Landfill Cell 2	\$ 16,944,582	\$ 661,166	\$ 16,283,416	\$ -	\$ -	\$ 89,117	\$ 34,879	\$ 18,214
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 67,432,275	\$ 3,647,628	\$ 63,784,647	\$ -	\$ -	\$ 4,257,546	\$ 138,791	\$ 71,349

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of September 2021

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	\$ 1,588,547	\$ (150,851)	\$ 1,997,156	\$ (353,337)
31	May-19	Actual \$ -	\$ -	\$ 104,878	\$ (202,486)	\$ 15,574,775	\$ 1,641,055	\$ (408,609)	\$ 3,229,602	\$ (611,095)
32	Jun-19	Actual \$ -	\$ -	\$ 104,216	\$ (202,486)	\$ 15,476,505	\$ 1,423,233	\$ (1,588,547)	\$ 3,064,288	\$ (1,791,033)
33	Jul-19	Actual \$ -	\$ -	\$ 103,550	\$ (202,486)	\$ 15,377,569	\$ 1,368,585	\$ (1,641,055)	\$ 2,791,818	\$ (1,843,541)
34	Aug-19	Actual \$ -	\$ -	\$ 102,880	\$ (202,486)	\$ 15,277,963	\$ 487,759	\$ (1,423,233)	\$ 1,856,344	\$ (1,625,719)
35	Sep-19	Actual \$ -	\$ -	\$ 102,204	\$ (202,486)	\$ 15,177,681	\$ 47,477	\$ (1,368,585)	\$ 535,236	\$ (1,571,071)
36	Oct-19	Actual \$ -	\$ -	\$ 101,524	\$ (202,486)	\$ 15,076,719	\$ (18,595)	\$ (487,759)	\$ 28,882	\$ (690,245)
37	Nov-19	Actual \$ -	\$ -	\$ 100,840	\$ (202,486)	\$ 14,975,073	\$ 330,375	\$ (47,477)	\$ 311,780	\$ (249,963)
38	Dec-19	Actual \$ -	\$ -	\$ 100,151	\$ (202,486)	\$ 14,872,738	\$ 121,640	\$ 18,595	\$ 452,015	\$ (183,891)
39	Jan-20	Actual \$ -	\$ -	\$ 99,457	\$ (202,486)	\$ 14,769,709	\$ 77,416	\$ (330,375)	\$ 199,056	\$ (532,861)
40	Feb-20	Actual \$ -	\$ -	\$ 98,759	\$ (202,486)	\$ 14,665,982	\$ 25,184	\$ (121,640)	\$ 102,600	\$ (324,126)
41	Mar-20	Actual \$ -	\$ -	\$ 98,055	\$ (202,486)	\$ 14,561,551	\$ 27,631	\$ (77,416)	\$ 52,815	\$ (279,902)
42	Apr-20	Actual \$ -	\$ -	\$ 97,347	\$ (202,486)	\$ 14,456,412	\$ 50,807	\$ (25,184)	\$ 78,438	\$ (227,670)
43	May-20	Actual \$ -	\$ -	\$ 96,635	\$ (202,486)	\$ 14,350,561	\$ 82,538	\$ (27,631)	\$ 133,345	\$ (230,117)
44	Jun-20	Actual \$ -	\$ -	\$ 95,917	\$ (202,486)	\$ 14,243,992	\$ 133,817	\$ (50,807)	\$ 216,355	\$ (253,293)
45	Jul-20	Actual \$ -	\$ -	\$ 95,194	\$ (202,486)	\$ 14,136,700	\$ 127,493	\$ (82,538)	\$ 261,310	\$ (285,024)
46	Aug-20	Actual \$ -	\$ -	\$ 94,467	\$ (202,486)	\$ 14,028,681	\$ 64,152	\$ (133,817)	\$ 191,645	\$ (336,303)
47	Sep-20	Actual \$ -	\$ -	\$ 93,735	\$ (202,486)	\$ 13,919,930	\$ 127,860	\$ (127,493)	\$ 192,012	\$ (329,979)
48	Oct-20	Actual \$ -	\$ -	\$ 92,997	\$ (202,486)	\$ 13,810,441	\$ 226,553	\$ (64,152)	\$ 354,413	\$ (266,638)
49	Nov-20	Actual \$ -	\$ -	\$ 92,255	\$ (202,486)	\$ 13,700,210	\$ 423,320	\$ (127,860)	\$ 649,873	\$ (330,346)
50	Dec-20	Actual \$ -	\$ -	\$ 91,508	\$ (202,486)	\$ 13,589,232	\$ 295,353	\$ (226,553)	\$ 718,673	\$ (429,039)

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of September 2021

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	80,328	(423,320)	375,681	(625,806)
52	Feb-21	Actual	-	89,998	(202,486)	13,365,014	86,810	(295,353)	167,138	(497,839)
53	Mar-21	Actual	-	89,235	(202,486)	13,251,763	71,335	(80,328)	158,145	(282,814)
54	Apr-21	Actual	-	88,468	(202,486)	13,137,745	90,503	(86,810)	161,838	(289,296)
55	May-21	Actual	-	87,695	(202,486)	13,022,954	208,821	(71,335)	299,324	(273,821)
56	Jun-21	Actual	-	86,916	(202,486)	12,907,384	245,017	(90,503)	453,838	(292,989)
57	Jul-21	Actual	-	86,133	(202,486)	12,791,031	102,270	(208,821)	347,287	(411,307)
58	Aug-21	Actual	-	85,344	(202,486)	12,673,889	-	(245,017)	102,270	(447,503)
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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of September 2021

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)		\$ 12,063,761	\$ (12,063,761)		(36,362,081)

Monthly Amortization Amount

(202,486)

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending September 2021

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	180,082	-	222	-	179,860
Dollars	\$ 16,417.55	\$ -	\$ 19.98	\$ -	\$ 16,397.57
\$/Allowance	\$ 0.091167	\$ -	\$ 0.090000	\$ -	\$ 0.091169
NO_x Allowances - Annual					
Quantity	11,130	-	179	-	10,951
Dollars	\$ 2,503.60	\$ -	\$ 39.38	\$ -	\$ 2,464.22
\$/Allowance	\$ 0.224942	\$ -	\$ 0.220000	\$ -	\$ 0.225022
NO_x Allowances - Seasonal					
Quantity	1,004	-	179	-	825
Dollars	\$ 217.37	\$ -	\$ 39.38	\$ -	\$ 177.99
\$/Allowance	\$ 0.216500	\$ -	\$ 0.220000	\$ -	\$ 0.215740
Total Emission Allowances					
Quantity	192,216	-	580	-	191,636
Dollars	\$ 19,138.52	\$ -	\$ 98.74	\$ -	\$ 19,039.78

(a) Note: The SO₂ 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 September 2021

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
1	Ammonia	502020	\$ (649)	\$ (649)
2	Lime	502040	452,616	452,616
3	Hydrated Lime	502040	9,402	9,402
4	Magnesium Hydroxide ^(Note 1)	502040	-	-
5	Total		\$ 461,369	\$ 461,369

Note 1: East Bend Station's Flue Gas Desulfurization is a Magnesium Oxide based technology. It is the only one of its kind within Duke Energy's current portfolio. The Magnesium Oxide based technology requires a particular chemical construct of lime to function properly, and as such, the scrubber utilizes a "quicklime" material versus the nominal limestone which is considered a Calcium Carbonate based technology. In March of 2020 the vendor's mining facility supplying the quicklime material to East Bend discontinued operations. This facility's quicklime product contained the proper constituents including the Magnesium required for East Bend's optimal scrubber performance. Upon learning of this facility's closure, Duke Energy Kentucky began exploring different solutions to obtain scrubber material with the correct chemical composition, including different mine sources and adding chemicals to produce the correct product. The vendor made the commitment to continue meeting contractual obligations by supplying East Bend with a blended product (Dolomitic Lime and Quicklime) from an alternate facility. Unfortunately, contractually meeting the specifications of the blended commodity, the reactivity of the substitute dolomitic lime is insufficient and as a result, East Bend found itself not able to meet its scrubber limit. In order for East Bend Station to meet its SO2 scrubbing limit, the Company must add an additional chemical reagent, Magnesium Hydroxide, to the substitute blended lime to produce the correct chemical reaction and achieve East Bend's SO2 limit.

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 September 2021

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge (2) - (5)
Oct-20	\$ 9,186,084			\$ 536,044	\$ 8,650,040
Nov-20	8,985,465			532,292	8,453,173
Dec-20	12,875,238			668,111	12,207,127
Jan-21	14,742,627			893,375	13,849,252
Feb-21	14,728,045			1,507,582	13,220,463
Mar-21	11,796,806			816,104	10,980,702
Apr-21	9,657,401			735,692	8,921,709
May-21	9,828,781			821,674	9,007,107
Jun-21	12,642,763			966,308	11,676,455
Jul-21	15,525,798			1,286,441	14,239,357
Aug-21	15,008,156			1,219,521	13,788,635
Sep-21	\$ 14,902,237			\$ 1,012,999	\$ 13,889,238
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 11,573,605
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 27,298,344
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					42.40%

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)
Oct-20	\$ 15,704,756	\$ 4,528,380	\$ 67,487	\$ 934,254	\$ 14,770,502	\$ 10,174,635
Nov-20	15,091,693	4,462,425	(416,161)	944,563	14,147,130	10,100,866
Dec-20	16,986,250	4,909,495	690,267	856,864	16,129,386	10,529,624
Jan-21	16,699,986	4,868,625	305,629	1,002,710	15,697,276	10,523,022
Feb-21	16,321,973	4,355,270	(200,141)	1,694,258	14,627,715	10,472,586
Mar-21	15,438,614	4,686,246	(42,102)	1,074,699	14,363,915	9,719,771
Apr-21	16,161,183	4,584,228	212,405	1,217,582	14,943,601	10,146,968
May-21	15,898,669	4,475,095	363,547	1,279,659	14,619,010	9,780,368
Jun-21	17,667,857	4,997,702	408,011	1,303,401	16,364,456	10,958,743
Jul-21	19,479,472	5,416,023	732,198	1,536,088	17,943,384	11,795,163
Aug-21	18,523,410	5,404,345	(177,636)	1,506,300	17,017,110	11,790,401
Sep-21	\$ 19,327,541	\$ 5,885,205	\$ 345,938	\$ 1,254,161	\$ 18,073,380	\$ 11,842,237
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 15,724,739	\$ 10,652,865
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 27,298,344	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					57.60%	

**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 2021

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	381,825
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	11,700,594
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		3.26%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	514,477
Jurisdictional R(m)	ES Form 1.10, Line 16		\$	10,672,705
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		4.82%

Effective Date for Billing: December 1, 2021

Submitted by: /s/ Theodore H. Czupik Jr.

Title: Rates & Regulatory Strategy Manager

Date Submitted: November 19, 2021

ES FORM 1.10

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of October 2021

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	\$ 59,375,936
2	RB ÷ 12 months	(1) ÷ 12	\$ 4,947,995
3	Pretax Rate of Return (ROR)	ES Form 1.20	7.905%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 391,139
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 437,295
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 828,434
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	96.93%
9	Jurisdictional E(m)	(7) x (8)	\$ 803,001
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ 93,301
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 896,302
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 25,433

Calculation of Environmental Surcharge Billing Factors

		Residential (Total Revenue)	Non-Residential (Net Revenue)
14	Revenues as a Percentage of 12 Month Average Total Revenues	42.60%	57.40%
15	Adjusted Jurisdictional E(m) - Allocated	\$ 381,825	\$ 514,477
16	R(m) Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	\$ 11,700,594	\$ 10,672,705
17	Jurisdictional E(m) / R(m)	3.26%	4.82%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 27,468,576	96.93%
19	Sales for Resale	Company Records	\$ 870,804	3.07%
20	Total Revenue		\$ 28,339,380	100.00%

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

**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	5.835%	1.710%	0.100%		0.100%
2	Long-term Debt	45.931%	4.028%	1.850%		1.850%
3	Common Equity	48.234%	9.250%	4.462%	1.3346139	5.955%
4	Total	100.000%		6.412%		7.905%

Note: Capital structure, cost of debt and tax rate gross-up factor as approved in Case No. 2019-00271. 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 2021

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant) Excluding AFUDC	ES Form 2.10	\$ 67,432,275
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	-
3	Subtotal		\$ 67,432,275
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 19,113
6	Subtotal		\$ 19,113
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 3,786,420
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	4,289,032
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 8,075,452
12	Environmental Compliance Rate Base		\$ 59,375,936
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 138,791
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 71,193
16	Monthly Amortization Expense	ES Form 2.20	\$ 202,486
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ (73)
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 24,898
19	Total Environmental Compliance Operating Expense		\$ 437,295
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x 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		\$ 1,577,358
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		1,484,057
27	(Over) / Under Recovery		\$ 93,301

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 2021

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project No.	Description	Gross Plant in-Service Excl. AFUDC as of October-21	Accumulated Depreciation as of October-21	Net Plant in-Service as of October-21	CWIP Excluding AFUDC as of October-21	Accumulated Deferred ITC as of October-21	Accumulated Deferred Tax Balance as of October-21	Monthly Depreciation Expense	Monthly Property Tax Expense
				(2)-(3)					
1	EB020290 Lined Retention Basin West	\$ 10,324,588	\$ 739,335	\$ 9,585,253	\$ -	\$ -	\$ 1,213,209	\$ 21,251	\$ 10,722
2	EB020745 Lined Retention Basin East	\$ 10,280,726	\$ 461,976	\$ 9,818,750	\$ -	\$ -	\$ 283,660	\$ 21,161	\$ 10,983
3	EB020298 East Bend SW/PW Reroute	\$ 29,882,379	\$ 1,889,064	\$ 27,993,315	\$ -	\$ -	\$ 2,696,462	\$ 61,500	\$ 31,313
4	EB021281 East Bend Landfill Cell 2	\$ 16,944,582	\$ 696,045	\$ 16,248,537	\$ -	\$ -	\$ 95,701	\$ 34,879	\$ 18,175
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 67,432,275	\$ 3,786,420	\$ 63,645,855	\$ -	\$ -	\$ 4,289,032	\$ 138,791	\$ 71,193

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of October 2021

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	1,588,547	(150,851)	1,997,156	(353,337)
31	May-19	Actual -	-	104,878	(202,486)	15,574,775	1,641,055	(408,609)	3,229,602	(611,095)
32	Jun-19	Actual -	-	104,216	(202,486)	15,476,505	1,423,233	(1,588,547)	3,064,288	(1,791,033)
33	Jul-19	Actual -	-	103,550	(202,486)	15,377,569	1,368,585	(1,641,055)	2,791,818	(1,843,541)
34	Aug-19	Actual -	-	102,880	(202,486)	15,277,963	487,759	(1,423,233)	1,856,344	(1,625,719)
35	Sep-19	Actual -	-	102,204	(202,486)	15,177,681	47,477	(1,368,585)	535,236	(1,571,071)
36	Oct-19	Actual -	-	101,524	(202,486)	15,076,719	(18,595)	(487,759)	28,882	(690,245)
37	Nov-19	Actual -	-	100,840	(202,486)	14,975,073	330,375	(47,477)	311,780	(249,963)
38	Dec-19	Actual -	-	100,151	(202,486)	14,872,738	121,640	18,595	452,015	(183,891)
39	Jan-20	Actual -	-	99,457	(202,486)	14,769,709	77,416	(330,375)	199,056	(532,861)
40	Feb-20	Actual -	-	98,759	(202,486)	14,665,982	25,184	(121,640)	102,600	(324,126)
41	Mar-20	Actual -	-	98,055	(202,486)	14,561,551	27,631	(77,416)	52,815	(279,902)
42	Apr-20	Actual -	-	97,347	(202,486)	14,456,412	50,807	(25,184)	78,438	(227,670)
43	May-20	Actual -	-	96,635	(202,486)	14,350,561	82,538	(27,631)	133,345	(230,117)
44	Jun-20	Actual -	-	95,917	(202,486)	14,243,992	133,817	(50,807)	216,355	(253,293)
45	Jul-20	Actual -	-	95,194	(202,486)	14,136,700	127,493	(82,538)	261,310	(285,024)
46	Aug-20	Actual -	-	94,467	(202,486)	14,028,681	64,152	(133,817)	191,645	(336,303)
47	Sep-20	Actual -	-	93,735	(202,486)	13,919,930	127,860	(127,493)	192,012	(329,979)
48	Oct-20	Actual -	-	92,997	(202,486)	13,810,441	226,553	(64,152)	354,413	(266,638)
49	Nov-20	Actual -	-	92,255	(202,486)	13,700,210	423,320	(127,860)	649,873	(330,346)
50	Dec-20	Actual -	\$ -	\$ 91,508	\$ (202,486)	\$ 13,589,232	\$ 295,353	\$ (226,553)	\$ 718,673	\$ (429,039)

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of October 2021

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	\$ 80,328	\$ (423,320)	\$ 375,681	\$ (625,806)
52	Feb-21	Actual	-	89,998	(202,486)	13,365,014	86,810	(295,353)	167,138	(497,839)
53	Mar-21	Actual	-	89,235	(202,486)	13,251,763	71,335	(80,328)	158,145	(282,814)
54	Apr-21	Actual	-	88,468	(202,486)	13,137,745	90,503	(86,810)	161,838	(289,296)
55	May-21	Actual	-	87,695	(202,486)	13,022,954	208,821	(71,335)	299,324	(273,821)
56	Jun-21	Actual	-	86,916	(202,486)	12,907,384	245,017	(90,503)	453,838	(292,989)
57	Jul-21	Actual	-	86,133	(202,486)	12,791,031	102,270	(208,821)	347,287	(411,307)
58	Aug-21	Actual	-	85,344	(202,486)	12,673,889	-	(245,017)	102,270	(447,503)
59	Sep-21	Actual	-	84,550	(202,486)	12,555,953	-	-	-	-
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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of October 2021

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)		\$ 12,063,761	\$ (12,063,761)		\$ (36,362,081)

Monthly Amortization Amount

\$ (202,486)

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending October 2021

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	179,860	-	(186)	-	180,046
Dollars	\$ 16,397.57	\$ -	\$ (16.74)	\$ -	\$ 16,414.31
\$/Allowance	\$ 0.091169	\$ -	\$ 0.090000	\$ -	\$ 0.091167
NO_x Allowances - Annual					
Quantity	10,951	-	(127)	-	11,078
Dollars	\$ 2,464.22	\$ -	\$ (27.69)	\$ -	\$ 2,491.91
\$/Allowance	\$ 0.225022	\$ -	\$ 0.218031	\$ -	\$ 0.224942
NO_x Allowances - Seasonal					
Quantity	825	-	(129)	-	954
Dollars	\$ 177.99	\$ -	\$ (28.55)	\$ -	\$ 206.54
\$/Allowance	\$ 0.215740	\$ -	\$ 0.221318	\$ -	\$ 0.216494
Total Emission Allowances					
Quantity	191,636	-	(442)	-	192,078
Dollars	\$ 19,039.78	\$ -	\$ (72.98)	\$ -	\$ 19,112.76

(a) Note: The SO₂ 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 October 2021

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
1	Ammonia	502020	\$ 530	\$ 530
2	Lime	502040	24,368	24,368
3	Hydrated Lime	502040	-	-
4	Magnesium Hydroxide ^(Note 1)	502040	-	-
5	Total		\$ 24,898	\$ 24,898

Note 1: East Bend Station's Flue Gas Desulfurization is a Magnesium Oxide based technology. It is the only one of its kind within Duke Energy's current portfolio. The Magnesium Oxide based technology requires a particular chemical construct of lime to function properly, and as such, the scrubber utilizes a "quicklime" material versus the nominal limestone which is considered a Calcium Carbonate based technology. In March of 2020 the vendor's mining facility supplying the quicklime material to East Bend discontinued operations. This facility's quicklime product contained the proper constituents including the Magnesium required for East Bend's optimal scrubber performance. Upon learning of this facility's closure, Duke Energy Kentucky began exploring different solutions to obtain scrubber material with the correct chemical composition, including different mine sources and adding chemicals to produce the correct product. The vendor made the commitment to continue meeting contractual obligations by supplying East Bend with a blended product (Dolomitic Lime and Quicklime) from an alternate facility. Unfortunately, contractually meeting the specifications of the blended commodity, the reactivity of the substitute dolomitic lime is insufficient and as a result, East Bend found itself not able to meet its scrubber limit. In order for East Bend Station to meet its SO2 scrubbing limit, the Company must add an additional chemical reagent, Magnesium Hydroxide, to the substitute blended lime to produce the correct chemical reaction and achieve East Bend's SO2 limit.

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 2021

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge (2) - (5)
Nov-20	\$ 8,985,465			\$ 532,292	\$ 8,453,173
Dec-20	12,875,238			668,111	12,207,127
Jan-21	14,742,627			893,375	13,849,252
Feb-21	14,728,045			1,507,582	13,220,463
Mar-21	11,796,806			816,104	10,980,702
Apr-21	9,657,401			735,692	8,921,709
May-21	9,828,781			821,674	9,007,107
Jun-21	12,642,763			966,308	11,676,455
Jul-21	15,525,798			1,286,441	14,239,357
Aug-21	15,008,156			1,219,521	13,788,635
Sep-21	14,902,237			1,012,999	13,889,238
Oct-21	\$ 10,769,498			\$ 595,584	\$ 10,173,914
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 11,700,594
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 27,468,576
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					42.60%

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)
Nov-20	\$ 15,091,693	\$ 4,462,425	\$ (416,161)	\$ 944,563	\$ 14,147,130	\$ 10,100,866
Dec-20	16,986,250	4,909,495	690,267	856,864	16,129,386	10,529,624
Jan-21	16,699,986	4,868,625	305,629	1,002,710	15,697,276	10,523,022
Feb-21	16,321,973	4,355,270	(200,141)	1,694,258	14,627,715	10,472,586
Mar-21	15,438,614	4,686,246	(42,102)	1,074,699	14,363,915	9,719,771
Apr-21	16,161,183	4,584,228	212,405	1,217,582	14,943,601	10,146,968
May-21	15,898,669	4,475,095	363,547	1,279,659	14,619,010	9,780,368
Jun-21	17,667,857	4,997,702	408,011	1,303,401	16,364,456	10,958,743
Jul-21	19,479,472	5,416,023	732,198	1,536,088	17,943,384	11,795,163
Aug-21	18,523,410	5,404,345	(177,636)	1,506,300	17,017,110	11,790,401
Sep-21	19,327,541	5,885,205	345,938	1,254,161	18,073,380	11,842,237
Oct-21	\$ 16,177,896	\$ 5,136,292	\$ (259,585)	\$ 888,473	\$ 15,289,423	\$ 10,412,716
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 15,767,982	\$ 10,672,705
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 27,468,576	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					57.40%	

**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 2021

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	352,750
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	11,930,444
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		2.96%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	475,302
Jurisdictional R(m)	ES Form 1.10, Line 16		\$	10,647,233
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		4.46%

Effective Date for Billing: January 4, 2022

Submitted by: /s/ Theodore H. Czupik Jr.

Title: Rates & Regulatory Strategy Manager

Date Submitted: December 17, 2021

ES FORM 1.10

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of November 2021

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	\$ 59,205,658
2	RB ÷ 12 months	(1) ÷ 12	\$ 4,933,805
3	Pretax Rate of Return (ROR)	ES Form 1.20	7.905%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 390,017
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 412,317
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 802,334
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	96.98%
9	Jurisdictional E(m)	(7) x (8)	\$ 778,104
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ 49,948
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 828,052
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 24,230

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	42.60%	57.40%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 352,750	\$ 475,302
16	R(m) Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	ES Form 3.00 ES Form 3.00	\$ 11,930,444	\$ 10,647,233
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	2.96%	4.46%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 28,002,775	96.98%
19	Sales for Resale	Company Records	\$ 870,614	3.02%
20	Total Revenue		\$ 28,873,389	100.00%

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

**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	5.835%	1.710%	0.100%		0.100%
2	Long-term Debt	45.931%	4.028%	1.850%		1.850%
3	Common Equity	48.234%	9.250%	4.462%	1.3346139	5.955%
4	Total	100.000%		6.412%		7.905%

Note: Capital structure, cost of debt and tax rate gross-up factor as approved in Case No. 2019-00271. 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 2021

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant) Excluding AFUDC	ES Form 2.10	\$ 67,432,275
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	-
3	Subtotal		\$ 67,432,275
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 19,110
6	Subtotal		\$ 19,110
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 3,925,210
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	4,320,517
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 8,245,727
12	Environmental Compliance Rate Base		\$ 59,205,658
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 138,791
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 71,037
16	Monthly Amortization Expense	ES Form 2.20	\$ 202,486
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 3
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ -
19	Total Environmental Compliance Operating Expense		\$ 412,317
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x 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		\$ 908,250
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		858,302
27	(Over) / Under Recovery		\$ 49,948

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 2021

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project No.	Description	Gross Plant in-Service Excl. AFUDC as of November-21	Accumulated Depreciation as of November-21	Net Plant in-Service as of November-21	CWIP Excluding AFUDC as of November-21	Accumulated Deferred ITC as of November-21	Accumulated Deferred Tax Balance as of November-21	Monthly Depreciation Expense	Monthly Property Tax Expense
				(2)-(3)					
1	EB020290 Lined Retention Basin West	\$ 10,324,588	\$ 760,586	\$ 9,564,002	\$ -	\$ -	\$ 1,215,752	\$ 21,251	\$ 10,698
2	EB020745 Lined Retention Basin East	\$ 10,280,726	\$ 483,136	\$ 9,797,590	\$ -	\$ -	\$ 292,809	\$ 21,161	\$ 10,959
3	EB020298 East Bend SW/PW Reroute	\$ 29,882,379	\$ 1,950,564	\$ 27,931,815	\$ -	\$ -	\$ 2,709,671	\$ 61,500	\$ 31,244
4	EB021281 East Bend Landfill Cell 2	\$ 16,944,582	\$ 730,924	\$ 16,213,658	\$ -	\$ -	\$ 102,285	\$ 34,879	\$ 18,136
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 67,432,275	\$ 3,925,210	\$ 63,507,065	\$ -	\$ -	\$ 4,320,517	\$ 138,791	\$ 71,037

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of November 2021

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	1,588,547	(150,851)	1,997,156	(353,337)
31	May-19	Actual -	-	104,878	(202,486)	15,574,775	1,641,055	(408,609)	3,229,602	(611,095)
32	Jun-19	Actual -	-	104,216	(202,486)	15,476,505	1,423,233	(1,588,547)	3,064,288	(1,791,033)
33	Jul-19	Actual -	-	103,550	(202,486)	15,377,569	1,368,585	(1,641,055)	2,791,818	(1,843,541)
34	Aug-19	Actual -	-	102,880	(202,486)	15,277,963	487,759	(1,423,233)	1,856,344	(1,625,719)
35	Sep-19	Actual -	-	102,204	(202,486)	15,177,681	47,477	(1,368,585)	535,236	(1,571,071)
36	Oct-19	Actual -	-	101,524	(202,486)	15,076,719	(18,595)	(487,759)	28,882	(690,245)
37	Nov-19	Actual -	-	100,840	(202,486)	14,975,073	330,375	(47,477)	311,780	(249,963)
38	Dec-19	Actual -	-	100,151	(202,486)	14,872,738	121,640	18,595	452,015	(183,891)
39	Jan-20	Actual -	-	99,457	(202,486)	14,769,709	77,416	(330,375)	199,056	(532,861)
40	Feb-20	Actual -	-	98,759	(202,486)	14,665,982	25,184	(121,640)	102,600	(324,126)
41	Mar-20	Actual -	-	98,055	(202,486)	14,561,551	27,631	(77,416)	52,815	(279,902)
42	Apr-20	Actual -	-	97,347	(202,486)	14,456,412	50,807	(25,184)	78,438	(227,670)
43	May-20	Actual -	-	96,635	(202,486)	14,350,561	82,538	(50,807)	133,345	(230,117)
44	Jun-20	Actual -	-	95,917	(202,486)	14,243,992	133,817	(82,538)	216,355	(253,293)
45	Jul-20	Actual -	-	95,194	(202,486)	14,136,700	127,493	(133,817)	261,310	(285,024)
46	Aug-20	Actual -	-	94,467	(202,486)	14,028,681	64,152	(127,493)	191,645	(336,303)
47	Sep-20	Actual -	-	93,735	(202,486)	13,919,930	127,860	(64,152)	192,012	(329,979)
48	Oct-20	Actual -	-	92,997	(202,486)	13,810,441	226,553	(127,860)	354,413	(266,638)
49	Nov-20	Actual -	-	92,255	(202,486)	13,700,210	423,320	(226,553)	649,873	(330,346)
50	Dec-20	Actual -	\$ -	\$ 91,508	\$ (202,486)	\$ 13,589,232	\$ 295,353	\$ (423,320)	\$ 718,673	\$ (429,039)

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of November 2021

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	\$ 80,328	\$ (423,320)	\$ 375,681	\$ (625,806)
52	Feb-21	Actual	-	89,998	(202,486)	13,365,014	86,810	(295,353)	167,138	(497,839)
53	Mar-21	Actual	-	89,235	(202,486)	13,251,763	71,335	(80,328)	158,145	(282,814)
54	Apr-21	Actual	-	88,468	(202,486)	13,137,745	90,503	(86,810)	161,838	(289,296)
55	May-21	Actual	-	87,695	(202,486)	13,022,954	208,821	(71,335)	299,324	(273,821)
56	Jun-21	Actual	-	86,916	(202,486)	12,907,384	245,017	(90,503)	453,838	(292,989)
57	Jul-21	Actual	-	86,133	(202,486)	12,791,031	102,270	(208,821)	347,287	(411,307)
58	Aug-21	Actual	-	85,344	(202,486)	12,673,889	-	(245,017)	102,270	(447,503)
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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of November 2021

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)		\$ 12,063,761	\$ (12,063,761)		\$ (36,362,081)

Monthly Amortization Amount

\$ (202,486)

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending November 2021

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	180,046	-	1	-	180,045
Dollars	\$ 16,414.31	\$ -	\$ 0.09	\$ -	\$ 16,414.22
\$/Allowance	\$ 0.091167	\$ -	\$ 0.090000	\$ -	\$ 0.091167
NO_x Allowances - Annual					
Quantity	11,078	-	10	-	11,068
Dollars	\$ 2,491.91	\$ -	\$ 2.20	\$ -	\$ 2,489.71
\$/Allowance	\$ 0.224942	\$ -	\$ 0.220000	\$ -	\$ 0.224947
NO_x Allowances - Seasonal					
Quantity	954	-	1	-	953
Dollars	\$ 206.54	\$ -	\$ 0.22	\$ -	\$ 206.32
\$/Allowance	\$ 0.216494	\$ -	\$ 0.220000	\$ -	\$ 0.216491
Total Emission Allowances					
Quantity	192,078	-	12	-	192,066
Dollars	\$ 19,112.76	\$ -	\$ 2.51	\$ -	\$ 19,110.25

(a) Note: The SO₂ 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 2021

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
1	Ammonia	502020	\$ -	\$ -
2	Lime	502040	-	-
3	Hydrated Lime	502040	-	-
4	Magnesium Hydroxide ^(Note 1)	502040	-	-
5	Total		\$ -	\$ -

Note 1: East Bend Station's Flue Gas Desulfurization is a Magnesium Oxide based technology. It is the only one of its kind within Duke Energy's current portfolio. The Magnesium Oxide based technology requires a particular chemical construct of lime to function properly, and as such, the scrubber utilizes a "quicklime" material versus the nominal limestone which is considered a Calcium Carbonate based technology. In March of 2020 the vendor's mining facility supplying the quicklime material to East Bend discontinued operations. This facility's quicklime product contained the proper constituents including the Magnesium required for East Bend's optimal scrubber performance. Upon learning of this facility's closure, Duke Energy Kentucky began exploring different solutions to obtain scrubber material with the correct chemical composition, including different mine sources and adding chemicals to produce the correct product. The vendor made the commitment to continue meeting contractual obligations by supplying East Bend with a blended product (Dolomitic Lime and Quicklime) from an alternate facility. Unfortunately, contractually meeting the specifications of the blended commodity, the reactivity of the substitute dolomitic lime is insufficient and as a result, East Bend found itself not able to meet its scrubber limit. In order for East Bend Station to meet its SO2 scrubbing limit, the Company must add an additional chemical reagent, Magnesium Hydroxide, to the substitute blended lime to produce the correct chemical reaction and achieve East Bend's SO2 limit.

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 2021

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge (2) - (5)
Dec-20	\$ 12,875,238			\$ 668,111	\$ 12,207,127
Jan-21	14,742,627			893,375	13,849,252
Feb-21	14,728,045			1,507,582	13,220,463
Mar-21	11,796,806			816,104	10,980,702
Apr-21	9,657,401			735,692	8,921,709
May-21	9,828,781			821,674	9,007,107
Jun-21	12,642,763			966,308	11,676,455
Jul-21	15,525,798			1,286,441	14,239,357
Aug-21	15,008,156			1,219,521	13,788,635
Sep-21	14,902,237			1,012,999	13,889,238
Oct-21	10,769,498			595,584	10,173,914
Nov-21	\$ 11,587,106			\$ 375,740	\$ 11,211,366
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 11,930,444
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 28,002,775
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					42.60%

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)
Dec-20	\$ 16,986,250	\$ 4,909,495	\$ 690,267	\$ 856,864	\$ 16,129,386	\$ 10,529,624
Jan-21	16,699,986	4,868,625	305,629	1,002,710	15,697,276	10,523,022
Feb-21	16,321,973	4,355,270	(200,141)	1,694,258	14,627,715	10,472,586
Mar-21	15,438,614	4,686,246	(42,102)	1,074,699	14,363,915	9,719,771
Apr-21	16,161,183	4,584,228	212,405	1,217,582	14,943,601	10,146,968
May-21	15,898,669	4,475,095	363,547	1,279,659	14,619,010	9,780,368
Jun-21	17,667,857	4,997,702	408,011	1,303,401	16,364,456	10,958,743
Jul-21	19,479,472	5,416,023	732,198	1,536,088	17,943,384	11,795,163
Aug-21	18,523,410	5,404,345	(177,636)	1,506,300	17,017,110	11,790,401
Sep-21	19,327,541	5,885,205	345,938	1,254,161	18,073,380	11,842,237
Oct-21	16,177,896	5,136,292	(259,585)	888,473	15,289,423	10,412,716
Nov-21	\$ 18,281,877	\$ 4,737,949	\$ 3,266,165	\$ 482,562	\$ 17,799,315	\$ 9,795,201
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 16,072,331	\$ 10,647,233
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 28,002,775	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					57.40%	

**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 2021

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	384,751
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	12,204,152
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		3.15%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	517,997
Jurisdictional R(m)	ES Form 1.10, Line 16		\$	10,614,090
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		4.88%

Effective Date for Billing: February 2, 2022

Submitted by: /s/ Theodore H. Czupik Jr.

Title: Rates & Regulatory Strategy Manager

Date Submitted: January 21, 2022

ES FORM 1.10

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of December 2021

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	\$ 59,035,372
2	RB ÷ 12 months	(1) ÷ 12	\$ 4,919,614
3	Pretax Rate of Return (ROR)	ES Form 1.20	7.905%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 388,895
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 646,817
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 1,035,712
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	97.26%
9	Jurisdictional E(m)	(7) x (8)	\$ 1,007,333
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ (104,585)
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 902,748
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 28,379

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	42.62%	57.38%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 384,751	\$ 517,997
16	R(m) Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	ES Form 3.00 ES Form 3.00	\$ 12,204,152	\$ 10,614,090
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	3.15%	4.88%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 28,633,511	97.26%
19	Sales for Resale	Company Records	\$ 806,976	2.74%
20	Total Revenue		\$ 29,440,487	100.00%

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

**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	5.835%	1.710%	0.100%		0.100%
2	Long-term Debt	45.931%	4.028%	1.850%		1.850%
3	Common Equity	48.234%	9.250%	4.462%	1.3346139	5.955%
4	Total	100.000%		6.412%		7.905%

Note: Capital structure, cost of debt and tax rate gross-up factor as approved in Case No. 2019-00271. 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 2021

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant) Excluding AFUDC	ES Form 2.10	\$ 67,432,275
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	-
3	Subtotal		\$ 67,432,275
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 19,099
6	Subtotal		\$ 19,099
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 4,064,000
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	4,352,002
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 8,416,002
12	Environmental Compliance Rate Base		\$ 59,035,372
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 138,791
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 70,886
16	Monthly Amortization Expense	ES Form 2.20	\$ 202,486
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 12
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 234,642
19	Total Environmental Compliance Operating Expense		\$ 646,817
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x 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		\$ 894,065
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		998,650
27	(Over) / Under Recovery		\$ (104,585)

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 2021

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project No.	Description	Gross Plant in-Service Excl. AFUDC as of December-21	Accumulated Depreciation as of December-21	Net Plant in-Service as of December-21	CWIP Excluding AFUDC as of December-21	Accumulated Deferred ITC as of December-21	Accumulated Deferred Tax Balance as of December-21	Monthly Depreciation Expense	Monthly Property Tax Expense
				(2)-(3)					
1	EB020290 Lined Retention Basin West	\$ 10,324,588	\$ 781,837	\$ 9,542,751	\$ -	\$ -	\$ 1,218,295	\$ 21,251	\$ 10,675
2	EB020745 Lined Retention Basin East	\$ 10,280,726	\$ 504,297	\$ 9,776,429	\$ -	\$ -	\$ 301,959	\$ 21,161	\$ 10,936
3	EB020298 East Bend SW/PW Reroute	\$ 29,882,379	\$ 2,012,064	\$ 27,870,315	\$ -	\$ -	\$ 2,722,880	\$ 61,500	\$ 31,177
4	EB021281 East Bend Landfill Cell 2	\$ 16,944,582	\$ 765,802	\$ 16,178,780	\$ -	\$ -	\$ 108,868	\$ 34,879	\$ 18,098
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 67,432,275	\$ 4,064,000	\$ 63,368,275	\$ -	\$ -	\$ 4,352,002	\$ 138,791	\$ 70,886

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of December 2021

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	1,588,547	(150,851)	1,997,156	(353,337)
31	May-19	Actual -	-	104,878	(202,486)	15,574,775	1,641,055	(408,609)	3,229,602	(611,095)
32	Jun-19	Actual -	-	104,216	(202,486)	15,476,505	1,423,233	(1,588,547)	3,064,288	(1,791,033)
33	Jul-19	Actual -	-	103,550	(202,486)	15,377,569	1,368,585	(1,641,055)	2,791,818	(1,843,541)
34	Aug-19	Actual -	-	102,880	(202,486)	15,277,963	487,759	(1,423,233)	1,856,344	(1,625,719)
35	Sep-19	Actual -	-	102,204	(202,486)	15,177,681	47,477	(1,368,585)	535,236	(1,571,071)
36	Oct-19	Actual -	-	101,524	(202,486)	15,076,719	(18,595)	(487,759)	28,882	(690,245)
37	Nov-19	Actual -	-	100,840	(202,486)	14,975,073	330,375	(47,477)	311,780	(249,963)
38	Dec-19	Actual -	-	100,151	(202,486)	14,872,738	121,640	18,595	452,015	(183,891)
39	Jan-20	Actual -	-	99,457	(202,486)	14,769,709	77,416	(330,375)	199,056	(532,861)
40	Feb-20	Actual -	-	98,759	(202,486)	14,665,982	25,184	(121,640)	102,600	(324,126)
41	Mar-20	Actual -	-	98,055	(202,486)	14,561,551	27,631	(77,416)	52,815	(279,902)
42	Apr-20	Actual -	-	97,347	(202,486)	14,456,412	50,807	(25,184)	78,438	(227,670)
43	May-20	Actual -	-	96,635	(202,486)	14,350,561	82,538	(27,631)	133,345	(230,117)
44	Jun-20	Actual -	-	95,917	(202,486)	14,243,992	133,817	(50,807)	216,355	(253,293)
45	Jul-20	Actual -	-	95,194	(202,486)	14,136,700	127,493	(82,538)	261,310	(285,024)
46	Aug-20	Actual -	-	94,467	(202,486)	14,028,681	64,152	(133,817)	191,645	(336,303)
47	Sep-20	Actual -	-	93,735	(202,486)	13,919,930	127,860	(127,493)	192,012	(329,979)
48	Oct-20	Actual -	-	92,997	(202,486)	13,810,441	226,553	(64,152)	354,413	(266,638)
49	Nov-20	Actual -	-	92,255	(202,486)	13,700,210	423,320	(127,860)	649,873	(330,346)
50	Dec-20	Actual -	\$ -	\$ 91,508	\$ (202,486)	\$ 13,589,232	\$ 295,353	\$ (226,553)	\$ 718,673	\$ (429,039)

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of December 2021

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	\$ 80,328	\$ (423,320)	\$ 375,681	\$ (625,806)
52	Feb-21 Actual		-	89,998	(202,486)	13,365,014	86,810	(295,353)	167,138	(497,839)
53	Mar-21 Actual		-	89,235	(202,486)	13,251,763	71,335	(80,328)	158,145	(282,814)
54	Apr-21 Actual		-	88,468	(202,486)	13,137,745	90,503	(86,810)	161,838	(289,296)
55	May-21 Actual		-	87,695	(202,486)	13,022,954	208,821	(71,335)	299,324	(273,821)
56	Jun-21 Actual		-	86,916	(202,486)	12,907,384	245,017	(90,503)	453,838	(292,989)
57	Jul-21 Actual		-	86,133	(202,486)	12,791,031	102,270	(208,821)	347,287	(411,307)
58	Aug-21 Actual		-	85,344	(202,486)	12,673,889	-	(245,017)	102,270	(447,503)
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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of December 2021

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)		\$ 12,063,761	\$ (12,063,761)		\$ (36,362,081)

Monthly Amortization Amount

\$ (202,486)

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending December 2021

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	180,045	-	25	-	180,020
Dollars	\$ 16,414.22	\$ -	\$ 2.25	\$ -	\$ 16,411.97
\$/Allowance	\$ 0.091167	\$ -	\$ 0.090000	\$ -	\$ 0.091167
NO_x Allowances - Annual					
Quantity	11,068	-	43	-	11,025
Dollars	\$ 2,489.71	\$ -	\$ 9.46	\$ -	\$ 2,480.25
\$/Allowance	\$ 0.224947	\$ -	\$ 0.220000	\$ -	\$ 0.224966
NO_x Allowances - Seasonal					
Quantity	953	-	-	-	953
Dollars	\$ 206.32	\$ -	\$ -	\$ -	\$ 206.32
\$/Allowance	\$ 0.216491	\$ -	\$ -	\$ -	\$ 0.216491
Total Emission Allowances					
Quantity	192,066	-	68	-	191,998
Dollars	\$ 19,110.25	\$ -	\$ 11.71	\$ -	\$ 19,098.54

(a) Note: The SO₂ 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 December 2021

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
1	Ammonia	502020	\$ 17,579	\$ 17,579
2	Lime	502040	208,001	208,001
3	Hydrated Lime	502040	9,062	9,062
4	Magnesium Hydroxide ^(Note 1)	502040	-	-
5	Total		\$ 234,642	\$ 234,642

Note 1: East Bend Station's Flue Gas Desulfurization is a Magnesium Oxide based technology. It is the only one of its kind within Duke Energy's current portfolio. The Magnesium Oxide based technology requires a particular chemical construct of lime to function properly, and as such, the scrubber utilizes a "quicklime" material versus the nominal limestone which is considered a Calcium Carbonate based technology. In March of 2020 the vendor's mining facility supplying the quicklime material to East Bend discontinued operations. This facility's quicklime product contained the proper constituents including the Magnesium required for East Bend's optimal scrubber performance. Upon learning of this facility's closure, Duke Energy Kentucky began exploring different solutions to obtain scrubber material with the correct chemical composition, including different mine sources and adding chemicals to produce the correct product. The vendor made the commitment to continue meeting contractual obligations by supplying East Bend with a blended product (Dolomitic Lime and Quicklime) from an alternate facility. Unfortunately, contractually meeting the specifications of the blended commodity, the reactivity of the substitute dolomitic lime is insufficient and as a result, East Bend found itself not able to meet its scrubber limit. In order for East Bend Station to meet its SO2 scrubbing limit, the Company must add an additional chemical reagent, Magnesium Hydroxide, to the substitute blended lime to produce the correct chemical reaction and achieve East Bend's SO2 limit.

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 December 2021

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge (2) - (5)
Jan-21	\$ 14,742,627			\$ 893,375	\$ 13,849,252
Feb-21	14,728,045			1,507,582	13,220,463
Mar-21	11,796,806			816,104	10,980,702
Apr-21	9,657,401			735,692	8,921,709
May-21	9,828,781			821,674	9,007,107
Jun-21	12,642,763			966,308	11,676,455
Jul-21	15,525,798			1,286,441	14,239,357
Aug-21	15,008,156			1,219,521	13,788,635
Sep-21	14,902,237			1,012,999	13,889,238
Oct-21	10,769,498			595,584	10,173,914
Nov-21	11,587,106			375,740	11,211,366
Dec-21	\$ 16,001,721			\$ 510,096	\$ 15,491,625
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 12,204,152
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 28,633,511
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					42.62%

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-21	\$ 16,699,986	\$ 4,868,625	\$ 305,629	\$ 1,002,710	\$ 15,697,276	\$ 10,523,022
Feb-21	16,321,973	4,355,270	(200,141)	1,694,258	14,627,715	10,472,586
Mar-21	15,438,614	4,686,246	(42,102)	1,074,699	14,363,915	9,719,771
Apr-21	16,161,183	4,584,228	212,405	1,217,582	14,943,601	10,146,968
May-21	15,898,669	4,475,095	363,547	1,279,659	14,619,010	9,780,368
Jun-21	17,667,857	4,997,702	408,011	1,303,401	16,364,456	10,958,743
Jul-21	19,479,472	5,416,023	732,198	1,536,088	17,943,384	11,795,163
Aug-21	18,523,410	5,404,345	(177,636)	1,506,300	17,017,110	11,790,401
Sep-21	19,327,541	5,885,205	345,938	1,254,161	18,073,380	11,842,237
Oct-21	16,177,896	5,136,292	(259,585)	888,473	15,289,423	10,412,716
Nov-21	18,281,877	4,737,949	3,266,165	482,562	17,799,315	9,795,201
Dec-21	\$ 20,902,282	\$ 5,194,127	\$ 5,087,696	\$ 488,554	\$ 20,413,728	\$ 10,131,905
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 16,429,359	\$ 10,614,090
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 28,633,511	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					57.38%	

**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 2022

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	621,835
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	12,775,625
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		4.87%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	830,373
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	10,583,486
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		7.85%

Effective Date for Billing: March 3, 2022

Submitted by: /s/ Theodore H. Czupik Jr.

Title: Rates & Regulatory Strategy Manager

Date Submitted: February 21, 2022

ES FORM 1.10

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

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of January 2022

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	\$ 58,736,165
2	RB ÷ 12 months	(1) ÷ 12	\$ 4,894,680
3	Pretax Rate of Return (ROR)	ES Form 1.20	7.905%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 386,924
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 1,346,411
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 1,733,335
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	97.54%
9	Jurisdictional E(m)	(7) x (8)	\$ 1,690,695
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ (238,487)
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 1,452,208
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 42,640

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	42.82%	57.18%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 621,835	\$ 830,373
16	R(m) Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	ES Form 3.00 ES Form 3.00	\$ 12,775,625	\$ 10,583,486
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	4.87%	7.85%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 29,835,513	97.54%
19	Sales for Resale	Company Records	\$ 752,884	2.46%
20	Total Revenue		\$ 30,588,397	100.00%

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

**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	5.835%	1.710%	0.100%		0.100%
2	Long-term Debt	45.931%	4.028%	1.850%		1.850%
3	Common Equity	48.234%	9.250%	4.462%	1.3346139	5.955%
4	Total	100.000%		6.412%		7.905%

Note: Capital structure, cost of debt and tax rate gross-up factor as approved in Case No. 2019-00271. 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 2022

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant) Excluding AFUDC	ES Form 2.10	\$ 67,432,275
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	-
3	Subtotal		\$ 67,432,275
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 19,099
6	Subtotal		\$ 19,099
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 4,202,792
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	4,512,417
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 8,715,209
12	Environmental Compliance Rate Base		\$ 58,736,165
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 138,791
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 70,731
16	Monthly Amortization Expense	ES Form 2.20	\$ 202,486
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ -
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 934,403
19	Total Environmental Compliance Operating Expense		\$ 1,346,411
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x 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		\$ 828,052
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		1,066,539
27	(Over) / Under Recovery		\$ (238,487)

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 2022

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project No.	Description	Gross Plant in-Service Excl. AFUDC as of January-22	Accumulated Depreciation as of January-22	Net Plant in-Service as of January-22	CWIP Excluding AFUDC as of January-22	Accumulated Deferred ITC as of January-22	Accumulated Deferred Tax Balance as of January-22	Monthly Depreciation Expense	Monthly Property Tax Expense
				(2)-(3)					
1	EB020290 Lined Retention Basin West	\$ 10,324,588	\$ 803,089	\$ 9,521,499	\$ -	\$ -	\$ 1,219,806	\$ 21,251	\$ 10,651
2	EB020745 Lined Retention Basin East	\$ 10,280,726	\$ 525,458	\$ 9,755,268	\$ -	\$ -	\$ 310,028	\$ 21,161	\$ 10,913
3	EB020298 East Bend SW/PW Reroute	\$ 29,882,379	\$ 2,073,564	\$ 27,808,815	\$ -	\$ -	\$ 2,733,952	\$ 61,500	\$ 31,108
4	EB021281 East Bend Landfill Cell 2	\$ 16,944,582	\$ 800,681	\$ 16,143,901	\$ -	\$ -	\$ 248,631	\$ 34,879	\$ 18,059
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 67,432,275	\$ 4,202,792	\$ 63,229,483	\$ -	\$ -	\$ 4,512,417	\$ 138,791	\$ 70,731

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of January 2022

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	1,588,547	(150,851)	1,997,156	(353,337)
31	May-19	Actual -	-	104,878	(202,486)	15,574,775	1,641,055	(408,609)	3,229,602	(611,095)
32	Jun-19	Actual -	-	104,216	(202,486)	15,476,505	1,423,233	(1,588,547)	3,064,288	(1,791,033)
33	Jul-19	Actual -	-	103,550	(202,486)	15,377,569	1,368,585	(1,641,055)	2,791,818	(1,843,541)
34	Aug-19	Actual -	-	102,880	(202,486)	15,277,963	487,759	(1,423,233)	1,856,344	(1,625,719)
35	Sep-19	Actual -	-	102,204	(202,486)	15,177,681	47,477	(1,368,585)	535,236	(1,571,071)
36	Oct-19	Actual -	-	101,524	(202,486)	15,076,719	(18,595)	(487,759)	28,882	(690,245)
37	Nov-19	Actual -	-	100,840	(202,486)	14,975,073	330,375	(47,477)	311,780	(249,963)
38	Dec-19	Actual -	-	100,151	(202,486)	14,872,738	121,640	18,595	452,015	(183,891)
39	Jan-20	Actual -	-	99,457	(202,486)	14,769,709	77,416	(330,375)	199,056	(532,861)
40	Feb-20	Actual -	-	98,759	(202,486)	14,665,982	25,184	(121,640)	102,600	(324,126)
41	Mar-20	Actual -	-	98,055	(202,486)	14,561,551	27,631	(77,416)	52,815	(279,902)
42	Apr-20	Actual -	-	97,347	(202,486)	14,456,412	50,807	(25,184)	78,438	(227,670)
43	May-20	Actual -	-	96,635	(202,486)	14,350,561	82,538	(27,631)	133,345	(230,117)
44	Jun-20	Actual -	-	95,917	(202,486)	14,243,992	133,817	(50,807)	216,355	(253,293)
45	Jul-20	Actual -	-	95,194	(202,486)	14,136,700	127,493	(82,538)	261,310	(285,024)
46	Aug-20	Actual -	-	94,467	(202,486)	14,028,681	64,152	(133,817)	191,645	(336,303)
47	Sep-20	Actual -	-	93,735	(202,486)	13,919,930	127,860	(127,493)	192,012	(329,979)
48	Oct-20	Actual -	-	92,997	(202,486)	13,810,441	226,553	(64,152)	354,413	(266,638)
49	Nov-20	Actual -	-	92,255	(202,486)	13,700,210	423,320	(127,860)	649,873	(330,346)
50	Dec-20	Actual -	\$ -	\$ 91,508	\$ (202,486)	\$ 13,589,232	\$ 295,353	\$ (226,553)	\$ 718,673	\$ (429,039)

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of January 2022

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	\$ 80,328	\$ (423,320)	\$ 375,681	\$ (625,806)
52	Feb-21 Actual		-	89,998	(202,486)	13,365,014	86,810	(295,353)	167,138	(497,839)
53	Mar-21 Actual		-	89,235	(202,486)	13,251,763	71,335	(80,328)	158,145	(282,814)
54	Apr-21 Actual		-	88,468	(202,486)	13,137,745	90,503	(86,810)	161,838	(289,296)
55	May-21 Actual		-	87,695	(202,486)	13,022,954	208,821	(71,335)	299,324	(273,821)
56	Jun-21 Actual		-	86,916	(202,486)	12,907,384	245,017	(90,503)	453,838	(292,989)
57	Jul-21 Actual		-	86,133	(202,486)	12,791,031	102,270	(208,821)	347,287	(411,307)
58	Aug-21 Actual		-	85,344	(202,486)	12,673,889	-	(245,017)	102,270	(447,503)
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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization Calculation for Coal Ash ARO

For the Expense Month of January 2022

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)		\$ 12,063,761	\$ (12,063,761)		\$ (36,362,081)

Monthly Amortization Amount

\$ (202,486)

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending January 2022

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	180,020	-	-	-	180,020
Dollars	\$ 16,411.97	\$ -	\$ -	\$ -	\$ 16,411.97
\$/Allowance	\$ 0.091167	\$ -	\$ -	\$ -	\$ 0.091167
NO_x Allowances - Annual					
Quantity	11,025	-	-	-	11,025
Dollars	\$ 2,480.25	\$ -	\$ -	\$ -	\$ 2,480.25
\$/Allowance	\$ 0.224966	\$ -	\$ -	\$ -	\$ 0.224966
NO_x Allowances - Seasonal					
Quantity	953	-	-	-	953
Dollars	\$ 206.32	\$ -	\$ -	\$ -	\$ 206.32
\$/Allowance	\$ 0.216491	\$ -	\$ -	\$ -	\$ 0.216491
Total Emission Allowances					
Quantity	191,998	-	-	-	191,998
Dollars	\$ 19,098.54	\$ -	\$ -	\$ -	\$ 19,098.54

(a) Note: The SO₂ 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 January 2022

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
1	Ammonia	502020	\$ 119,042	\$ 119,042
2	Lime	502040	747,428	747,428
3	Hydrated Lime	502040	67,933	67,933
4	Magnesium Hydroxide ^(Note 1)	502040	-	-
5	Total		\$ 934,403	\$ 934,403

Note 1: East Bend Station's Flue Gas Desulfurization is a Magnesium Oxide based technology. It is the only one of its kind within Duke Energy's current portfolio. The Magnesium Oxide based technology requires a particular chemical construct of lime to function properly, and as such, the scrubber utilizes a "quicklime" material versus the nominal limestone which is considered a Calcium Carbonate based technology. In March of 2020 the vendor's mining facility supplying the quicklime material to East Bend discontinued operations. This facility's quicklime product contained the proper constituents including the Magnesium required for East Bend's optimal scrubber performance. Upon learning of this facility's closure, Duke Energy Kentucky began exploring different solutions to obtain scrubber material with the correct chemical composition, including different mine sources and adding chemicals to produce the correct product. The vendor made the commitment to continue meeting contractual obligations by supplying East Bend with a blended product (Dolomitic Lime and Quicklime) from an alternate facility. Unfortunately, contractually meeting the specifications of the blended commodity, the reactivity of the substitute dolomitic lime is insufficient and as a result, East Bend found itself not able to meet its scrubber limit. In order for East Bend Station to meet its SO2 scrubbing limit, the Company must add an additional chemical reagent, Magnesium Hydroxide, to the substitute blended lime to produce the correct chemical reaction and achieve East Bend's SO2 limit.

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 January 2022

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge (2) - (5)
Feb-21	\$ 14,728,045			\$ 1,507,582	\$ 13,220,463
Mar-21	11,796,806			816,104	10,980,702
Apr-21	9,657,401			735,692	8,921,709
May-21	9,828,781			821,674	9,007,107
Jun-21	12,642,763			966,308	11,676,455
Jul-21	15,525,798			1,286,441	14,239,357
Aug-21	15,008,156			1,219,521	13,788,635
Sep-21	14,902,237			1,012,999	13,889,238
Oct-21	10,769,498			595,584	10,173,914
Nov-21	11,587,106			375,740	11,211,366
Dec-21	16,001,721			510,096	15,491,625
Jan-22	\$ 21,318,327			\$ 611,393	\$ 20,706,934
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 12,775,625
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 29,835,513
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					42.82%

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-21	\$ 16,321,973	\$ 4,355,270	\$ (200,141)	\$ 1,694,258	\$ 14,627,715	\$ 10,472,586
Mar-21	15,438,614	4,686,246	(42,102)	1,074,699	14,363,915	9,719,771
Apr-21	16,161,183	4,584,228	212,405	1,217,582	14,943,601	10,146,968
May-21	15,898,669	4,475,095	363,547	1,279,659	14,619,010	9,780,368
Jun-21	17,667,857	4,997,702	408,011	1,303,401	16,364,456	10,958,743
Jul-21	19,479,472	5,416,023	732,198	1,536,088	17,943,384	11,795,163
Aug-21	18,523,410	5,404,345	(177,636)	1,506,300	17,017,110	11,790,401
Sep-21	19,327,541	5,885,205	345,938	1,254,161	18,073,380	11,842,237
Oct-21	16,177,896	5,136,292	(259,585)	888,473	15,289,423	10,412,716
Nov-21	18,281,877	4,737,949	3,266,165	482,562	17,799,315	9,795,201
Dec-21	20,902,282	5,194,127	5,087,696	488,554	20,413,728	10,131,905
Jan-22	\$ 23,718,760	\$ 5,133,317	\$ 7,974,524	\$ 455,146	\$ 23,263,614	\$ 10,155,773
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 17,059,888	\$ 10,583,486
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 29,835,513	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					57.18%	

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 2022

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,204,505
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	13,269,497
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		9.08%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,594,716
Jurisdictional R(m)	ES Form 1.10, Line 16		\$	10,579,616
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		15.07%

Effective Date for Billing: April 1, 2022

Submitted by: /s/ Theodore H. Czupik Jr.

Title: Rates & Regulatory Strategy Manager

Date Submitted: March 22, 2022

ES FORM 1.10

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

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of February 2022

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	\$ 58,561,104
2	RB ÷ 12 months	(1) ÷ 12	\$ 4,880,092
3	Pretax Rate of Return (ROR)	ES Form 1.20	7.905%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 385,771
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 2,673,836
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 3,059,607
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	97.83%
9	Jurisdictional E(m)	(7) x (8)	\$ 2,993,214
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ (193,993)
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 2,799,221
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 66,393

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	43.03%	56.97%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 1,204,505	\$ 1,594,716
16	<u>R(m)</u> 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	\$ 13,269,497	\$ 10,579,616
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	9.08%	15.07%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 30,837,624	97.83%
19	Sales for Resale	Company Records	\$ 684,308	2.17%
20	Total Revenue		\$ 31,521,932	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	5.835%	1.710%	0.100%		0.100%
2	Long-term Debt	45.931%	4.028%	1.850%		1.850%
3	Common Equity	48.234%	9.250%	4.462%	1.3346139	5.955%
4	Total	100.000%		6.412%		7.905%

Note: Capital structure, cost of debt and tax rate gross-up factor as approved in Case No. 2019-00271. 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 2022

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant) Excluding AFUDC	ES Form 2.10	\$ 67,432,275
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	-
3	Subtotal		\$ 67,432,275
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 18,984
6	Subtotal		\$ 18,984
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 4,341,581
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	4,548,574
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 8,890,155
12	Environmental Compliance Rate Base		\$ 58,561,104
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 138,791
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 70,576
16	Monthly Amortization Expense	ES Form 2.20	\$ 525,501
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 115
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 1,938,853
19	Total Environmental Compliance Operating Expense		\$ 2,673,836
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x 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		\$ 902,748
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		1,096,741
27	(Over) / Under Recovery		\$ (193,993)

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 2022

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project No.	Description	Gross Plant in-Service Excl. AFUDC as of February-22	Accumulated Depreciation as of February-22	Net Plant in-Service as of February-22	CWIP Excluding AFUDC as of February-22	Accumulated Deferred ITC as of February-22	Accumulated Deferred Tax Balance as of February-22	Monthly Depreciation Expense	Monthly Property Tax Expense
				(2)-(3)					
1	EB020290 Lined Retention Basin West	\$ 10,324,588	\$ 824,340	\$ 9,500,248	\$ -	\$ -	\$ 1,221,773	\$ 21,251	\$ 10,627
2	EB020745 Lined Retention Basin East	\$ 10,280,726	\$ 546,618	\$ 9,734,108	\$ -	\$ -	\$ 318,097	\$ 21,161	\$ 10,889
3	EB020298 East Bend SW/PW Reroute	\$ 29,882,379	\$ 2,135,064	\$ 27,747,315	\$ -	\$ -	\$ 2,745,024	\$ 61,500	\$ 31,040
4	EB021281 East Bend Landfill Cell 2	\$ 16,944,582	\$ 835,559	\$ 16,109,023	\$ -	\$ -	\$ 263,680	\$ 34,879	\$ 18,020
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 67,432,275	\$ 4,341,581	\$ 63,090,694	\$ -	\$ -	\$ 4,548,574	\$ 138,791	\$ 70,576

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization of Coal Ash ARO and Landfill Closure

For the Expense Month of February 2022

Line No.	Period (1)	Coal Ash ARO					Coal Ash ARO and Landfill Closure		Landfill Closure		Total Recovery (11)=(5)+(8)+(10)
		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)	Cash Spend (9)	Recovery: 1-Yr Amort. (10)	
1	2015 Tr Actual	\$ 3,858,084	\$ (856,412)	\$ 20,378	\$ -	\$ 3,022,050	\$ -	\$ -	\$ -	\$ -	\$ -
2	2016 Tr Actual	4,486,812	(107,052)	379,037	-	7,780,847	-	-	291,152	-	-
3	Jan-17 Actual	358,148	-	43,243	-	8,182,238	-	-	13,108	-	-
4	Feb-17 Actual	424,021	-	40,351	-	8,646,610	-	-	14,281	-	-
5	Mar-17 Actual	692,184	(26,763)	44,724	-	9,356,755	-	-	20,225	-	-
6	Apr-17 Actual	254,067	-	50,949	-	9,661,771	-	-	30,324	-	-
7	May-17 Actual	608,377	-	56,141	-	10,326,289	-	-	34,997	-	-
8	Jun-17 Actual	265,619	(26,763)	53,472	-	10,618,617	-	-	45,594	-	-
9	Jul-17 Actual	220,636	-	51,558	-	10,890,811	-	-	30,629	-	-
10	Aug-17 Actual	272,053	-	47,731	-	11,210,595	-	-	17,432	-	-
11	Sep-17 Actual	233,743	(26,763)	44,389	-	11,461,964	-	-	23,200	-	-
12	Oct-17 Actual	444,793	-	60,670	-	11,967,427	-	-	47,545	-	-
13	Nov-17 Actual	525,770	-	68,573	-	12,561,770	-	-	33,047	-	-
14	Dec-17 Actual	2,482,493	(26,763)	82,850	-	15,100,350	-	-	18,362	-	-
15	Jan-18 Actual	510,525	-	91,185	-	15,702,060	-	-	18,843	-	-
16	Feb-18 Actual	89,648	-	91,534	-	15,883,242	-	-	-	-	-
17	Mar-18 Actual	396,977	(26,763)	93,696	-	16,347,152	-	-	14,037	-	-
18	Apr-18 Actual	132,294	-	111,722	-	16,591,168	173,000	-	36,260	-	-
19	May-18 Actual	-	-	112,480	-	16,703,648	100,234	-	88,888	-	-
20	Jun-18 Actual	-	-	111,870	(202,486)	16,613,032	150,901	(173,000)	128,843	-	(375,486)
21	Jul-18 Actual	-	-	111,255	(202,486)	16,521,801	196,585	(100,234)	16	-	(302,720)
22	Aug-18 Actual	-	-	110,637	(202,486)	16,429,952	321,815	(150,901)	29,844	-	(353,387)
23	Sep-18 Actual	-	-	110,014	(202,486)	16,337,480	275,135	(196,585)	-	-	(399,071)
24	Oct-18 Actual	-	-	109,387	(202,486)	16,244,381	69,886	(321,815)	-	-	(524,301)
25	Nov-18 Actual	-	-	108,756	(202,486)	16,150,651	238,428	(275,135)	(2,498)	-	(477,621)
26	Dec-18 Actual	-	-	108,121	(202,486)	16,056,286	263,037	(69,886)	-	-	(272,372)
27	Jan-19 Actual	-	-	107,481	(202,486)	15,961,281	177,996	(238,428)	-	-	(440,914)
28	Feb-19 Actual	-	-	106,837	(202,486)	15,865,632	150,851	(263,037)	-	-	(465,523)
29	Mar-19 Actual	-	-	106,188	(202,486)	15,769,334	408,609	(177,996)	-	-	(380,482)
30	Apr-19 Actual	-	-	105,535	(202,486)	15,672,383	1,588,547	(150,851)	-	-	(353,337)
31	May-19 Actual	-	-	104,878	(202,486)	15,574,775	1,641,055	(408,609)	-	-	(611,095)
32	Jun-19 Actual	-	-	104,216	(202,486)	15,476,505	1,423,233	(1,588,547)	-	-	(1,791,033)
33	Jul-19 Actual	-	-	103,550	(202,486)	15,377,569	1,368,585	(1,641,055)	-	-	(1,843,541)
34	Aug-19 Actual	-	-	102,880	(202,486)	15,277,963	487,759	(1,423,233)	-	-	(1,625,719)
35	Sep-19 Actual	-	-	102,204	(202,486)	15,177,681	47,477	(1,368,585)	-	-	(1,571,071)
36	Oct-19 Actual	-	-	101,524	(202,486)	15,076,719	(18,595)	(487,759)	-	-	(690,245)
37	Nov-19 Actual	-	-	100,840	(202,486)	14,975,073	330,375	(47,477)	-	-	(249,963)
38	Dec-19 Actual	-	-	100,151	(202,486)	14,872,738	121,640	18,595	-	-	(183,891)
39	Jan-20 Actual	-	-	99,457	(202,486)	14,769,709	77,416	(330,375)	-	-	(532,861)
40	Feb-20 Actual	-	-	98,759	(202,486)	14,665,982	25,184	(121,640)	-	-	(324,126)
41	Mar-20 Actual	-	-	98,055	(202,486)	14,561,551	27,631	(77,416)	-	-	(279,902)
42	Apr-20 Actual	-	-	97,347	(202,486)	14,456,412	50,807	(25,184)	-	-	(227,670)
43	May-20 Actual	-	-	96,635	(202,486)	14,350,561	82,538	(27,631)	-	-	(230,117)
44	Jun-20 Actual	-	-	95,917	(202,486)	14,243,992	133,817	(50,807)	-	-	(253,293)
45	Jul-20 Actual	-	-	95,194	(202,486)	14,136,700	127,493	(82,538)	-	-	(285,024)
46	Aug-20 Actual	-	-	94,467	(202,486)	14,028,681	64,152	(133,817)	-	-	(336,303)
47	Sep-20 Actual	-	-	93,735	(202,486)	13,919,930	127,860	(127,493)	-	-	(329,979)
48	Oct-20 Actual	-	-	92,997	(202,486)	13,810,441	226,553	(64,152)	-	-	(266,638)
49	Nov-20 Actual	-	-	92,255	(202,486)	13,700,210	423,320	(127,860)	5,465	-	(330,346)
50	Dec-20 Actual	\$ -	\$ -	\$ 91,508	\$ (202,486)	\$ 13,589,232	\$ 295,353	\$ (226,553)	\$ 17,705	\$ -	\$ (429,039)

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization of Coal Ash ARO and Landfill Closure

For the Expense Month of February 2022

Line No.	Period (1)	Coal Ash ARO				Coal Ash ARO and Landfill Closure		Landfill Closure		Total Recovery (11)=(5)+(8)+(10)	
		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)	Cash Spend (9)		Recovery: 1-Yr Amort. (10)
51	Jan-21 Actual		\$ -	\$ 90,756	\$ (202,486)	\$ 13,477,502	\$ 80,328	\$ (423,320)	\$ 19,334	\$ -	\$ (625,806)
52	Feb-21 Actual		-	89,998	(202,486)	13,365,014	86,810	(295,353)	4,714	-	(497,839)
53	Mar-21 Actual		-	89,235	(202,486)	13,251,763	71,335	(80,328)	20,845	-	(282,814)
54	Apr-21 Actual		-	88,468	(202,486)	13,137,745	90,503	(86,810)	23,069	-	(289,296)
55	May-21 Actual		-	87,695	(202,486)	13,022,954	208,821	(71,335)	11,618	-	(273,821)
56	Jun-21 Actual		-	86,916	(202,486)	12,907,384	245,017	(90,503)	10,988	-	(292,989)
57	Jul-21 Actual		-	86,133	(202,486)	12,791,031	102,270	(208,821)	-	-	(411,307)
58	Aug-21 Actual		-	85,344	(202,486)	12,673,889	-	(245,017)	144,042	-	(447,503)
59	Sep-21 Actual		-	84,550	(202,486)	12,555,953	-	(102,270)	309,800	-	(304,756)
60	Oct-21 Actual		-	83,750	(202,486)	12,437,217	-	-	411,865	-	(202,486)
61	Nov-21 Actual		-	82,945	(202,486)	12,317,676	-	-	388,963	-	(202,486)
62	Dec-21 Actual		-	82,135	(202,486)	12,197,325	-	-	194,124	-	(202,486)
63	Jan-22 Actual		-	81,319	(202,486)	12,076,158	-	-	105,294	-	(202,486)
64	Feb-22 Actual		-	80,498	(202,486)	11,954,170	103,920	-	27,183	-	(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	-	(103,920)	-	(219,095)	(525,501)
67	May-22 Actual		-	78,000	(202,486)	11,583,221	-	-	-	(219,095)	(421,581)
68	Jun-22 Actual		-	77,156	(202,486)	11,457,891	-	-	-	(219,095)	(421,581)
69	Jul-22 Actual		-	76,306	(202,486)	11,331,711	-	-	-	(219,095)	(421,581)
70	Aug-22 Actual		-	75,451	(202,486)	11,204,676	-	-	-	(219,095)	(421,581)
71	Sep-22 Actual		-	74,589	(202,486)	11,076,779	-	-	-	(219,095)	(421,581)
72	Oct-22 Actual		-	73,722	(202,486)	10,948,015	-	-	-	(219,095)	(421,581)
73	Nov-22 Actual		-	72,849	(202,486)	10,818,378	-	-	-	(219,095)	(421,581)
74	Dec-22 Actual		-	71,971	(202,486)	10,687,863	-	-	-	(219,095)	(421,581)
75	Jan-23 Actual		-	71,086	(202,486)	10,556,463	-	-	-	(219,095)	(421,581)
76	Feb-23 Actual		-	70,195	(202,486)	10,424,172	-	-	-	(219,095)	(421,581)
77	Mar-23 Actual		-	69,298	(202,486)	10,290,984	-	-	-	(219,095)	(421,581)
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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization of Coal Ash ARO and Landfill Closure

For the Expense Month of February 2022

Line No.	Period (1)	Coal Ash ARO				Coal Ash ARO and Landfill Closure		Landfill Closure		Total Recovery (11)=(5)+(8)+(10)	
		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)	Cash Spend (9)		Recovery: 1-Yr Amort. (10)
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	#####	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (39,095,141)

Monthly Amortization Amount

\$ (525,501)

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending February 2022

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	180,020	25,041	402	-	204,659
Dollars	\$ 16,411.97	\$ -	\$ 32.16	\$ -	\$ 16,379.81
\$/Allowance	\$ 0.091167	\$ -	\$ 0.080000	\$ -	\$ 0.080035
NO_x Allowances - Annual					
Quantity	11,025	3,292	487	-	13,830
Dollars	\$ 2,480.25	\$ -	\$ 82.79	\$ -	\$ 2,397.46
\$/Allowance	\$ 0.224966	\$ -	\$ 0.170000	\$ -	\$ 0.173352
NO_x Allowances - Seasonal					
Quantity	953	-	-	-	953
Dollars	\$ 206.32	\$ -	\$ -	\$ -	\$ 206.32
\$/Allowance	\$ 0.216491	\$ -	\$ -	\$ -	\$ 0.216491
Total Emission Allowances					
Quantity	191,998	28,333	889	-	219,442
Dollars	\$ 19,098.54	\$ -	\$ 114.95	\$ -	\$ 18,983.59

(a) Note: The SO₂ 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 February 2022

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
1	Ammonia	502020	\$ 88,863	\$ 88,863
2	Lime	502040	1,775,280	1,775,280
3	Hydrated Lime	502040	74,710	74,710
4	Magnesium Hydroxide ^(Note 1)	502040	-	-
5	Total		\$ 1,938,853	\$ 1,938,853

Note 1: East Bend Station's Flue Gas Desulfurization is a Magnesium Oxide based technology. It is the only one of its kind within Duke Energy's current portfolio. The Magnesium Oxide based technology requires a particular chemical construct of lime to function properly, and as such, the scrubber utilizes a "quicklime" material versus the nominal limestone which is considered a Calcium Carbonate based technology. In March of 2020 the vendor's mining facility supplying the quicklime material to East Bend discontinued operations. This facility's quicklime product contained the proper constituents including the Magnesium required for East Bend's optimal scrubber performance. Upon learning of this facility's closure, Duke Energy Kentucky began exploring different solutions to obtain scrubber material with the correct chemical composition, including different mine sources and adding chemicals to produce the correct product. The vendor made the commitment to continue meeting contractual obligations by supplying East Bend with a blended product (Dolomitic Lime and Quicklime) from an alternate facility. Unfortunately, contractually meeting the specifications of the blended commodity, the reactivity of the substitute dolomitic lime is insufficient and as a result, East Bend found itself not able to meet its scrubber limit. In order for East Bend Station to meet its SO2 scrubbing limit, the Company must add an additional chemical reagent, Magnesium Hydroxide, to the substitute blended lime to produce the correct chemical reaction and achieve East Bend's SO2 limit.

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 2022

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge (2) - (5)
Mar-21	\$ 11,796,806			\$ 816,104	\$ 10,980,702
Apr-21	9,657,401			735,692	8,921,709
May-21	9,828,781			821,674	9,007,107
Jun-21	12,642,763			966,308	11,676,455
Jul-21	15,525,798			1,286,441	14,239,357
Aug-21	15,008,156			1,219,521	13,788,635
Sep-21	14,902,237			1,012,999	13,889,238
Oct-21	10,769,498			595,584	10,173,914
Nov-21	11,587,106			375,740	11,211,366
Dec-21	16,001,721			510,096	15,491,625
Jan-22	21,318,327			611,393	20,706,934
Feb-22	\$ 19,751,655			\$ 604,732	\$ 19,146,923
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 13,269,497
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 30,837,624
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					43.03%

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)
Mar-21	\$ 15,438,614	\$ 4,686,246	\$ (42,102)	\$ 1,074,699	\$ 14,363,915	\$ 9,719,771
Apr-21	16,161,183	4,584,228	212,405	1,217,582	14,943,601	10,146,968
May-21	15,898,669	4,475,095	363,547	1,279,659	14,619,010	9,780,368
Jun-21	17,667,857	4,997,702	408,011	1,303,401	16,364,456	10,958,743
Jul-21	19,479,472	5,416,023	732,198	1,536,088	17,943,384	11,795,163
Aug-21	18,523,410	5,404,345	(177,636)	1,506,300	17,017,110	11,790,401
Sep-21	19,327,541	5,885,205	345,938	1,254,161	18,073,380	11,842,237
Oct-21	16,177,896	5,136,292	(259,585)	888,473	15,289,423	10,412,716
Nov-21	18,281,877	4,737,949	3,266,165	482,562	17,799,315	9,795,201
Dec-21	20,902,282	5,194,127	5,087,696	488,554	20,413,728	10,131,905
Jan-22	23,718,760	5,133,317	7,974,524	455,146	23,263,614	10,155,773
Feb-22	\$ 21,218,594	\$ 4,675,522	\$ 5,624,922	\$ 492,009	\$ 20,726,585	\$ 10,426,141
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 17,568,127	\$ 10,579,616
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 30,837,624	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					56.97%	

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 2022

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,184,005
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	13,276,617
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		8.92%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,563,743
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	10,548,050
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		14.82%

Effective Date for Billing: May 3, 2022

Submitted by: /s/ Theodore H. Czupik Jr.

Title: Rates & Regulatory Strategy Manager

Date Submitted: April 22, 2022

ES FORM 1.10

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

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of March 2022

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	\$ 58,386,105
2	RB ÷ 12 months	(1) ÷ 12	\$ 4,865,509
3	Pretax Rate of Return (ROR)	ES Form 1.20	7.905%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 384,618
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 2,271,237
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 2,655,855
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	97.81%
9	Jurisdictional E(m)	(7) x (8)	\$ 2,597,691
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ 150,057
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 2,747,748
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 58,164

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	43.09%	56.91%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 1,184,005	\$ 1,563,743
16	<u>R(m)</u> 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	\$ 13,276,617	\$ 10,548,050
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	8.92%	14.82%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 30,814,215	97.81%
19	Sales for Resale	Company Records	\$ 689,648	2.19%
20	Total Revenue		\$ 31,503,863	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	5.835%	1.710%	0.100%		0.100%
2	Long-term Debt	45.931%	4.028%	1.850%		1.850%
3	Common Equity	48.234%	9.250%	4.462%	1.3346139	5.955%
4	Total	100.000%		6.412%		7.905%

Note: Capital structure, cost of debt and tax rate gross-up factor as approved in Case No. 2019-00271. 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 2022

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant) Excluding AFUDC	ES Form 2.10	\$ 67,432,275
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	-
3	Subtotal		\$ 67,432,275
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 18,935
6	Subtotal		\$ 18,935
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 4,480,372
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	4,584,733
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 9,065,105
12	Environmental Compliance Rate Base		\$ 58,386,105
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 138,791
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 70,421
16	Monthly Amortization Expense	ES Form 2.20	\$ 552,802
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 49
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 1,509,174
19	Total Environmental Compliance Operating Expense		\$ 2,271,237
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x 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		\$ 1,452,208
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		1,302,151
27	(Over) / Under Recovery		\$ 150,057

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 2022

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project No.	Description	Gross Plant in-Service Excl. AFUDC as of March-22	Accumulated Depreciation as of March-22	Net Plant in-Service as of March-22	CWIP Excluding AFUDC as of March-22	Accumulated Deferred ITC as of March-22	Accumulated Deferred Tax Balance as of March-22	Monthly Depreciation Expense	Monthly Property Tax Expense
				(2)-(3)					
1	EB020290 Lined Retention Basin West	\$ 10,324,588	\$ 845,592	\$ 9,478,996	\$ -	\$ -	\$ 1,223,741	\$ 21,251	\$ 10,604
2	EB020745 Lined Retention Basin East	\$ 10,280,726	\$ 567,779	\$ 9,712,947	\$ -	\$ -	\$ 326,167	\$ 21,161	\$ 10,865
3	EB020298 East Bend SW/PW Reroute	\$ 29,882,379	\$ 2,196,563	\$ 27,685,816	\$ -	\$ -	\$ 2,756,096	\$ 61,500	\$ 30,971
4	EB021281 East Bend Landfill Cell 2	\$ 16,944,582	\$ 870,438	\$ 16,074,144	\$ -	\$ -	\$ 278,729	\$ 34,879	\$ 17,981
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 67,432,275	\$ 4,480,372	\$ 62,951,903	\$ -	\$ -	\$ 4,584,733	\$ 138,791	\$ 70,421

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Amortization of Coal Ash ARO and Landfill Closure

For the Expense Month of March 2022

Line No.	Period (1)	Coal Ash ARO				Coal Ash ARO and Landfill Closure		Landfill Closure		Total Recovery (11)=(5)+(8)+(10)
		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)	Cash Spend (9)	
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	-	-	291,152	-
3	Jan-17 Actual	358,148	-	43,243	-	8,182,238	-	-	13,108	-
4	Feb-17 Actual	424,021	-	40,351	-	8,646,610	-	-	14,281	-
5	Mar-17 Actual	692,184	(26,763)	44,724	-	9,356,755	-	-	20,225	-
6	Apr-17 Actual	254,067	-	50,949	-	9,661,771	-	-	30,324	-
7	May-17 Actual	608,377	-	56,141	-	10,326,289	-	-	34,997	-
8	Jun-17 Actual	265,619	(26,763)	53,472	-	10,618,617	-	-	45,594	-
9	Jul-17 Actual	220,636	-	51,558	-	10,890,811	-	-	30,629	-
10	Aug-17 Actual	272,053	-	47,731	-	11,210,595	-	-	17,432	-
11	Sep-17 Actual	233,743	(26,763)	44,389	-	11,461,964	-	-	23,200	-
12	Oct-17 Actual	444,793	-	60,670	-	11,967,427	-	-	47,545	-
13	Nov-17 Actual	525,770	-	68,573	-	12,561,770	-	-	33,047	-
14	Dec-17 Actual	2,482,493	(26,763)	82,850	-	15,100,350	-	-	18,362	-
15	Jan-18 Actual	510,525	-	91,185	-	15,702,060	-	-	18,843	-
16	Feb-18 Actual	89,648	-	91,534	-	15,883,242	-	-	-	-
17	Mar-18 Actual	396,977	(26,763)	93,696	-	16,347,152	-	-	14,037	-
18	Apr-18 Actual	132,294	-	111,722	-	16,591,168	173,000	-	36,260	-
19	May-18 Actual	-	-	112,480	-	16,703,648	100,234	-	88,888	-
20	Jun-18 Actual	-	-	111,870	(202,486)	16,613,032	150,901	(173,000)	128,843	(375,486)
21	Jul-18 Actual	-	-	111,255	(202,486)	16,521,801	196,585	(100,234)	16	(302,720)
22	Aug-18 Actual	-	-	110,637	(202,486)	16,429,952	321,815	(150,901)	29,844	(353,387)
23	Sep-18 Actual	-	-	110,014	(202,486)	16,337,480	275,135	(196,585)	-	(399,071)
24	Oct-18 Actual	-	-	109,387	(202,486)	16,244,381	69,886	(321,815)	-	(524,301)
25	Nov-18 Actual	-	-	108,756	(202,486)	16,150,651	238,428	(275,135)	(2,498)	(477,621)
26	Dec-18 Actual	-	-	108,121	(202,486)	16,056,286	263,037	(69,886)	-	(272,372)
27	Jan-19 Actual	-	-	107,481	(202,486)	15,961,281	177,996	(238,428)	-	(440,914)
28	Feb-19 Actual	-	-	106,837	(202,486)	15,865,632	150,851	(263,037)	-	(465,523)
29	Mar-19 Actual	-	-	106,188	(202,486)	15,769,334	408,609	(177,996)	-	(380,482)
30	Apr-19 Actual	-	-	105,535	(202,486)	15,672,383	1,588,547	(150,851)	-	(353,337)
31	May-19 Actual	-	-	104,878	(202,486)	15,574,775	1,641,055	(408,609)	-	(611,095)
32	Jun-19 Actual	-	-	104,216	(202,486)	15,476,505	1,423,233	(1,588,547)	-	(1,791,033)
33	Jul-19 Actual	-	-	103,550	(202,486)	15,377,569	1,368,585	(1,641,055)	-	(1,843,541)
34	Aug-19 Actual	-	-	102,880	(202,486)	15,277,963	487,759	(1,423,233)	-	(1,625,719)
35	Sep-19 Actual	-	-	102,204	(202,486)	15,177,681	47,477	(1,368,585)	-	(1,571,071)
36	Oct-19 Actual	-	-	101,524	(202,486)	15,076,719	(18,595)	(487,759)	-	(690,245)
37	Nov-19 Actual	-	-	100,840	(202,486)	14,975,073	330,375	(47,477)	-	(249,963)
38	Dec-19 Actual	-	-	100,151	(202,486)	14,872,738	121,640	18,595	-	(183,891)
39	Jan-20 Actual	-	-	99,457	(202,486)	14,769,709	77,416	(330,375)	-	(532,861)
40	Feb-20 Actual	-	-	98,759	(202,486)	14,665,982	25,184	(121,640)	-	(324,126)
41	Mar-20 Actual	-	-	98,055	(202,486)	14,561,551	27,631	(77,416)	-	(279,902)
42	Apr-20 Actual	-	-	97,347	(202,486)	14,456,412	50,807	(25,184)	-	(227,670)
43	May-20 Actual	-	-	96,635	(202,486)	14,350,561	82,538	(27,631)	-	(230,117)
44	Jun-20 Actual	-	-	95,917	(202,486)	14,243,992	133,817	(50,807)	-	(253,293)
45	Jul-20 Actual	-	-	95,194	(202,486)	14,136,700	127,493	(82,538)	-	(285,024)
46	Aug-20 Actual	-	-	94,467	(202,486)	14,028,681	64,152	(133,817)	-	(336,303)
47	Sep-20 Actual	-	-	93,735	(202,486)	13,919,930	127,860	(127,493)	-	(329,979)
48	Oct-20 Actual	-	-	92,997	(202,486)	13,810,441	226,553	(64,152)	-	(266,638)
49	Nov-20 Actual	-	-	92,255	(202,486)	13,700,210	423,320	(127,860)	5,465	(330,346)
50	Dec-20 Actual	\$ -	\$ -	\$ 91,508	\$ (202,486)	\$13,589,232	\$ 295,353	\$ (226,553)	\$ 17,705	\$ (429,039)

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization of Coal Ash ARO and Landfill Closure

For the Expense Month of March 2022

Line No.	Period (1)	Coal Ash ARO				Coal Ash ARO and Landfill Closure			Landfill Closure		Total Recovery (11)=(5)+(8)+(10)
		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)	Cash Spend (9)	Recovery: 1-Yr Amort. (10)	
51	Jan-21 Actual		\$ -	\$ 90,756	\$ (202,486)	\$13,477,502	\$ 80,328	\$ (423,320)	\$ 19,334	\$ -	\$ (625,806)
52	Feb-21 Actual		-	89,998	(202,486)	13,365,014	86,810	(295,353)	4,714	-	(497,839)
53	Mar-21 Actual		-	89,235	(202,486)	13,251,763	71,335	(80,328)	20,845	-	(282,814)
54	Apr-21 Actual		-	88,468	(202,486)	13,137,745	90,503	(86,810)	23,069	-	(289,296)
55	May-21 Actual		-	87,695	(202,486)	13,022,954	208,821	(71,335)	11,618	-	(273,821)
56	Jun-21 Actual		-	86,916	(202,486)	12,907,384	245,017	(90,503)	10,988	-	(292,989)
57	Jul-21 Actual		-	86,133	(202,486)	12,791,031	102,270	(208,821)	-	-	(411,307)
58	Aug-21 Actual		-	85,344	(202,486)	12,673,889	-	(245,017)	144,042	-	(447,503)
59	Sep-21 Actual		-	84,550	(202,486)	12,555,953	-	(102,270)	309,800	-	(304,756)
60	Oct-21 Actual		-	83,750	(202,486)	12,437,217	-	-	411,865	-	(202,486)
61	Nov-21 Actual		-	82,945	(202,486)	12,317,676	-	-	388,963	-	(202,486)
62	Dec-21 Actual		-	82,135	(202,486)	12,197,325	-	-	194,124	-	(202,486)
63	Jan-22 Actual		-	81,319	(202,486)	12,076,158	-	-	105,294	-	(202,486)
64	Feb-22 Actual		-	80,498	(202,486)	11,954,170	103,920	-	27,183	-	(202,486)
65	Mar-22 Actual		-	79,671	(202,486)	11,831,355	131,221	-	-	-	(202,486)
66	Apr-22 Actual		-	78,838	(202,486)	11,707,707	-	(103,920)	-	(219,095)	(525,501)
67	May-22 Actual		-	78,000	(202,486)	11,583,221	-	(131,221)	-	(219,095)	(552,802)
68	Jun-22 Actual		-	77,156	(202,486)	11,457,891	-	-	-	(219,095)	(421,581)
69	Jul-22 Actual		-	76,306	(202,486)	11,331,711	-	-	-	(219,095)	(421,581)
70	Aug-22 Actual		-	75,451	(202,486)	11,204,676	-	-	-	(219,095)	(421,581)
71	Sep-22 Actual		-	74,589	(202,486)	11,076,779	-	-	-	(219,095)	(421,581)
72	Oct-22 Actual		-	73,722	(202,486)	10,948,015	-	-	-	(219,095)	(421,581)
73	Nov-22 Actual		-	72,849	(202,486)	10,818,378	-	-	-	(219,095)	(421,581)
74	Dec-22 Actual		-	71,971	(202,486)	10,687,863	-	-	-	(219,095)	(421,581)
75	Jan-23 Actual		-	71,086	(202,486)	10,556,463	-	-	-	(219,095)	(421,581)
76	Feb-23 Actual		-	70,195	(202,486)	10,424,172	-	-	-	(219,095)	(421,581)
77	Mar-23 Actual		-	69,298	(202,486)	10,290,984	-	-	-	(219,095)	(421,581)
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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization of Coal Ash ARO and Landfill Closure

For the Expense Month of March 2022

Line No.	Period (1)	Coal Ash ARO				Coal Ash ARO and Landfill Closure		Landfill Closure		Total Recovery (11)=(5)+(8)+(10)	
		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)	Cash Spend (9)		Recovery: 1-Yr Amort. (10)
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	#####	\$ -	\$ -	\$ -	\$ -	\$ -	(202,486)
						\$ 12,298,902	\$ (12,298,902)	\$ 2,629,139	\$ (2,629,140)	\$ -	(39,226,362)

Monthly Amortization Amount

\$ (552,802)

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending March 2022

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	204,659	-	191	-	204,468
Dollars	\$ 16,379.81	\$ -	\$ 15.00	\$ -	\$ 16,364.81
\$/Allowance	\$ 0.080035	\$ -	\$ 0.078534	\$ -	\$ 0.080036
NO_x Allowances - Annual					
Quantity	13,830	-	198	-	13,632
Dollars	\$ 2,397.46	\$ -	\$ 33.66	\$ -	\$ 2,363.80
\$/Allowance	\$ 0.173352	\$ -	\$ 0.170000	\$ -	\$ 0.173401
NO_x Allowances - Seasonal					
Quantity	953	-	-	-	953
Dollars	\$ 206.32	\$ -	\$ -	\$ -	\$ 206.32
\$/Allowance	\$ 0.216491	\$ -	\$ -	\$ -	\$ 0.216491
Total Emission Allowances					
Quantity	219,442	-	389	-	219,053
Dollars	\$ 18,983.59	\$ -	\$ 48.66	\$ -	\$ 18,934.93

(a) Note: The SO₂ 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 March 2022

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
1	Ammonia	502020	\$ 112,733	\$ 112,733
2	Lime	502040	1,315,036	1,315,036
3	Hydrated Lime	502040	81,404	81,404
4	Magnesium Hydroxide ^(Note 1)	502040	-	-
5	Total		\$ 1,509,174	\$ 1,509,174

Note 1: East Bend Station's Flue Gas Desulfurization is a Magnesium Oxide based technology. It is the only one of its kind within Duke Energy's current portfolio. The Magnesium Oxide based technology requires a particular chemical construct of lime to function properly, and as such, the scrubber utilizes a "quicklime" material versus the nominal limestone which is considered a Calcium Carbonate based technology. In March of 2020 the vendor's mining facility supplying the quicklime material to East Bend discontinued operations. This facility's quicklime product contained the proper constituents including the Magnesium required for East Bend's optimal scrubber performance. Upon learning of this facility's closure, Duke Energy Kentucky began exploring different solutions to obtain scrubber material with the correct chemical composition, including different mine sources and adding chemicals to produce the correct product. The vendor made the commitment to continue meeting contractual obligations by supplying East Bend with a blended product (Dolomitic Lime and Quicklime) from an alternate facility. Unfortunately, contractually meeting the specifications of the blended commodity, the reactivity of the substitute dolomitic lime is insufficient and as a result, East Bend found itself not able to meet its scrubber limit. In order for East Bend Station to meet its SO2 scrubbing limit, the Company must add an additional chemical reagent, Magnesium Hydroxide, to the substitute blended lime to produce the correct chemical reaction and achieve East Bend's SO2 limit.

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 2022

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge (2) - (5)
Apr-21	\$ 9,657,401			\$ 735,692	\$ 8,921,709
May-21	9,828,781			821,674	9,007,107
Jun-21	12,642,763			966,308	11,676,455
Jul-21	15,525,798			1,286,441	14,239,357
Aug-21	15,008,156			1,219,521	13,788,635
Sep-21	14,902,237			1,012,999	13,889,238
Oct-21	10,769,498			595,584	10,173,914
Nov-21	11,587,106			375,740	11,211,366
Dec-21	16,001,721			510,096	15,491,625
Jan-22	21,318,327			611,393	20,706,934
Feb-22	19,751,655			604,732	19,146,923
Mar-22	\$ 11,607,297			\$ 541,161	\$ 11,066,136
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 13,276,617
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 30,814,215
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					43.09%

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-21	\$ 16,161,183	\$ 4,584,228	\$ 212,405	\$ 1,217,582	\$ 14,943,601	\$ 10,146,968
May-21	15,898,669	4,475,095	363,547	1,279,659	14,619,010	9,780,368
Jun-21	17,667,857	4,997,702	408,011	1,303,401	16,364,456	10,958,743
Jul-21	19,479,472	5,416,023	732,198	1,536,088	17,943,384	11,795,163
Aug-21	18,523,410	5,404,345	(177,636)	1,506,300	17,017,110	11,790,401
Sep-21	19,327,541	5,885,205	345,938	1,254,161	18,073,380	11,842,237
Oct-21	16,177,896	5,136,292	(259,585)	888,473	15,289,423	10,412,716
Nov-21	18,281,877	4,737,949	3,266,165	482,562	17,799,315	9,795,201
Dec-21	20,902,282	5,194,127	5,087,696	488,554	20,413,728	10,131,905
Jan-22	23,718,760	5,133,317	7,974,524	455,146	23,263,614	10,155,773
Feb-22	21,218,594	4,675,522	5,624,922	492,009	20,726,585	10,426,141
Mar-22	\$ 14,758,559	\$ 4,840,248	\$ (183,660)	\$ 760,990	\$ 13,997,569	\$ 9,340,981
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 17,537,598	\$ 10,548,050
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 30,814,215	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					56.91%	

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 April 2022

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,328,775
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	13,456,112
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		9.87%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,677,503
Jurisdictional R(m)	ES Form 1.10, Line 16		\$	10,155,496
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		16.52%

Effective Date for Billing: June 1, 2022

Submitted by: /s/ Dana R. Patten

Title: Lead Rates & Regulatory Strategy Analyst

Date Submitted: May 20, 2022

ES FORM 1.10

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

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of April 2022

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	\$ 58,211,159
2	RB ÷ 12 months	(1) ÷ 12	\$ 4,850,930
3	Pretax Rate of Return (ROR)	ES Form 1.20	7.905%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 383,466
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 1,707,449
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 2,090,915
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	97.86%
9	Jurisdictional E(m)	(7) x (8)	\$ 2,046,169
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ 960,109
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 3,006,278
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 44,746

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	44.20%	55.80%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 1,328,775	\$ 1,677,503
16	R(m) Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	ES Form 3.00 ES Form 3.00	\$ 13,456,112	\$ 10,155,496
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	9.87%	16.52%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 30,445,780	97.86%
19	Sales for Resale	Company Records	\$ 666,933	2.14%
20	Total Revenue		\$ 31,112,713	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	5.835%	1.710%	0.100%		0.100%
2	Long-term Debt	45.931%	4.028%	1.850%		1.850%
3	Common Equity	48.234%	9.250%	4.462%	1.3346139	5.955%
4	Total	100.000%		6.412%		7.905%

Note: Capital structure, cost of debt and tax rate gross-up factor as approved in Case No. 2019-00271. 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 April 2022

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant) Excluding AFUDC	ES Form 2.10	\$ 67,432,275
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	-
3	Subtotal		\$ 67,432,275
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 18,935
6	Subtotal		\$ 18,935
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 4,619,162
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	4,620,889
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 9,240,051
12	Environmental Compliance Rate Base		\$ 58,211,159
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 138,791
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 70,266
16	Monthly Amortization Expense	ES Form 2.20	\$ 558,800
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ -
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 939,592
19	Total Environmental Compliance Operating Expense		\$ 1,707,449
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NOx Allowances Sales		-
23	Total Emission Allowance Sales		\$ -
24	<u>(Over) / Under Recovery</u>		
25	Adjusted Jurisdictional E(m) Authorized for Expense Month two Months Prior		\$ 2,799,221
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		1,839,112
27	(Over) / Under Recovery		\$ 960,109

Note: (Over) recovery will be deducted from Jurisdictional E(m)
 Under recovery will be added to Jurisdictional E(m)
 Note: NOx proceeds from sale in February 2022

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 April 2022

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
Project No.	Description	Gross Plant in-Service Excl. AFUDC as of April-22	Accumulated Depreciation as of April-22	Net Plant in-Service as of April-22	CWIP Excluding AFUDC as of April-22	Accumulated Deferred ITC as of April-22	Accumulated Deferred Tax Balance as of April-22	Monthly Depreciation Expense	Monthly Property Tax Expense
				(2)-(3)					
1	EB020290 Lined Retention Basin West	\$ 10,324,588	\$ 866,843	\$ 9,457,744	\$ -	\$ -	\$ 1,225,708	\$ 21,251	\$ 10,580
2	EB020745 Lined Retention Basin East	\$ 10,280,726	\$ 588,939	\$ 9,691,787	\$ -	\$ -	\$ 334,236	\$ 21,161	\$ 10,842
3	EB020298 East Bend SW/PW Reroute	\$ 29,882,379	\$ 2,258,063	\$ 27,624,316	\$ -	\$ -	\$ 2,767,167	\$ 61,500	\$ 30,902
4	EB021281 East Bend Landfill Cell 2	\$ 16,944,582	\$ 905,316	\$ 16,039,265	\$ -	\$ -	\$ 293,778	\$ 34,879	\$ 17,942
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 67,432,275	\$ 4,619,162	\$ 62,813,113	\$ -	\$ -	\$ 4,620,889	\$ 138,791	\$ 70,266

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Amortization of Coal Ash ARO and Landfill Closure

For the Expense Month of April 2022

Line No.	Period (1)	Coal Ash ARO					Coal Ash ARO and Landfill Closure		Landfill Closure		Total Recovery (11)=(5)+(8)+(10)
		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)	Cash Spend (9)	Recovery: 1-Yr Amort. (10)	
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	-	-	-	291,152	-
3	Jan-17	Actual 358,148	-	43,243	-	8,182,238	-	-	-	13,108	-
4	Feb-17	Actual 424,021	-	40,351	-	8,646,610	-	-	-	14,281	-
5	Mar-17	Actual 692,184	(26,763)	44,724	-	9,356,755	-	-	-	20,225	-
6	Apr-17	Actual 254,067	-	50,949	-	9,661,771	-	-	-	30,324	-
7	May-17	Actual 608,377	-	56,141	-	10,326,289	-	-	-	34,997	-
8	Jun-17	Actual 265,619	(26,763)	53,472	-	10,618,617	-	-	-	45,594	-
9	Jul-17	Actual 220,636	-	51,558	-	10,890,811	-	-	-	30,629	-
10	Aug-17	Actual 272,053	-	47,731	-	11,210,595	-	-	-	17,432	-
11	Sep-17	Actual 233,743	(26,763)	44,389	-	11,461,964	-	-	-	23,200	-
12	Oct-17	Actual 444,793	-	60,670	-	11,967,427	-	-	-	47,545	-
13	Nov-17	Actual 525,770	-	68,573	-	12,561,770	-	-	-	33,047	-
14	Dec-17	Actual 2,482,493	(26,763)	82,850	-	15,100,350	-	-	-	18,362	-
15	Jan-18	Actual 510,525	-	91,185	-	15,702,060	-	-	-	18,843	-
16	Feb-18	Actual 89,648	-	91,534	-	15,883,242	-	-	-	88,888	-
17	Mar-18	Actual 396,977	(26,763)	93,696	-	16,347,152	-	-	-	14,037	-
18	Apr-18	Actual 132,294	-	111,722	-	16,591,168	173,000	-	-	36,260	-
19	May-18	Actual -	-	112,480	-	16,703,648	100,234	-	-	88,888	-
20	Jun-18	Actual -	-	111,870	(202,486)	16,613,032	150,901	(173,000)	128,843	-	(375,486)
21	Jul-18	Actual -	-	111,255	(202,486)	16,521,801	196,585	(100,234)	16	-	(302,720)
22	Aug-18	Actual -	-	110,637	(202,486)	16,429,952	321,815	(150,901)	29,844	-	(353,387)
23	Sep-18	Actual -	-	110,014	(202,486)	16,337,480	275,135	(196,585)	-	-	(399,071)
24	Oct-18	Actual -	-	109,387	(202,486)	16,244,381	69,886	(321,815)	-	-	(524,301)
25	Nov-18	Actual -	-	108,756	(202,486)	16,150,651	238,428	(275,135)	(2,498)	-	(477,621)
26	Dec-18	Actual -	-	108,121	(202,486)	16,056,286	263,037	(69,886)	-	-	(272,372)
27	Jan-19	Actual -	-	107,481	(202,486)	15,961,281	177,996	(238,428)	-	-	(440,914)
28	Feb-19	Actual -	-	106,837	(202,486)	15,865,632	150,851	(263,037)	-	-	(465,523)
29	Mar-19	Actual -	-	106,188	(202,486)	15,769,334	408,609	(177,996)	-	-	(380,482)
30	Apr-19	Actual -	-	105,535	(202,486)	15,672,383	1,588,547	(150,851)	-	-	(353,337)
31	May-19	Actual -	-	104,878	(202,486)	15,574,775	1,641,055	(408,609)	-	-	(611,095)
32	Jun-19	Actual -	-	104,216	(202,486)	15,476,505	1,423,233	(1,588,547)	-	-	(1,791,033)
33	Jul-19	Actual -	-	103,550	(202,486)	15,377,569	1,368,585	(1,641,055)	-	-	(1,843,541)
34	Aug-19	Actual -	-	102,880	(202,486)	15,277,963	487,759	(1,423,233)	-	-	(1,625,719)
35	Sep-19	Actual -	-	102,204	(202,486)	15,177,681	47,477	(1,368,585)	-	-	(1,571,071)
36	Oct-19	Actual -	-	101,524	(202,486)	15,076,719	(18,595)	(487,759)	-	-	(690,245)
37	Nov-19	Actual -	-	100,840	(202,486)	14,975,073	330,375	(47,477)	-	-	(249,963)
38	Dec-19	Actual -	-	100,151	(202,486)	14,872,738	121,640	18,595	-	-	(183,891)
39	Jan-20	Actual -	-	99,457	(202,486)	14,769,709	77,416	(330,375)	-	-	(532,861)
40	Feb-20	Actual -	-	98,759	(202,486)	14,665,982	25,184	(121,640)	-	-	(324,126)
41	Mar-20	Actual -	-	98,055	(202,486)	14,561,551	27,631	(77,416)	-	-	(279,902)
42	Apr-20	Actual -	-	97,347	(202,486)	14,456,412	50,807	(25,184)	-	-	(227,670)
43	May-20	Actual -	-	96,635	(202,486)	14,350,561	82,538	(27,631)	-	-	(230,117)
44	Jun-20	Actual -	-	95,917	(202,486)	14,243,992	133,817	(50,807)	-	-	(253,293)
45	Jul-20	Actual -	-	95,194	(202,486)	14,136,700	127,493	(82,538)	-	-	(285,024)
46	Aug-20	Actual -	-	94,467	(202,486)	14,028,681	64,152	(133,817)	-	-	(336,303)
47	Sep-20	Actual -	-	93,735	(202,486)	13,919,930	127,860	(127,493)	-	-	(329,979)
48	Oct-20	Actual -	-	92,997	(202,486)	13,810,441	226,553	(64,152)	-	-	(266,638)
49	Nov-20	Actual -	-	92,255	(202,486)	13,700,210	423,320	(127,860)	5,465	-	(330,346)
50	Dec-20	Actual -	\$ -	\$ 91,508	\$ (202,486)	\$ 13,589,232	\$ 295,353	\$ (226,553)	\$ 17,705	\$ -	\$ (429,039)

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization of Coal Ash ARO and Landfill Closure

For the Expense Month of April 2022

Line No.	Period (1)	Coal Ash ARO					Coal Ash ARO and Landfill Closure		Landfill Closure		Total Recovery (11)=(5)+(8)+(10)
		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)	Cash Spend (9)	Recovery: 1-Yr Amort. (10)	
51	Jan-21	Actual	\$ -	\$ 90,756	\$(202,486)	\$ 13,477,502	\$ 80,328	\$(423,320)	\$ 19,334	\$ -	\$(625,806)
52	Feb-21	Actual	-	89,998	(202,486)	13,365,014	86,810	(295,353)	4,714	-	(497,839)
53	Mar-21	Actual	-	89,235	(202,486)	13,251,763	71,335	(80,328)	20,845	-	(282,814)
54	Apr-21	Actual	-	88,468	(202,486)	13,137,745	90,503	(86,810)	23,069	-	(289,296)
55	May-21	Actual	-	87,695	(202,486)	13,022,954	208,821	(71,335)	11,618	-	(273,821)
56	Jun-21	Actual	-	86,916	(202,486)	12,907,384	245,017	(90,503)	10,988	-	(292,989)
57	Jul-21	Actual	-	86,133	(202,486)	12,791,031	102,270	(208,821)	-	-	(411,307)
58	Aug-21	Actual	-	85,344	(202,486)	12,673,889	-	(245,017)	144,042	-	(447,503)
59	Sep-21	Actual	-	84,550	(202,486)	12,555,953	-	(102,270)	309,800	-	(304,756)
60	Oct-21	Actual	-	83,750	(202,486)	12,437,217	-	-	411,865	-	(202,486)
61	Nov-21	Actual	-	82,945	(202,486)	12,317,676	-	-	388,963	-	(202,486)
62	Dec-21	Actual	-	82,135	(202,486)	12,197,325	-	-	194,124	-	(202,486)
63	Jan-22	Actual	-	81,319	(202,486)	12,076,158	-	-	105,294	-	(202,486)
64	Feb-22	Actual	-	80,498	(202,486)	11,954,170	103,920	-	27,183	-	(202,486)
65	Mar-22	Actual	-	79,671	(202,486)	11,831,355	131,221	-	-	-	(202,486)
66	Apr-22	Actual	-	78,838	(202,486)	11,707,707	137,219	(103,920)	-	(219,095)	(525,501)
67	May-22	Actual	-	78,000	(202,486)	11,583,221	-	(131,221)	-	(219,095)	(552,802)
68	Jun-22	Actual	-	77,156	(202,486)	11,457,891	-	(137,219)	-	(219,095)	(558,800)
69	Jul-22	Actual	-	76,306	(202,486)	11,331,711	-	-	-	(219,095)	(421,581)
70	Aug-22	Actual	-	75,451	(202,486)	11,204,676	-	-	-	(219,095)	(421,581)
71	Sep-22	Actual	-	74,589	(202,486)	11,076,779	-	-	-	(219,095)	(421,581)
72	Oct-22	Actual	-	73,722	(202,486)	10,948,015	-	-	-	(219,095)	(421,581)
73	Nov-22	Actual	-	72,849	(202,486)	10,818,378	-	-	-	(219,095)	(421,581)
74	Dec-22	Actual	-	71,971	(202,486)	10,687,863	-	-	-	(219,095)	(421,581)
75	Jan-23	Actual	-	71,086	(202,486)	10,556,463	-	-	-	(219,095)	(421,581)
76	Feb-23	Actual	-	70,195	(202,486)	10,424,172	-	-	-	(219,095)	(421,581)
77	Mar-23	Actual	-	69,298	(202,486)	10,290,984	-	-	-	(219,095)	(421,581)
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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization of Coal Ash ARO and Landfill Closure

For the Expense Month of April 2022

Line No.	Period (1)	Coal Ash ARO					Coal Ash ARO and Landfill Closure		Landfill Closure		Total Recovery (11)=(5)+(8)+(10)
		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)	Cash Spend (9)	Recovery: 1-Yr Amort. (10)	
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)		\$ 12,436,121	\$ (12,436,121)	\$ 2,629,139	\$ (2,629,140)	\$ (39,363,581)

Monthly Amortization Amount

\$ (558,800)

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending April 2022

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	204,468	-	-	-	204,468
Dollars	\$ 16,364.53	\$ -	-	\$ -	\$ 16,364.53
\$/Allowance	\$ 0.080035	\$ -	\$ -	\$ -	\$ 0.080035
NO_x Allowances - Annual					
Quantity	13,632	-	-	-	13,632
Dollars	\$ 2,363.80	\$ -	-	\$ -	\$ 2,363.80
\$/Allowance	\$ 0.173401	\$ -	\$ -	\$ -	\$ 0.173401
NO_x Allowances - Seasonal					
Quantity	953	-	-	-	953
Dollars	\$ 206.32	\$ -	\$ -	\$ -	\$ 206.32
\$/Allowance	\$ 0.216495	\$ -	\$ -	\$ -	\$ 0.216495
Total Emission Allowances					
Quantity	218,664	-	-	-	219,053
Dollars	\$ 18,934.65	\$ -	\$ -	\$ -	\$ 18,934.65

(a) Note: The SO₂ 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 April 2022

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
1	Ammonia	502020	\$ 94,533	\$ 94,533
2	Lime	502040	783,122	783,122
3	Hydrated Lime	502040	61,937	61,937
4	Magnesium Hydroxide ^(Note 1)	502040	-	-
5	Total		\$ 939,592	\$ 939,592

Note 1: East Bend Station's Flue Gas Desulfurization is a Magnesium Oxide based technology. It is the only one of its kind within Duke Energy's current portfolio. The Magnesium Oxide based technology requires a particular chemical construct of lime to function properly, and as such, the scrubber utilizes a "quicklime" material versus the nominal limestone which is considered a Calcium Carbonate based technology. In March of 2020 the vendor's mining facility supplying the quicklime material to East Bend discontinued operations. This facility's quicklime product contained the proper constituents including the Magnesium required for East Bend's optimal scrubber performance. Upon learning of this facility's closure, Duke Energy Kentucky began exploring different solutions to obtain scrubber material with the correct chemical composition, including different mine sources and adding chemicals to produce the correct product. The vendor made the commitment to continue meeting contractual obligations by supplying East Bend with a blended product (Dolomitic Lime and Quicklime) from an alternate facility. Unfortunately, contractually meeting the specifications of the blended commodity, the reactivity of the substitute dolomitic lime is insufficient and as a result, East Bend found itself not able to meet its scrubber limit. In order for East Bend Station to meet its SO2 scrubbing limit, the Company must add an additional chemical reagent, Magnesium Hydroxide, to the substitute blended lime to produce the correct chemical reaction and achieve East Bend's SO2 limit.

ES FORM 3.00

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

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

For the Expense Month of April 2022

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge
					(2) - (5)
May-21	\$ 9,828,781			\$ 821,674	\$ 9,007,107
Jun-21	12,642,763			966,308	11,676,455
Jul-21	15,525,798			1,286,441	14,239,357
Aug-21	15,008,156			1,219,521	13,788,635
Sep-21	14,902,237			1,012,999	13,889,238
Oct-21	10,769,498			595,584	10,173,914
Nov-21	11,587,106			375,740	11,211,366
Dec-21	16,001,721			510,096	15,491,625
Jan-22	21,318,327			611,393	20,706,934
Feb-22	19,751,655			604,732	19,146,923
Mar-22	11,607,297			541,161	11,066,136
Apr-22	\$ 12,082,416			\$ 1,006,766	\$ 11,075,650
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 13,456,112
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 30,445,780
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					44.20%

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)
May-21	\$ 15,898,669	\$ 4,475,095	\$ 363,547	\$ 1,279,659	\$ 14,619,010	\$ 9,780,368
Jun-21	17,667,857	4,997,702	408,011	1,303,401	16,364,456	10,958,743
Jul-21	19,479,472	5,416,023	732,198	1,536,088	17,943,384	11,795,163
Aug-21	18,523,410	5,404,345	(177,636)	1,506,300	17,017,110	11,790,401
Sep-21	19,327,541	5,885,205	345,938	1,254,161	18,073,380	11,842,237
Oct-21	16,177,896	5,136,292	(259,585)	888,473	15,289,423	10,412,716
Nov-21	18,281,877	4,737,949	3,266,165	482,562	17,799,315	9,795,201
Dec-21	20,902,282	5,194,127	5,087,696	488,554	20,413,728	10,131,905
Jan-22	23,718,760	5,133,317	7,974,524	455,146	23,263,614	10,155,773
Feb-22	21,218,594	4,675,522	5,624,922	492,009	20,726,585	10,426,141
Mar-22	14,758,559	4,840,248	(183,660)	760,990	13,997,569	9,340,981
Apr-22	\$ 9,200,787	\$ 2,373,083	\$ 559,030	\$ 832,346	\$ 8,368,441	\$ 5,436,328
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 16,989,668	\$ 10,155,496
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 30,445,780	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					55.80%	

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 May 2022

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,333,883
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	13,593,772
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		9.81%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,675,101
Jurisdictional R(m)	ES Form 1.10, Line 16		\$	9,976,457
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		16.79%

Effective Date for Billing: July 1, 2022

Submitted by: /s/ Libbie Miller

Title: Rates & Regulatory Strategy Manager

Date Submitted: June 21, 2022

ES FORM 1.10

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

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of May 2022

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	\$ 58,036,145
2	RB ÷ 12 months	(1) ÷ 12	\$ 4,836,345
3	Pretax Rate of Return (ROR)	ES Form 1.20	7.905%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 382,313
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 2,382,451
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 2,764,764
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	97.57%
9	Jurisdictional E(m)	(7) x (8)	\$ 2,697,580
10	Prior Period Adjustment (if necessary)	(A)	+ \$ -
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ 311,404
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 3,008,984
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 67,184

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	44.33%	55.67%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 1,333,883	\$ 1,675,101
16	R(m) Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	ES Form 3.00 ES Form 3.00	\$ 13,593,772	\$ 9,976,457
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	9.81%	16.79%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 30,663,647	97.57%
19	Sales for Resale	Company Records	\$ 763,908	2.43%
20	Total Revenue		\$ 31,427,555	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	5.835%	1.710%	0.100%		0.100%
2	Long-term Debt	45.931%	4.028%	1.850%		1.850%
3	Common Equity	48.234%	9.250%	4.462%	1.3346139	5.955%
4	Total	100.000%		6.412%		7.905%

Note: Capital structure, cost of debt and tax rate gross-up factor as approved in Case No. 2019-00271. 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 May 2022

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant) Excluding AFUDC	ES Form 2.10	\$ 67,432,275
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	-
3	Subtotal		\$ 67,432,275
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 18,870
6	Subtotal		\$ 18,870
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 4,757,953
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	4,657,048
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 9,415,001
12	Environmental Compliance Rate Base		\$ 58,036,145
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 138,791
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 70,110
16	Monthly Amortization Expense	ES Form 2.20	\$ 775,714
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 65
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 1,397,771
19	Total Environmental Compliance Operating Expense		\$ 2,382,451
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x 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		\$ 2,747,748
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		2,436,344
27	(Over) / Under Recovery		\$ 311,404

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 May 2022

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project No.	Description	Gross Plant in-Service Excl. AFUDC as of May-22	Accumulated Depreciation as of May-22	Net Plant in-Service as of May-22	CWIP Excluding AFUDC as of May-22	Accumulated Deferred ITC as of May-22	Accumulated Deferred Tax Balance as of May-22	Monthly Depreciation Expense	Monthly Property Tax Expense
				(2)-(3)					
1	EB020290 Lined Retention Basin West	\$ 10,324,588	\$ 888,095	\$ 9,436,493	\$ -	\$ -	\$ 1,227,676	\$ 21,251	\$ 10,556
2	EB020745 Lined Retention Basin East	\$ 10,280,726	\$ 610,100	\$ 9,670,626	\$ -	\$ -	\$ 342,305	\$ 21,161	\$ 10,818
3	EB020298 East Bend SW/PW Reroute	\$ 29,882,379	\$ 2,319,563	\$ 27,562,816	\$ -	\$ -	\$ 2,778,239	\$ 61,500	\$ 30,833
4	EB021281 East Bend Landfill Cell 2	\$ 16,944,582	\$ 940,195	\$ 16,004,387	\$ -	\$ -	\$ 308,827	\$ 34,879	\$ 17,903
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 67,432,275	\$ 4,757,953	\$ 62,674,322	\$ -	\$ -	\$ 4,657,048	\$ 138,791	\$ 70,110

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Amortization of Coal Ash ARO and Landfill Closure

For the Expense Month of May 2022

Line No.	Period (1)	Coal Ash ARO				Coal Ash ARO and Landfill Closure		Landfill Closure		Total Recovery (11)=(5)+(8)+(10)
		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)	Cash Spend (9)	
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	-	-	291,152	-
3	Jan-17 Actual	358,148	-	43,243	-	8,182,238	-	-	13,108	-
4	Feb-17 Actual	424,021	-	40,351	-	8,646,610	-	-	14,281	-
5	Mar-17 Actual	692,184	(26,763)	44,724	-	9,356,755	-	-	20,225	-
6	Apr-17 Actual	254,067	-	50,949	-	9,661,771	-	-	30,324	-
7	May-17 Actual	608,377	-	56,141	-	10,326,289	-	-	34,997	-
8	Jun-17 Actual	265,619	(26,763)	53,472	-	10,618,617	-	-	45,594	-
9	Jul-17 Actual	220,636	-	51,558	-	10,890,811	-	-	30,629	-
10	Aug-17 Actual	272,053	-	47,731	-	11,210,595	-	-	17,432	-
11	Sep-17 Actual	233,743	(26,763)	44,389	-	11,461,964	-	-	23,200	-
12	Oct-17 Actual	444,793	-	60,670	-	11,967,427	-	-	47,545	-
13	Nov-17 Actual	525,770	-	68,573	-	12,561,770	-	-	33,047	-
14	Dec-17 Actual	2,482,493	(26,763)	82,850	-	15,100,350	-	-	18,362	-
15	Jan-18 Actual	510,525	-	91,185	-	15,702,060	-	-	18,843	-
16	Feb-18 Actual	89,648	-	91,534	-	15,893,242	-	-	-	-
17	Mar-18 Actual	396,977	(26,763)	93,696	-	16,347,152	-	-	14,037	-
18	Apr-18 Actual	132,294	-	111,722	-	16,591,168	173,000	-	36,260	-
19	May-18 Actual	-	-	112,480	-	16,703,648	100,234	-	88,888	-
20	Jun-18 Actual	-	-	111,870	(202,486)	16,613,032	150,901	(173,000)	128,843	(375,486)
21	Jul-18 Actual	-	-	111,255	(202,486)	16,521,801	196,585	(100,234)	16	(302,720)
22	Aug-18 Actual	-	-	110,637	(202,486)	16,429,952	321,815	(150,901)	29,844	(353,387)
23	Sep-18 Actual	-	-	110,014	(202,486)	16,337,480	275,135	(196,585)	-	(399,071)
24	Oct-18 Actual	-	-	109,387	(202,486)	16,244,381	69,886	(321,815)	-	(524,301)
25	Nov-18 Actual	-	-	108,756	(202,486)	16,150,651	238,428	(275,135)	(2,498)	(477,621)
26	Dec-18 Actual	-	-	108,121	(202,486)	16,056,286	263,037	(69,886)	-	(272,372)
27	Jan-19 Actual	-	-	107,481	(202,486)	15,961,281	177,996	(238,428)	-	(440,914)
28	Feb-19 Actual	-	-	106,837	(202,486)	15,865,632	150,851	(263,037)	-	(465,523)
29	Mar-19 Actual	-	-	106,188	(202,486)	15,769,334	408,609	(177,996)	-	(380,482)
30	Apr-19 Actual	-	-	105,535	(202,486)	15,672,383	1,588,547	(150,851)	-	(353,337)
31	May-19 Actual	-	-	104,878	(202,486)	15,574,775	1,641,055	(408,609)	-	(611,095)
32	Jun-19 Actual	-	-	104,216	(202,486)	15,476,505	1,423,233	(1,588,547)	-	(1,791,033)
33	Jul-19 Actual	-	-	103,550	(202,486)	15,377,569	1,368,585	(1,641,055)	-	(1,843,541)
34	Aug-19 Actual	-	-	102,880	(202,486)	15,277,963	487,759	(1,423,233)	-	(1,625,719)
35	Sep-19 Actual	-	-	102,204	(202,486)	15,177,681	47,477	(1,368,585)	-	(1,571,071)
36	Oct-19 Actual	-	-	101,524	(202,486)	15,076,719	(18,595)	(487,759)	-	(690,245)
37	Nov-19 Actual	-	-	100,840	(202,486)	14,975,073	330,375	(47,477)	-	(249,963)
38	Dec-19 Actual	-	-	100,151	(202,486)	14,872,738	121,640	18,595	-	(183,891)
39	Jan-20 Actual	-	-	99,457	(202,486)	14,769,709	77,416	(330,375)	-	(532,861)
40	Feb-20 Actual	-	-	98,759	(202,486)	14,665,982	25,184	(121,640)	-	(324,126)
41	Mar-20 Actual	-	-	98,055	(202,486)	14,561,551	27,631	(77,416)	-	(279,902)
42	Apr-20 Actual	-	-	97,347	(202,486)	14,456,412	50,807	(25,184)	-	(227,670)
43	May-20 Actual	-	-	96,635	(202,486)	14,350,561	82,538	(27,631)	-	(230,117)
44	Jun-20 Actual	-	-	95,917	(202,486)	14,243,992	133,817	(50,807)	-	(253,293)
45	Jul-20 Actual	-	-	95,194	(202,486)	14,136,700	127,493	(82,538)	-	(285,024)
46	Aug-20 Actual	-	-	94,467	(202,486)	14,028,681	64,152	(133,817)	-	(336,303)
47	Sep-20 Actual	-	-	93,735	(202,486)	13,919,930	127,860	(127,493)	-	(329,979)
48	Oct-20 Actual	-	-	92,997	(202,486)	13,810,441	226,553	(64,152)	-	(266,638)
49	Nov-20 Actual	-	-	92,255	(202,486)	13,700,210	423,320	(127,860)	5,465	(330,346)
50	Dec-20 Actual	-	\$ -	\$ 91,508	\$ (202,486)	\$ 13,589,232	\$ 295,353	\$ (226,553)	\$ 17,705	\$ (429,039)

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization of Coal Ash ARO and Landfill Closure

For the Expense Month of May 2022

Line No.	Period (1)	Coal Ash ARO				Coal Ash ARO and Landfill Closure		Landfill Closure		Total Recovery (11)=(5)+(8)+(10)	
		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)	Cash Spend (9)		Recovery: 1-Yr Amort. (10)
51	Jan-21 Actual		\$ -	\$ 90,756	\$ (202,486)	\$13,477,502	\$ 80,328	\$ (423,320)	\$ 19,334	\$ -	\$ (625,806)
52	Feb-21 Actual		-	89,998	(202,486)	13,365,014	86,810	(295,353)	4,714	-	(497,839)
53	Mar-21 Actual		-	89,235	(202,486)	13,251,763	71,335	(80,328)	20,845	-	(282,814)
54	Apr-21 Actual		-	88,468	(202,486)	13,137,745	90,503	(86,810)	23,069	-	(289,296)
55	May-21 Actual		-	87,695	(202,486)	13,022,954	208,821	(71,335)	11,618	-	(273,821)
56	Jun-21 Actual		-	86,916	(202,486)	12,907,384	245,017	(90,503)	10,988	-	(292,989)
57	Jul-21 Actual		-	86,133	(202,486)	12,791,031	102,270	(208,821)	-	-	(411,307)
58	Aug-21 Actual		-	85,344	(202,486)	12,673,889	-	(245,017)	144,042	-	(447,503)
59	Sep-21 Actual		-	84,550	(202,486)	12,555,953	-	(102,270)	309,800	-	(304,756)
60	Oct-21 Actual		-	83,750	(202,486)	12,437,217	-	-	411,865	-	(202,486)
61	Nov-21 Actual		-	82,945	(202,486)	12,317,676	-	-	388,963	-	(202,486)
62	Dec-21 Actual		-	82,135	(202,486)	12,197,325	-	-	194,124	-	(202,486)
63	Jan-22 Actual		-	81,319	(202,486)	12,076,158	-	-	105,294	-	(202,486)
64	Feb-22 Actual		-	80,498	(202,486)	11,954,170	103,920	-	27,183	-	(202,486)
65	Mar-22 Actual		-	79,671	(202,486)	11,831,355	131,221	-	-	-	(202,486)
66	Apr-22 Actual		-	78,838	(202,486)	11,707,707	137,219	(103,920)	-	(219,095)	(525,501)
67	May-22 Actual		-	78,000	(202,486)	11,583,221	354,133	(131,221)	-	(219,095)	(552,802)
68	Jun-22 Actual		-	77,156	(202,486)	11,457,891	-	(137,219)	-	(219,095)	(558,800)
69	Jul-22 Actual		-	76,306	(202,486)	11,331,711	-	(354,133)	-	(219,095)	(775,714)
70	Aug-22 Actual		-	75,451	(202,486)	11,204,676	-	-	-	(219,095)	(421,581)
71	Sep-22 Actual		-	74,589	(202,486)	11,076,779	-	-	-	(219,095)	(421,581)
72	Oct-22 Actual		-	73,722	(202,486)	10,948,015	-	-	-	(219,095)	(421,581)
73	Nov-22 Actual		-	72,849	(202,486)	10,818,378	-	-	-	(219,095)	(421,581)
74	Dec-22 Actual		-	71,971	(202,486)	10,687,863	-	-	-	(219,095)	(421,581)
75	Jan-23 Actual		-	71,086	(202,486)	10,556,463	-	-	-	(219,095)	(421,581)
76	Feb-23 Actual		-	70,195	(202,486)	10,424,172	-	-	-	(219,095)	(421,581)
77	Mar-23 Actual		-	69,298	(202,486)	10,290,984	-	-	-	(219,095)	(421,581)
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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization of Coal Ash ARO and Landfill Closure

For the Expense Month of May 2022

Line No.	Period (1)	Coal Ash ARO				Coal Ash ARO and Landfill Closure		Landfill Closure		Total Recovery (11)=(5)+(8)+(10)	
		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)	Cash Spend (9)		Recovery: 1-Yr Amort. (10)
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	#####	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (202,486)
						\$ 12,790,255	\$ (12,790,255)	\$ 2,629,139	\$ (2,629,140)	\$	\$ (39,717,715)

Monthly Amortization Amount

\$ (775,714)

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending May 2022

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	204,468	-	194	-	204,274
Dollars	\$ 16,364.53	\$ -	\$ 15.52	\$ -	\$ 16,349.01
\$/Allowance	\$ 0.080035	\$ -	\$ 0.080000	\$ -	\$ 0.080035
NO_x Allowances - Annual					
Quantity	13,632	-	126	-	13,506
Dollars	\$ 2,363.80	\$ -	\$ 21.42	\$ -	\$ 2,342.38
\$/Allowance	\$ 0.173401	\$ -	\$ 0.170000	\$ -	\$ 0.173433
NO_x Allowances - Seasonal					
Quantity	953	-	126	-	827
Dollars	\$ 206.32	\$ -	\$ 27.72	\$ -	\$ 178.60
\$/Allowance	\$ 0.216495	\$ -	\$ 0.220000	\$ -	\$ 0.215961
Total Emission Allowances					
Quantity	219,053	-	446	-	218,607
Dollars	\$ 18,934.65	\$ -	\$ 64.66	\$ -	\$ 18,869.99

(a) Note: The SO₂ 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 May 2022

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
1	Ammonia	502020	\$ 179,694	\$ 179,694
2	Lime	502040	1,154,660	1,154,660
3	Hydrated Lime	502040	63,417	63,417
4	Magnesium Hydroxide ^(Note 1)	502040	-	-
5	Total		\$ 1,397,771	\$ 1,397,771

Note 1: East Bend Station's Flue Gas Desulfurization is a Magnesium Oxide based technology. It is the only one of its kind within Duke Energy's current portfolio. The Magnesium Oxide based technology requires a particular chemical construct of lime to function properly, and as such, the scrubber utilizes a "quicklime" material versus the nominal limestone which is considered a Calcium Carbonate based technology. In March of 2020 the vendor's mining facility supplying the quicklime material to East Bend discontinued operations. This facility's quicklime product contained the proper constituents including the Magnesium required for East Bend's optimal scrubber performance. Upon learning of this facility's closure, Duke Energy Kentucky began exploring different solutions to obtain scrubber material with the correct chemical composition, including different mine sources and adding chemicals to produce the correct product. The vendor made the commitment to continue meeting contractual obligations by supplying East Bend with a blended product (Dolomitic Lime and Quicklime) from an alternate facility. Unfortunately, contractually meeting the specifications of the blended commodity, the reactivity of the substitute dolomitic lime is insufficient and as a result, East Bend found itself not able to meet its scrubber limit. In order for East Bend Station to meet its SO2 scrubbing limit, the Company must add an additional chemical reagent, Magnesium Hydroxide, to the substitute blended lime to produce the correct chemical reaction and achieve East Bend's SO2 limit.

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 May 2022

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge
					(2) - (5)
Jun-21	\$ 12,642,763			\$ 966,308	\$ 11,676,455
Jul-21	15,525,798			1,286,441	14,239,357
Aug-21	15,008,156			1,219,521	13,788,635
Sep-21	14,902,237			1,012,999	13,889,238
Oct-21	10,769,498			595,584	10,173,914
Nov-21	11,587,106			375,740	11,211,366
Dec-21	16,001,721			510,096	15,491,625
Jan-22	21,318,327			611,393	20,706,934
Feb-22	19,751,655			604,732	19,146,923
Mar-22	11,607,297			541,161	11,066,136
Apr-22	12,082,416			1,006,766	11,075,650
May-22	\$ 11,615,289			\$ 956,257	\$ 10,659,032
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 13,593,772
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 30,663,647
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					44.33%

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)
Jun-21	\$ 17,667,857	\$ 4,997,702	\$ 408,011	\$ 1,303,401	\$ 16,364,456	\$ 10,958,743
Jul-21	19,479,472	5,416,023	732,198	1,536,088	17,943,384	11,795,163
Aug-21	18,523,410	5,404,345	(177,636)	1,506,300	17,017,110	11,790,401
Sep-21	19,327,541	5,885,205	345,938	1,254,161	18,073,380	11,842,237
Oct-21	16,177,896	5,136,292	(259,585)	888,473	15,289,423	10,412,716
Nov-21	18,281,877	4,737,949	3,266,165	482,562	17,799,315	9,795,201
Dec-21	20,902,282	5,194,127	5,087,696	488,554	20,413,728	10,131,905
Jan-22	23,718,760	5,133,317	7,974,524	455,146	23,263,614	10,155,773
Feb-22	21,218,594	4,675,522	5,624,922	492,009	20,726,585	10,426,141
Mar-22	14,758,559	4,840,248	(183,660)	760,990	13,997,569	9,340,981
Apr-22	9,200,787	2,373,083	559,030	832,346	8,368,441	5,436,328
May-22	\$ 17,061,583	\$ 6,907,083	\$ 1,042,516	\$ 1,480,087	\$ 15,581,496	\$ 7,631,897
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 17,069,875	\$ 9,976,457
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 30,663,647	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					55.67%	

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 June 2022

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	460,372
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	13,978,747
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		3.29%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	540,437
Jurisdictional R(m)	ES Form 1.10, Line 16		\$	9,451,001
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		5.72%

Effective Date for Billing: August 2, 2022

Submitted by: /s/ Libbie S. Miller

Title: Rates & Regulatory Strategy Manager

Date Submitted: July 22, 2022

ES FORM 1.10

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

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of June 2022

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	\$ 57,860,995
2	RB ÷ 12 months	(1) ÷ 12	\$ 4,821,750
3	Pretax Rate of Return (ROR)	ES Form 1.20	7.905%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 381,159
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 2,632,315
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ 2,584,475
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 428,999
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	96.96%
9	Jurisdictional E(m)	(7) x (8)	\$ 415,957
10	Prior Period Adjustment (if necessary)	(A)	+ \$ 2,237
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ 582,615
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 1,000,809
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 13,042

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	46.00%	54.00%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 460,372	\$ 540,437
16	R(m) Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	ES Form 3.00 ES Form 3.00	\$ 13,978,747	\$ 9,451,001
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	3.29%	5.72%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 30,391,724	96.96%
19	Sales for Resale	Company Records	\$ 952,826	3.04%
20	Total Revenue		\$ 31,344,550	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	5.835%	1.710%	0.100%		0.100%
2	Long-term Debt	45.931%	4.028%	1.850%		1.850%
3	Common Equity	48.234%	9.250%	4.462%	1.3346139	5.955%
4	Total	100.000%		6.412%		7.905%

Note: Capital structure, cost of debt and tax rate gross-up factor as approved in Case No. 2019-00271. 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 June 2022

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant) Excluding AFUDC	ES Form 2.10	\$ 67,432,275
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	-
3	Subtotal		\$ 67,432,275
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 18,669
6	Subtotal		\$ 18,669
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 4,896,744
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	4,693,205
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 9,589,949
12	Environmental Compliance Rate Base		\$ 57,860,995
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 138,791
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 69,954
16	Monthly Amortization Expense	ES Form 2.20	\$ 595,414
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 80
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 1,828,076
19	Total Environmental Compliance Operating Expense		\$ 2,632,315
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x Allowances Sales		\$ 2,584,475
23	Total Emission Allowance Sales		\$ 2,584,475
24	<u>(Over) / Under Recovery</u>		
25	Adjusted Jurisdictional E(m) Authorized for Expense Month two Months Prior		\$ 3,006,278
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		2,423,663
27	(Over) / Under Recovery		\$ 582,615

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 June 2022

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
Project No.	Description	Gross Plant in-Service Excl. AFUDC as of June-22	Accumulated Depreciation as of June-22	Net Plant in-Service as of June-22	CWIP Excluding AFUDC as of June-22	Accumulated Deferred ITC as of June-22	Accumulated Deferred Tax Balance as of June-22	Monthly Depreciation Expense	Monthly Property Tax Expense
				(2)-(3)					
1	EB020290 Lined Retention Basin West	\$ 10,324,588	\$ 909,346	\$ 9,415,242	\$ -	\$ -	\$ 1,229,643	\$ 21,251	\$ 10,532
2	EB020745 Lined Retention Basin East	\$ 10,280,726	\$ 631,261	\$ 9,649,465	\$ -	\$ -	\$ 350,374	\$ 21,161	\$ 10,794
3	EB020298 East Bend SW/PW Reroute	\$ 29,882,379	\$ 2,381,063	\$ 27,501,316	\$ -	\$ -	\$ 2,789,311	\$ 61,500	\$ 30,764
4	EB021281 East Bend Landfill Cell 2	\$ 16,944,582	\$ 975,074	\$ 15,969,508	\$ -	\$ -	\$ 323,876	\$ 34,879	\$ 17,864
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 67,432,275	\$ 4,896,744	\$ 62,535,531	\$ -	\$ -	\$ 4,693,205	\$ 138,791	\$ 69,954

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization of Coal Ash ARO and Landfill Closure

For the Expense Month of June 2022

Line No.	Period (1)	Coal Ash ARO					Coal Ash ARO and Landfill Closure		Landfill Closure		Total Recovery (11)=(5)+(8)+(10)
		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)	Cash Spend (9)	Recovery: 1-Yr Amort. (10)	
1	2015 Total	Actual 3,858,084	Actual (856,412)	Actual 20,378	-	3,022,050	-	-	-	-	-
2	2016 Total	Actual 4,486,812	Actual (107,052)	Actual 379,037	-	7,780,847	-	-	291,152	-	-
3	Jan-17	Actual 358,148	-	43,243	-	8,182,238	-	-	13,108	-	-
4	Feb-17	Actual 424,021	-	40,351	-	8,646,610	-	-	14,281	-	-
5	Mar-17	Actual 692,184	(26,763)	44,724	-	9,356,755	-	-	20,225	-	-
6	Apr-17	Actual 254,067	-	50,949	-	9,661,771	-	-	30,324	-	-
7	May-17	Actual 608,377	-	56,141	-	10,326,289	-	-	34,997	-	-
8	Jun-17	Actual 265,619	(26,763)	53,472	-	10,618,617	-	-	45,594	-	-
9	Jul-17	Actual 220,636	-	51,558	-	10,890,811	-	-	30,629	-	-
10	Aug-17	Actual 272,053	-	47,731	-	11,210,595	-	-	17,432	-	-
11	Sep-17	Actual 233,743	(26,763)	44,389	-	11,461,964	-	-	23,200	-	-
12	Oct-17	Actual 444,793	-	60,670	-	11,967,427	-	-	47,545	-	-
13	Nov-17	Actual 525,770	-	68,573	-	12,561,770	-	-	33,047	-	-
14	Dec-17	Actual 2,482,493	(26,763)	82,850	-	15,100,350	-	-	18,362	-	-
15	Jan-18	Actual 510,525	-	91,185	-	15,702,060	-	-	18,843	-	-
16	Feb-18	Actual 89,648	-	91,534	-	15,883,242	-	-	-	-	-
17	Mar-18	Actual 396,977	(26,763)	93,696	-	16,347,152	-	-	14,037	-	-
18	Apr-18	Actual 132,294	-	111,722	-	16,591,168	173,000	-	36,260	-	-
19	May-18	Actual -	-	112,480	-	16,703,648	100,234	-	88,888	-	-
20	Jun-18	Actual -	-	111,870	(202,486)	16,613,032	150,901	(173,000)	128,843	-	(375,486)
21	Jul-18	Actual -	-	111,255	(202,486)	16,521,801	196,585	(100,234)	16	-	(302,720)
22	Aug-18	Actual -	-	110,637	(202,486)	16,429,952	321,815	(150,901)	29,844	-	(353,387)
23	Sep-18	Actual -	-	110,014	(202,486)	16,337,480	275,135	(196,585)	-	-	(399,071)
24	Oct-18	Actual -	-	109,387	(202,486)	16,244,381	69,886	(321,815)	-	-	(524,301)
25	Nov-18	Actual -	-	108,756	(202,486)	16,150,651	238,428	(275,135)	(2,498)	-	(477,621)
26	Dec-18	Actual -	-	108,121	(202,486)	16,056,286	263,037	(69,886)	-	-	(272,372)
27	Jan-19	Actual -	-	107,481	(202,486)	15,961,281	177,996	(238,428)	-	-	(440,914)
28	Feb-19	Actual -	-	106,837	(202,486)	15,865,632	150,851	(263,037)	-	-	(465,523)
29	Mar-19	Actual -	-	106,188	(202,486)	15,769,334	408,609	(177,996)	-	-	(380,482)
30	Apr-19	Actual -	-	105,535	(202,486)	15,672,383	1,588,547	(150,851)	-	-	(353,337)
31	May-19	Actual -	-	104,878	(202,486)	15,574,775	1,641,055	(408,609)	-	-	(611,095)
32	Jun-19	Actual -	-	104,216	(202,486)	15,476,505	1,423,233	(1,588,547)	-	-	(1,791,033)
33	Jul-19	Actual -	-	103,550	(202,486)	15,377,569	1,368,585	(1,641,055)	-	-	(1,843,541)
34	Aug-19	Actual -	-	102,880	(202,486)	15,277,963	487,759	(1,423,233)	-	-	(1,625,719)
35	Sep-19	Actual -	-	102,204	(202,486)	15,177,681	47,477	(1,368,585)	-	-	(1,571,071)
36	Oct-19	Actual -	-	101,524	(202,486)	15,076,719	(18,595)	(487,759)	-	-	(690,245)
37	Nov-19	Actual -	-	100,840	(202,486)	14,975,073	330,375	(47,477)	-	-	(249,963)
38	Dec-19	Actual -	-	100,151	(202,486)	14,872,738	121,640	18,595	-	-	(183,891)
39	Jan-20	Actual -	-	99,457	(202,486)	14,769,709	77,416	(330,375)	-	-	(532,861)
40	Feb-20	Actual -	-	98,759	(202,486)	14,665,982	25,184	(121,640)	-	-	(324,126)
41	Mar-20	Actual -	-	98,055	(202,486)	14,561,551	27,631	(77,416)	-	-	(279,902)
42	Apr-20	Actual -	-	97,347	(202,486)	14,456,412	50,807	(25,184)	-	-	(227,670)
43	May-20	Actual -	-	96,635	(202,486)	14,350,561	82,538	(27,631)	-	-	(230,117)
44	Jun-20	Actual -	-	95,917	(202,486)	14,243,992	133,817	(50,807)	-	-	(253,293)
45	Jul-20	Actual -	-	95,194	(202,486)	14,136,700	127,493	(82,538)	-	-	(285,024)
46	Aug-20	Actual -	-	94,467	(202,486)	14,028,681	64,152	(133,817)	-	-	(336,303)
47	Sep-20	Actual -	-	93,735	(202,486)	13,919,930	127,860	(127,493)	-	-	(329,979)
48	Oct-20	Actual -	-	92,997	(202,486)	13,810,441	226,553	(64,152)	-	-	(266,638)
49	Nov-20	Actual -	-	92,255	(202,486)	13,700,210	423,320	(127,860)	5,465	-	(330,346)
50	Dec-20	Actual -	-	91,508	(202,486)	13,589,232	295,353	(226,553)	17,705	-	(429,039)

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization of Coal Ash ARO and Landfill Closure

For the Expense Month of June 2022

Line No.	Period (1)	Coal Ash ARO				Coal Ash ARO and Landfill Closure		Landfill Closure (a)		Total Recovery (11)=(5)+(8)+(10)	
		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)	Cash Spend (9)		Recovery: 1-Yr Amort. (10)
51	Jan-21 Actual		\$ -	\$ 90,756	\$ (202,486)	\$ 13,477,502	\$ 80,328	\$ (423,320)	\$ 19,334	\$ -	\$ (625,806)
52	Feb-21 Actual		-	89,998	(202,486)	13,365,014	86,810	(295,353)	4,714	-	(497,839)
53	Mar-21 Actual		-	89,235	(202,486)	13,251,763	71,335	(80,328)	20,845	-	(282,814)
54	Apr-21 Actual		-	88,468	(202,486)	13,137,745	90,503	(86,810)	23,069	-	(289,296)
55	May-21 Actual		-	87,695	(202,486)	13,022,954	208,821	(71,335)	11,618	-	(273,821)
56	Jun-21 Actual		-	86,916	(202,486)	12,907,384	245,017	(90,503)	10,988	-	(292,989)
57	Jul-21 Actual		-	86,133	(202,486)	12,791,031	102,270	(208,821)	-	-	(411,307)
58	Aug-21 Actual		-	85,344	(202,486)	12,673,889	-	(245,017)	144,042	-	(447,503)
59	Sep-21 Actual		-	84,550	(202,486)	12,555,953	-	(102,270)	309,800	-	(304,756)
60	Oct-21 Actual		-	83,750	(202,486)	12,437,217	-	-	411,865	-	(202,486)
61	Nov-21 Actual		-	82,945	(202,486)	12,317,676	-	-	388,963	-	(202,486)
62	Dec-21 Actual		-	82,135	(202,486)	12,197,325	-	-	194,124	-	(202,486)
63	Jan-22 Actual		-	81,319	(202,486)	12,076,158	-	-	105,294	-	(202,486)
64	Feb-22 Actual		-	80,498	(202,486)	11,954,170	103,920	-	27,183	-	(202,486)
65	Mar-22 Actual		-	79,671	(202,486)	11,831,355	131,221	-	-	-	(202,486)
66	Apr-22 Actual		-	78,838	(202,486)	11,707,707	137,219	(103,920)	-	(219,095)	(525,501)
67	May-22 Actual		-	78,000	(202,486)	11,583,221	354,133	(131,221)	-	(219,095)	(552,802)
68	Jun-22 Actual		-	77,156	(202,486)	11,457,891	173,833	(137,219)	-	(219,095)	(558,800)
69	Jul-22 Actual		-	76,306	(202,486)	11,331,711	-	(354,133)	-	(219,095)	(775,714)
70	Aug-22 Actual		-	75,451	(202,486)	11,204,676	-	(173,833)	-	(219,095)	(595,414)
71	Sep-22 Actual		-	74,589	(202,486)	11,076,779	-	-	-	(219,095)	(421,581)
72	Oct-22 Actual		-	73,722	(202,486)	10,948,015	-	-	-	(219,095)	(421,581)
73	Nov-22 Actual		-	72,849	(202,486)	10,818,378	-	-	-	(219,095)	(421,581)
74	Dec-22 Actual		-	71,971	(202,486)	10,687,863	-	-	-	(219,095)	(421,581)
75	Jan-23 Actual		-	71,086	(202,486)	10,556,463	-	-	-	(219,095)	(421,581)
76	Feb-23 Actual		-	70,195	(202,486)	10,424,172	-	-	-	(219,095)	(421,581)
77	Mar-23 Actual		-	69,298	(202,486)	10,290,984	-	-	-	(219,095)	(421,581)
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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization of Coal Ash ARO and Landfill Closure

For the Expense Month of June 2022

Line No.	Period (1)	Coal Ash ARO				Coal Ash ARO and Landfill Closure		Landfill Closure		Total Recovery (11)=(5)+(8)+(10)	
		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)	Cash Spend (9)		Recovery: 1-Yr Amort. (10)
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)		\$ 12,964,088	\$ (12,964,088)	\$ 2,629,139	\$ (2,629,140)	\$ (39,891,548)

Monthly Amortization Amount

\$ (595,414)

(a) In Case No. 2021-00290, the Commission granted Duke Energy Kentucky's request to recover unrecovered construction, maintenance, closure, and post-closure maintenance costs of the East Landfill and unrecovered maintenance costs of the West Landfill at the East Bend Station through its Environmental Surcharge Mechanism. Beginning with the expense month of February 2022, ES FORM 2.20, will be revised to show the costs associated with the closure of the East Landfill. The amount shown as "Landfill Closure" cash spend in columns (9) and (10) of ES FORM 2.20, which is being amortized for recovery over a period of twelve months, includes \$1,110,406 of costs related to the closure of the East Landfill and \$1,518,734 of unrecovered maintenance costs related to the West Landfill.

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending June 2022

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a) (b)					
Quantity	204,140	-	222	-	203,918
Dollars	\$ 16,338.29	\$ -	\$ 17.76	\$ -	\$ 16,320.53
\$/Allowance	\$ 0.080035	\$ -	\$ 0.080000	\$ -	\$ 0.080035
NO_x Allowances - Annual (b)					
Quantity	13,369	-	165	-	13,204
Dollars	\$ 2,319.09	\$ -	\$ 28.05	\$ -	\$ 2,291.04
\$/Allowance	\$ 0.173468	\$ -	\$ 0.170000	\$ -	\$ 0.173511
NO_x Allowances - Seasonal					
Quantity	827	-	165	397	265
Dollars	\$ 178.60	\$ -	\$ 34.65	\$ 87	\$ 57.30
\$/Allowance	\$ 0.215961	\$ -	\$ 0.210000	\$ 0.218262	\$ 0.216226
Total Emission Allowances					
Quantity	218,336	-	552	397	217,387
Dollars	\$ 18,835.98	\$ -	\$ 80.46	\$ 87	\$ 18,668.87

(a) Note: The SO₂ 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.

(b) Note: Beginning balance adjustment due to April consumption inadvertently left off of ES Form 2.30

ES FORM 2.50

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

Environmental Reagent Expenses

For the Expense Month of June 2022

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
1	Ammonia	502020	\$ 232,445	\$ 232,445
2	Lime	502040	1,499,486	1,499,486
3	Hydrated Lime	502040	96,145	96,145
4	Magnesium Hydroxide ^(Note 1)	502040	-	-
5	Total		\$ 1,828,076	\$ 1,828,076

Note 1: East Bend Station's Flue Gas Desulfurization is a Magnesium Oxide based technology. It is the only one of its kind within Duke Energy's current portfolio. The Magnesium Oxide based technology requires a particular chemical construct of lime to function properly, and as such, the scrubber utilizes a "quicklime" material versus the nominal limestone which is considered a Calcium Carbonate based technology. In March of 2020 the vendor's mining facility supplying the quicklime material to East Bend discontinued operations. This facility's quicklime product contained the proper constituents including the Magnesium required for East Bend's optimal scrubber performance. Upon learning of this facility's closure, Duke Energy Kentucky began exploring different solutions to obtain scrubber material with the correct chemical composition, including different mine sources and adding chemicals to produce the correct product. The vendor made the commitment to continue meeting contractual obligations by supplying East Bend with a blended product (Dolomitic Lime and Quicklime) from an alternate facility. Unfortunately, contractually meeting the specifications of the blended commodity, the reactivity of the substitute dolomitic lime is insufficient and as a result, East Bend found itself not able to meet its scrubber limit. In order for East Bend Station to meet its SO2 scrubbing limit, the Company must add an additional chemical reagent, Magnesium Hydroxide, to the substitute blended lime to produce the correct chemical reaction and achieve East Bend's SO2 limit.

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 June 2022

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge
					(2) - (5)
Jul-21	\$ 15,525,798			\$ 1,286,441	\$ 14,239,357
Aug-21	15,008,156			1,219,521	13,788,635
Sep-21	14,902,237			1,012,999	13,889,238
Oct-21	10,769,498			595,584	10,173,914
Nov-21	11,587,106			375,740	11,211,366
Dec-21	16,001,721			510,096	15,491,625
Jan-22	21,318,327			611,393	20,706,934
Feb-22	19,751,655			604,732	19,146,923
Mar-22	11,607,297			541,161	11,066,136
Apr-22	12,082,416			1,006,766	11,075,650
May-22	11,615,289			956,257	10,659,032
Jun-22	\$ 17,910,941			\$ 1,614,789	\$ 16,296,152
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 13,978,747
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 30,391,724
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					46.00%

Non-Residential - Kentucky Jurisdictional Revenues						
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Month	Total Revenues	Base Rate Fuel Component	Fuel Clause Revenues	Environmental Surcharge Revenues	Total Excluding Environmental Surcharge	Total Non-Fuel Revenue
					(2) - (5)	(6) - (3) - (4)
Jul-21	\$ 19,479,472	\$ 5,416,023	\$ 732,198	\$ 1,536,088	\$ 17,943,384	\$ 11,795,163
Aug-21	18,523,410	5,404,345	(177,636)	1,506,300	17,017,110	11,790,401
Sep-21	19,327,541	5,885,205	345,938	1,254,161	18,073,380	11,842,237
Oct-21	16,177,896	5,136,292	(259,585)	888,473	15,289,423	10,412,716
Nov-21	18,281,877	4,737,949	3,266,165	482,562	17,799,315	9,795,201
Dec-21	20,902,282	5,194,127	5,087,696	488,554	20,413,728	10,131,905
Jan-22	23,718,760	5,133,317	7,974,524	455,146	23,263,614	10,155,773
Feb-22	21,218,594	4,675,522	5,624,922	492,009	20,726,585	10,426,141
Mar-22	14,758,559	4,840,248	(183,660)	760,990	13,997,569	9,340,981
Apr-22	9,200,787	2,373,083	559,030	832,346	8,368,441	5,436,328
May-22	17,061,583	6,907,083	1,042,516	1,480,087	15,581,496	7,631,897
Jun-22	\$ 9,290,552	\$ 1,390,573	\$ 2,437,838	\$ 808,874	\$ 8,481,678	\$ 4,653,267
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 16,412,977	\$ 9,451,001
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 30,391,724	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					54.00%	

ES FORM 1.00

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

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

For the Expense Month of July 2022

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	440,608
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	14,200,838
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		3.10%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	550,860
Jurisdictional R(m)	ES Form 1.10, Line 16		\$	10,038,423
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		5.49%

Effective Date for Billing: September 1, 2022

Submitted by: /s/ Libbie S. Miller

Title: Rates & Regulatory Strategy Manager

Date Submitted: August 22, 2022

ES FORM 1.10

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

Calculation of Current Month Environmental Surcharge Factors
 For the Expense Month of July 2022

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	\$ 57,680,537
2	RB ÷ 12 months	(1) ÷ 12	\$ 4,806,711
3	Pretax Rate of Return (ROR)	ES Form 1.20	7.905%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 379,971
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 2,334,912
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 2,714,883
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	97.01%
9	Jurisdictional E(m)	(7) x (8)	\$ 2,633,708
10	Prior Period Adjustment (if necessary)	(A)	+
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ (1,642,240)
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 991,468
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 81,175

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	44.44%	55.56%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 440,608	\$ 550,860
16	R(m) Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	ES Form 3.00 ES Form 3.00	\$ 14,200,838	\$ 10,038,423
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	3.10%	5.49%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 31,953,316	97.01%
19	Sales for Resale	Company Records	\$ 984,559	2.99%
20	Total Revenue		\$ 32,937,875	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	5.835%	1.710%	0.100%		0.100%
2	Long-term Debt	45.931%	4.028%	1.850%		1.850%
3	Common Equity	48.234%	9.250%	4.462%	1.3346139	5.955%
4	Total	100.000%		6.412%		7.905%

Note: Capital structure, cost of debt and tax rate gross-up factor as approved in Case No. 2019-00271. 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 July 2022

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant) Excluding AFUDC	ES Form 2.10	\$ 67,432,275
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	-
3	Subtotal		\$ 67,432,275
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 18,556
6	Subtotal		\$ 18,556
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 5,035,693
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	4,734,601
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 9,770,294
12	Environmental Compliance Rate Base		\$ 57,680,537
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 138,798
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 69,800
16	Monthly Amortization Expense	ES Form 2.20	\$ 584,856
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 113
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 1,541,345
19	Total Environmental Compliance Operating Expense		\$ 2,334,912
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x 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		\$ 3,008,984
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		4,651,224
27	(Over) / Under Recovery		\$ (1,642,240)

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 July 2022

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
Project No.	Description	Gross Plant in-Service Excl. AFUDC as of July-22	Accumulated Depreciation as of July-22	Net Plant in-Service as of July-22	CWIP Excluding AFUDC as of July-22	Accumulated Deferred ITC as of July-22	Accumulated Deferred Tax Balance as of July-22	Monthly Depreciation Expense	Monthly Property Tax Expense
				(2)-(3)					
1	EB020290 Lined Retention Basin West	\$ 10,324,588	\$ 930,598	\$ 9,393,990	\$ -	\$ -	\$ 1,231,611	\$ 21,251	\$ 10,509
2	EB020745 Lined Retention Basin East	\$ 10,280,726	\$ 652,434	\$ 9,628,292	\$ -	\$ -	\$ 363,718	\$ 21,161	\$ 10,771
3	EB020298 East Bend SW/PW Reroute	\$ 29,882,379	\$ 2,442,730	\$ 27,439,649	\$ -	\$ -	\$ 2,800,341	\$ 61,508	\$ 30,695
4	EB021281 East Bend Landfill Cell 2	\$ 16,944,582	\$ 1,009,931	\$ 15,934,651	\$ -	\$ -	\$ 338,931	\$ 34,878	\$ 17,825
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 67,432,275	\$ 5,035,693	\$ 62,396,582	\$ -	\$ -	\$ 4,734,601	\$ 138,798	\$ 69,800

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT
 Amortization of Coal Ash ARO and Landfill Closure
 For the Expense Month of July 2022

Line No.	Period (1)	Coal Ash ARO					Coal Ash ARO and Landfill Closure		Landfill Closure		Total Recovery (11)=(5)+(8)+(10)
		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)	Cash Spend (9)	Recovery: 1-Yr Amort. (10)	
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	-	-	291,152	-	-
3	Jan-17	Actual 358,148	-	43,243	-	8,182,238	-	-	13,108	-	-
4	Feb-17	Actual 424,021	-	40,351	-	8,646,610	-	-	14,281	-	-
5	Mar-17	Actual 692,184	(26,763)	44,724	-	9,356,755	-	-	20,225	-	-
6	Apr-17	Actual 254,067	-	50,949	-	9,661,771	-	-	30,324	-	-
7	May-17	Actual 608,377	-	56,141	-	10,326,289	-	-	34,997	-	-
8	Jun-17	Actual 265,619	(26,763)	53,472	-	10,618,617	-	-	45,594	-	-
9	Jul-17	Actual 220,636	-	51,558	-	10,890,811	-	-	30,629	-	-
10	Aug-17	Actual 272,053	-	47,731	-	11,210,595	-	-	17,432	-	-
11	Sep-17	Actual 233,743	(26,763)	44,389	-	11,461,964	-	-	23,200	-	-
12	Oct-17	Actual 444,793	-	60,670	-	11,967,427	-	-	47,545	-	-
13	Nov-17	Actual 525,770	-	68,573	-	12,561,770	-	-	33,047	-	-
14	Dec-17	Actual 2,482,493	(26,763)	82,850	-	15,100,350	-	-	18,362	-	-
15	Jan-18	Actual 510,525	-	91,185	-	15,702,060	-	-	18,843	-	-
16	Feb-18	Actual 89,648	-	91,534	-	15,883,242	-	-	-	-	-
17	Mar-18	Actual 396,977	(26,763)	93,696	-	16,347,152	-	-	14,037	-	-
18	Apr-18	Actual 132,294	-	111,722	-	16,591,168	173,000	-	36,260	-	-
19	May-18	Actual -	-	112,480	-	16,703,648	-	-	88,888	-	-
20	Jun-18	Actual -	-	111,870	(202,486)	16,613,032	150,901	(173,000)	128,843	-	(375,486)
21	Jul-18	Actual -	-	111,255	(202,486)	16,521,801	196,585	(100,234)	16	-	(302,720)
22	Aug-18	Actual -	-	110,637	(202,486)	16,429,952	321,815	(150,901)	29,844	-	(353,387)
23	Sep-18	Actual -	-	110,014	(202,486)	16,337,480	275,135	(196,585)	-	-	(399,071)
24	Oct-18	Actual -	-	109,387	(202,486)	16,244,381	69,886	(321,815)	-	-	(524,301)
25	Nov-18	Actual -	-	108,756	(202,486)	16,150,651	238,428	(275,135)	(2,498)	-	(477,621)
26	Dec-18	Actual -	-	108,121	(202,486)	16,056,286	263,037	(69,886)	-	-	(272,372)
27	Jan-19	Actual -	-	107,481	(202,486)	15,961,281	177,996	(238,428)	-	-	(440,914)
28	Feb-19	Actual -	-	106,837	(202,486)	15,865,632	150,851	(263,037)	-	-	(465,523)
29	Mar-19	Actual -	-	106,188	(202,486)	15,769,334	408,609	(177,996)	-	-	(380,482)
30	Apr-19	Actual -	-	105,535	(202,486)	15,672,383	1,588,547	(150,851)	-	-	(353,337)
31	May-19	Actual -	-	104,878	(202,486)	15,574,775	1,641,055	(408,609)	-	-	(611,095)
32	Jun-19	Actual -	-	104,216	(202,486)	15,476,505	1,423,233	(1,588,547)	-	-	(1,791,033)
33	Jul-19	Actual -	-	103,550	(202,486)	15,377,569	1,368,585	(1,641,055)	-	-	(1,843,541)
34	Aug-19	Actual -	-	102,880	(202,486)	15,277,963	487,759	(1,423,233)	-	-	(1,625,719)
35	Sep-19	Actual -	-	102,204	(202,486)	15,177,681	47,477	(1,368,585)	-	-	(1,571,071)
36	Oct-19	Actual -	-	101,524	(202,486)	15,076,719	(18,595)	(487,759)	-	-	(690,245)
37	Nov-19	Actual -	-	100,840	(202,486)	14,975,073	330,375	(47,477)	-	-	(249,963)
38	Dec-19	Actual -	-	100,151	(202,486)	14,872,738	121,640	18,595	-	-	(183,891)
39	Jan-20	Actual -	-	99,457	(202,486)	14,769,709	77,416	(330,375)	-	-	(532,861)
40	Feb-20	Actual -	-	98,759	(202,486)	14,665,982	25,184	(121,640)	-	-	(324,126)
41	Mar-20	Actual -	-	98,055	(202,486)	14,561,551	27,631	(77,416)	-	-	(279,902)
42	Apr-20	Actual -	-	97,347	(202,486)	14,456,412	50,807	(25,184)	-	-	(227,670)
43	May-20	Actual -	-	96,635	(202,486)	14,350,561	82,538	(27,631)	-	-	(230,117)
44	Jun-20	Actual -	-	95,917	(202,486)	14,243,992	133,817	(50,807)	-	-	(253,293)
45	Jul-20	Actual -	-	95,194	(202,486)	14,136,700	127,493	(82,538)	-	-	(285,024)
46	Aug-20	Actual -	-	94,467	(202,486)	14,028,681	64,152	(133,817)	-	-	(336,303)
47	Sep-20	Actual -	-	93,735	(202,486)	13,919,930	127,860	(127,493)	-	-	(329,979)
48	Oct-20	Actual -	-	92,997	(202,486)	13,810,441	226,553	(64,152)	-	-	(266,638)
49	Nov-20	Actual -	-	92,255	(202,486)	13,700,210	423,320	(127,860)	5,465	-	(330,346)
50	Dec-20	Actual -	\$ -	\$ 91,508	\$ (202,486)	\$ 13,589,232	\$ 295,353	\$ (226,553)	\$ 17,705	\$ -	\$ (429,039)

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Amortization of Coal Ash ARO and Landfill Closure

For the Expense Month of July 2022

Line No.	Period (1)	Coal Ash ARO				Coal Ash ARO and Landfill Closure		Landfill Closure (a)		Total Recovery (11)=(5)+(8)+(10)	
		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)	Cash Spend (9)		Recovery: 1-Yr Amort. (10)
51	Jan-21	Actual	\$ -	\$ 90,756	\$ (202,486)	\$ 13,477,502	\$ 80,328	\$ (423,320)	\$ 19,334	\$ -	\$ (625,806)
52	Feb-21	Actual	-	89,998	(202,486)	13,365,014	86,810	(295,353)	4,714	-	(497,839)
53	Mar-21	Actual	-	89,235	(202,486)	13,251,763	71,335	(80,328)	20,845	-	(282,814)
54	Apr-21	Actual	-	88,468	(202,486)	13,137,745	90,503	(86,810)	23,069	-	(289,296)
55	May-21	Actual	-	87,695	(202,486)	13,022,954	208,821	(71,335)	11,618	-	(273,821)
56	Jun-21	Actual	-	86,916	(202,486)	12,907,384	245,017	(90,503)	10,988	-	(292,989)
57	Jul-21	Actual	-	86,133	(202,486)	12,791,031	102,270	(208,821)	-	-	(411,307)
58	Aug-21	Actual	-	85,344	(202,486)	12,673,889	-	(245,017)	144,042	-	(447,503)
59	Sep-21	Actual	-	84,550	(202,486)	12,555,953	-	(102,270)	309,800	-	(304,756)
60	Oct-21	Actual	-	83,750	(202,486)	12,437,217	-	-	411,865	-	(202,486)
61	Nov-21	Actual	-	82,945	(202,486)	12,317,676	-	-	388,963	-	(202,486)
62	Dec-21	Actual	-	82,135	(202,486)	12,197,325	-	-	194,124	-	(202,486)
63	Jan-22	Actual	-	81,319	(202,486)	12,076,158	-	-	105,294	-	(202,486)
64	Feb-22	Actual	-	80,498	(202,486)	11,954,170	103,920	-	27,183	-	(202,486)
65	Mar-22	Actual	-	79,671	(202,486)	11,831,355	131,221	-	-	-	(202,486)
66	Apr-22	Actual	-	78,838	(202,486)	11,707,707	137,219	(103,920)	-	(219,095)	(525,501)
67	May-22	Actual	-	78,000	(202,486)	11,583,221	354,133	(131,221)	-	(219,095)	(552,802)
68	Jun-22	Actual	-	77,156	(202,486)	11,457,891	173,833	(137,219)	-	(219,095)	(558,800)
69	Jul-22	Actual	-	76,306	(202,486)	11,331,711	163,275	(354,133)	-	(219,095)	(775,714)
70	Aug-22	Actual	-	75,451	(202,486)	11,204,676	-	(173,833)	-	(219,095)	(595,414)
71	Sep-22	Actual	-	74,589	(202,486)	11,076,779	-	(163,275)	-	(219,095)	(584,856)
72	Oct-22	Actual	-	73,722	(202,486)	10,948,015	-	-	-	(219,095)	(421,581)
73	Nov-22	Actual	-	72,849	(202,486)	10,818,378	-	-	-	(219,095)	(421,581)
74	Dec-22	Actual	-	71,971	(202,486)	10,687,863	-	-	-	(219,095)	(421,581)
75	Jan-23	Actual	-	71,086	(202,486)	10,556,463	-	-	-	(219,095)	(421,581)
76	Feb-23	Actual	-	70,195	(202,486)	10,424,172	-	-	-	(219,095)	(421,581)
77	Mar-23	Actual	-	69,298	(202,486)	10,290,984	-	-	-	(219,095)	(421,581)
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

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Amortization of Coal Ash ARO and Landfill Closure

For the Expense Month of July 2022

Line No.	Period (1)	Coal Ash ARO				Coal Ash ARO and Landfill Closure		Landfill Closure		Total Recovery (11)=(5)+(8)+(10)	
		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)	Cash Spend (9)		Recovery: 1-Yr Amort. (10)
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)		\$ 13,127,363	\$ (13,127,363)	\$ 2,629,139	\$ (2,629,140)	\$ (40,054,823)

Monthly Amortization Amount

\$ (584,856)

(a) In Case No. 2021-00290, the Commission granted Duke Energy Kentucky's request to recover unrecovered construction, maintenance, closure, and post-closure maintenance costs of the East Landfill and unrecovered maintenance costs of the West Landfill at the East Bend Station through its Environmental Surcharge Mechanism. Beginning with the expense month of February 2022, ES FORM 2.20, will be revised to show the costs associated with the closure of the East Landfill. The amount shown as "Landfill Closure" cash spend in columns (9) and (10) of ES FORM 2.20, which is being amortized for recovery over a period of twelve months, includes \$1,110,406 of costs related to the closure of the East Landfill and \$1,518,734 of unrecovered maintenance costs related to the West Landfill.

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending July 2022

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	203,918	-	223	-	203,695
Dollars	\$ 16,320.53	\$ -	\$ 17.84	\$ -	\$ 16,302.69
\$/Allowance	\$ 0.080035	\$ -	\$ 0.080000	\$ -	\$ 0.080035
NO_x Allowances - Annual (b)					
Quantity	13,204	-	243	-	12,961
Dollars	\$ 2,291.04	\$ -	\$ 41.31	\$ -	\$ 2,249.73
\$/Allowance	\$ 0.173511	\$ -	\$ 0.170000	\$ -	\$ 0.173577
NO_x Allowances - Seasonal					
Quantity	265	-	243	-	22
Dollars	\$ 57.30	\$ -	\$ 53.46	\$ -	\$ 3.84
\$/Allowance	\$ 0.216226	\$ -	\$ 0.220000	\$ -	\$ 0.174545
Total Emission Allowances					
Quantity	217,387	-	709	-	216,678
Dollars	\$ 18,668.87	\$ -	\$ 112.61	\$ -	\$ 18,556.26

(a) Note: The SO₂ 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 July 2022

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
1	Ammonia	502020	\$ 119,906	\$ 119,906
2	Lime	502040	1,308,146	1,308,146
3	Hydrated Lime	502040	113,293	113,293
4	Magnesium Hydroxide ^(Note 1)	502040	-	-
5	Total		\$ 1,541,345	\$ 1,541,345

Note 1: East Bend Station's Flue Gas Desulfurization is a Magnesium Oxide based technology. It is the only one of its kind within Duke Energy's current portfolio. The Magnesium Oxide based technology requires a particular chemical construct of lime to function properly, and as such, the scrubber utilizes a "quicklime" material versus the nominal limestone which is considered a Calcium Carbonate based technology. In March of 2020 the vendor's mining facility supplying the quicklime material to East Bend discontinued operations. This facility's quicklime product contained the proper constituents including the Magnesium required for East Bend's optimal scrubber performance. Upon learning of this facility's closure, Duke Energy Kentucky began exploring different solutions to obtain scrubber material with the correct chemical composition, including different mine sources and adding chemicals to produce the correct product. The vendor made the commitment to continue meeting contractual obligations by supplying East Bend with a blended product (Dolomitic Lime and Quicklime) from an alternate facility. Unfortunately, contractually meeting the specifications of the blended commodity, the reactivity of the substitute dolomitic lime is insufficient and as a result, East Bend found itself not able to meet its scrubber limit. In order for East Bend Station to meet its SO2 scrubbing limit, the Company must add an additional chemical reagent, Magnesium Hydroxide, to the substitute blended lime to produce the correct chemical reaction and achieve East Bend's SO2 limit.

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 July 2022

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge
					(2) - (5)
Aug-21	\$ 15,008,156			\$ 1,219,521	\$ 13,788,635
Sep-21	14,902,237			1,012,999	13,889,238
Oct-21	10,769,498			595,584	10,173,914
Nov-21	11,587,106			375,740	11,211,366
Dec-21	16,001,721			510,096	15,491,625
Jan-22	21,318,327			611,393	20,706,934
Feb-22	19,751,655			604,732	19,146,923
Mar-22	11,607,297			541,161	11,066,136
Apr-22	12,082,416			1,006,766	11,075,650
May-22	11,615,289			956,257	10,659,032
Jun-22	17,910,941			1,614,789	16,296,152
Jul-22	\$ 18,563,570			\$ 1,659,116	\$ 16,904,454
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 14,200,838
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 31,953,316
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					44.44%

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)
Aug-21	\$ 18,523,410	\$ 5,404,345	\$ (177,636)	\$ 1,506,300	\$ 17,017,110	\$ 11,790,401
Sep-21	19,327,541	5,885,205	345,938	1,254,161	18,073,380	11,842,237
Oct-21	16,177,896	5,136,292	(259,585)	888,473	15,289,423	10,412,716
Nov-21	18,281,877	4,737,949	3,266,165	482,562	17,799,315	9,795,201
Dec-21	20,902,282	5,194,127	5,087,696	488,554	20,413,728	10,131,905
Jan-22	23,718,760	5,133,317	7,974,524	455,146	23,263,614	10,155,773
Feb-22	21,218,594	4,675,522	5,624,922	492,009	20,726,585	10,426,141
Mar-22	14,758,559	4,840,248	(183,660)	760,990	13,997,569	9,340,981
Apr-22	9,200,787	2,373,083	559,030	832,346	8,368,441	5,436,328
May-22	17,061,583	6,907,083	1,042,516	1,480,087	15,581,496	7,631,897
Jun-22	9,290,552	1,390,573	2,437,838	808,874	8,481,678	4,653,267
Jul-22	\$ 37,009,503	\$ 10,084,818	\$ 5,088,354	\$ 2,992,108	\$ 34,017,395	\$ 18,844,223
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 17,752,478	\$ 10,038,423
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 31,953,316	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					55.56%	

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 August 2022

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	569,885
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	14,537,828
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		3.92%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	719,448
Jurisdictional R(m)	ES Form 1.10, Line 16		\$	10,197,467
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		7.06%

Effective Date for Billing: October 3, 2022

Submitted by: /s/ Libbie S. Miller

Title: Rates & Regulatory Strategy Manager

Date Submitted: September 23, 2022

ES FORM 1.10

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

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of August 2022

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	\$ 57,511,023
2	RB ÷ 12 months	(1) ÷ 12	\$ 4,792,585
3	Pretax Rate of Return (ROR)	ES Form 1.20	7.905%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 378,854
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 1,827,117
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 2,205,971
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	97.17%
9	Jurisdictional E(m)	(7) x (8)	\$ 2,143,542
10	Prior Period Adjustment (if necessary)	(A)	+
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ (854,209)
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 1,289,333
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 62,429

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	44.20%	55.80%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 569,885	\$ 719,448
16	R(m) Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	ES Form 3.00 ES Form 3.00	\$ 14,537,828	\$ 10,197,467
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	3.92%	7.06%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 32,891,352	97.17%
19	Sales for Resale	Company Records	\$ 957,413	2.83%
20	Total Revenue		\$ 33,848,765	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	5.835%	1.710%	0.100%		0.100%
2	Long-term Debt	45.931%	4.028%	1.850%		1.850%
3	Common Equity	48.234%	9.250%	4.462%	1.3346139	5.955%
4	Total	100.000%		6.412%		7.905%

Note: Capital structure, cost of debt and tax rate gross-up factor as approved in Case No. 2019-00271. 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 August 2022

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant) Excluding AFUDC	ES Form 2.10	\$ 67,432,275
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	-
3	Subtotal		\$ 67,432,275
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 18,718
6	Subtotal		\$ 18,718
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 5,174,490
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	4,765,480
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 9,939,970
12	Environmental Compliance Rate Base		\$ 57,511,023
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 138,798
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 69,645
16	Monthly Amortization Expense	ES Form 2.20	\$ 926,454
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 44
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 692,176
19	Total Environmental Compliance Operating Expense		\$ 1,827,117
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x 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		\$ 1,000,809
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		1,855,018
27	(Over) / Under Recovery		\$ (854,209)

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 August 2022

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project No.	Description	Gross Plant in-Service Excl. AFUDC as of August-22	Accumulated Depreciation as of August-22	Net Plant in-Service as of August-22	CWIP Excluding AFUDC as of August-22	Accumulated Deferred ITC as of August-22	Accumulated Deferred Tax Balance as of August-22	Monthly Depreciation Expense	Monthly Property Tax Expense
				(2)-(3)					
1	EB020290 Lined Retention Basin West	\$ 10,324,588	\$ 951,849	\$ 9,372,739	\$ -	\$ -	\$ 1,233,579	\$ 21,251	\$ 10,485
2	EB020745 Lined Retention Basin East	\$ 10,280,726	\$ 673,595	\$ 9,607,131	\$ -	\$ -	\$ 366,510	\$ 21,161	\$ 10,747
3	EB020298 East Bend SW/PW Reroute	\$ 29,882,379	\$ 2,504,238	\$ 27,378,141	\$ -	\$ -	\$ 2,811,411	\$ 61,508	\$ 30,627
4	EB021281 East Bend Landfill Cell 2	\$ 16,944,582	\$ 1,044,808	\$ 15,899,774	\$ -	\$ -	\$ 353,980	\$ 34,878	\$ 17,786
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 67,432,275	\$ 5,174,490	\$ 62,257,785	\$ -	\$ -	\$ 4,765,480	\$ 138,798	\$ 69,645

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization of Coal Ash ARO and Landfill Closure

For the Expense Month of August 2022

Line No.	Period (1)	Coal Ash ARO					Coal Ash ARO and Landfill Closure		Landfill Closure		Total Recovery (11)=(5)+(8)+(10)	
		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)	Cash Spend (9)	Recovery: 1-Yr Amort. (10)		
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	-	-	291,152	-	-
3	Jan-17	Actual	358,148	-	43,243	-	8,182,238	-	-	13,108	-	-
4	Feb-17	Actual	424,021	-	40,351	-	8,646,610	-	-	14,281	-	-
5	Mar-17	Actual	692,184	(26,763)	44,724	-	9,356,755	-	-	20,225	-	-
6	Apr-17	Actual	254,067	-	50,949	-	9,661,771	-	-	30,324	-	-
7	May-17	Actual	608,377	-	56,141	-	10,326,289	-	-	34,997	-	-
8	Jun-17	Actual	265,619	(26,763)	53,472	-	10,618,617	-	-	45,594	-	-
9	Jul-17	Actual	220,636	-	51,558	-	10,890,811	-	-	30,629	-	-
10	Aug-17	Actual	272,053	-	47,731	-	11,210,595	-	-	17,432	-	-
11	Sep-17	Actual	233,743	(26,763)	44,389	-	11,461,964	-	-	23,200	-	-
12	Oct-17	Actual	444,793	-	60,670	-	11,967,427	-	-	47,545	-	-
13	Nov-17	Actual	525,770	-	68,573	-	12,561,770	-	-	33,047	-	-
14	Dec-17	Actual	2,482,493	(26,763)	82,850	-	15,100,350	-	-	18,362	-	-
15	Jan-18	Actual	510,525	-	91,185	-	15,702,060	-	-	18,843	-	-
16	Feb-18	Actual	89,648	-	91,534	-	15,883,242	-	-	-	-	-
17	Mar-18	Actual	396,977	(26,763)	93,696	-	16,347,152	-	-	14,037	-	-
18	Apr-18	Actual	132,294	-	111,722	-	16,591,168	173,000	-	36,260	-	-
19	May-18	Actual	-	-	112,480	-	16,703,648	100,234	-	88,888	-	-
20	Jun-18	Actual	-	-	111,870	(202,486)	16,613,032	150,901	(173,000)	128,843	-	(375,486)
21	Jul-18	Actual	-	-	111,255	(202,486)	16,521,801	196,585	(100,234)	16	-	(302,720)
22	Aug-18	Actual	-	-	110,637	(202,486)	16,429,952	321,815	(150,901)	29,844	-	(353,387)
23	Sep-18	Actual	-	-	110,014	(202,486)	16,337,480	275,135	(196,585)	-	-	(399,071)
24	Oct-18	Actual	-	-	109,387	(202,486)	16,244,381	69,886	(321,815)	-	-	(524,301)
25	Nov-18	Actual	-	-	108,756	(202,486)	16,150,651	238,428	(275,135)	(2,498)	-	(477,621)
26	Dec-18	Actual	-	-	108,121	(202,486)	16,056,286	263,037	(69,886)	-	-	(272,372)
27	Jan-19	Actual	-	-	107,481	(202,486)	15,961,281	177,996	(238,428)	-	-	(440,914)
28	Feb-19	Actual	-	-	106,837	(202,486)	15,865,632	150,851	(263,037)	-	-	(465,523)
29	Mar-19	Actual	-	-	106,188	(202,486)	15,769,334	408,609	(177,996)	-	-	(380,482)
30	Apr-19	Actual	-	-	105,535	(202,486)	15,672,383	1,588,547	(150,851)	-	-	(353,337)
31	May-19	Actual	-	-	104,878	(202,486)	15,574,775	1,641,055	(408,609)	-	-	(611,095)
32	Jun-19	Actual	-	-	104,216	(202,486)	15,476,505	1,423,233	(1,588,547)	-	-	(1,791,033)
33	Jul-19	Actual	-	-	103,550	(202,486)	15,377,569	1,368,585	(1,641,055)	-	-	(1,843,541)
34	Aug-19	Actual	-	-	102,880	(202,486)	15,277,963	487,759	(1,423,233)	-	-	(1,625,719)
35	Sep-19	Actual	-	-	102,204	(202,486)	15,177,681	47,477	(1,368,585)	-	-	(1,571,071)
36	Oct-19	Actual	-	-	101,524	(202,486)	15,076,719	(18,595)	(487,759)	-	-	(690,245)
37	Nov-19	Actual	-	-	100,840	(202,486)	14,975,073	330,375	(47,477)	-	-	(249,963)
38	Dec-19	Actual	-	-	100,151	(202,486)	14,872,738	121,640	18,595	-	-	(183,891)
39	Jan-20	Actual	-	-	99,457	(202,486)	14,769,709	77,416	(330,375)	-	-	(532,861)
40	Feb-20	Actual	-	-	98,759	(202,486)	14,665,982	25,184	(121,640)	-	-	(324,126)
41	Mar-20	Actual	-	-	98,055	(202,486)	14,561,551	27,631	(77,416)	-	-	(279,902)
42	Apr-20	Actual	-	-	97,347	(202,486)	14,456,412	50,807	(25,184)	-	-	(227,670)
43	May-20	Actual	-	-	96,635	(202,486)	14,350,561	82,538	(27,631)	-	-	(230,117)
44	Jun-20	Actual	-	-	95,917	(202,486)	14,243,992	133,817	(50,807)	-	-	(253,293)
45	Jul-20	Actual	-	-	95,194	(202,486)	14,136,700	127,493	(82,538)	-	-	(285,024)
46	Aug-20	Actual	-	-	94,467	(202,486)	14,028,681	64,152	(133,817)	-	-	(336,303)
47	Sep-20	Actual	-	-	93,735	(202,486)	13,919,930	127,860	(127,493)	-	-	(329,979)
48	Oct-20	Actual	-	-	92,997	(202,486)	13,810,441	226,553	(64,152)	-	-	(266,638)
49	Nov-20	Actual	-	-	92,255	(202,486)	13,700,210	423,320	(127,860)	5,465	-	(330,346)
50	Dec-20	Actual	-	-	91,508	(202,486)	13,589,232	295,353	(226,553)	17,705	-	(429,039)

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization of Coal Ash ARO and Landfill Closure

For the Expense Month of August 2022

Line No.	Period (1)	Coal Ash ARO					Coal Ash ARO and Landfill Closure		Landfill Closure (a)		Total Recovery (11)=(5)+(8)+(10)	
		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)	Cash Spend (9)	Recovery: 1-Yr Amort. (10)		
51	Jan-21	Actual		\$	90,756	\$(202,486)	\$13,477,502	\$80,328	\$(423,320)	\$19,334	\$-	\$(625,806)
52	Feb-21	Actual			89,998	(202,486)	13,365,014	86,810	(295,353)	4,714	-	(497,839)
53	Mar-21	Actual			89,235	(202,486)	13,251,763	71,335	(80,328)	20,845	-	(282,814)
54	Apr-21	Actual			88,468	(202,486)	13,137,745	90,503	(86,810)	23,069	-	(289,296)
55	May-21	Actual			87,695	(202,486)	13,022,954	208,821	(71,335)	11,618	-	(273,821)
56	Jun-21	Actual			86,916	(202,486)	12,907,384	245,017	(90,503)	10,988	-	(292,989)
57	Jul-21	Actual			86,133	(202,486)	12,791,031	102,270	(208,821)	-	-	(411,307)
58	Aug-21	Actual			85,344	(202,486)	12,673,889	-	(245,017)	144,042	-	(447,503)
59	Sep-21	Actual			84,550	(202,486)	12,555,953	-	(102,270)	309,800	-	(304,756)
60	Oct-21	Actual			83,750	(202,486)	12,437,217	-	-	411,865	-	(202,486)
61	Nov-21	Actual			82,945	(202,486)	12,317,676	-	-	388,963	-	(202,486)
62	Dec-21	Actual			82,135	(202,486)	12,197,325	-	-	194,124	-	(202,486)
63	Jan-22	Actual			81,319	(202,486)	12,076,158	-	-	105,294	-	(202,486)
64	Feb-22	Actual			80,498	(202,486)	11,954,170	103,920	-	27,183	-	(202,486)
65	Mar-22	Actual			79,671	(202,486)	11,831,355	131,221	-	-	-	(202,486)
66	Apr-22	Actual			78,838	(202,486)	11,707,707	137,219	(103,920)	-	(219,095)	(525,501)
67	May-22	Actual			78,000	(202,486)	11,583,221	354,133	(131,221)	-	(219,095)	(552,802)
68	Jun-22	Actual			77,156	(202,486)	11,457,891	173,833	(137,219)	-	(219,095)	(558,800)
69	Jul-22	Actual			76,306	(202,486)	11,331,711	163,275	(354,133)	-	(219,095)	(775,714)
70	Aug-22	Actual			75,451	(202,486)	11,204,676	504,873	(173,833)	-	(219,095)	(595,414)
71	Sep-22	Actual			74,589	(202,486)	11,076,779	-	(163,275)	-	(219,095)	(584,856)
72	Oct-22	Actual			73,722	(202,486)	10,948,015	-	(504,873)	-	(219,095)	(926,454)
73	Nov-22	Actual			72,849	(202,486)	10,818,378	-	-	-	(219,095)	(421,581)
74	Dec-22	Actual			71,971	(202,486)	10,687,863	-	-	-	(219,095)	(421,581)
75	Jan-23	Actual			71,086	(202,486)	10,556,463	-	-	-	(219,095)	(421,581)
76	Feb-23	Actual			70,195	(202,486)	10,424,172	-	-	-	(219,095)	(421,581)
77	Mar-23	Actual			69,298	(202,486)	10,290,984	-	-	-	(219,095)	(421,581)
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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization of Coal Ash ARO and Landfill Closure

For the Expense Month of August 2022

Line No.	Period (1)	Coal Ash ARO				Coal Ash ARO and Landfill Closure		Landfill Closure		Total Recovery (11)=(5)+(8)+(10)	
		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)	Cash Spend (9)		Recovery: 1-Yr Amort. (10)
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)		\$ 13,632,236	\$ (13,632,236)	\$ 2,629,139	\$ (2,629,140)	\$ (40,559,696)

Monthly Amortization Amount

\$ (926,454)

(a) In Case No. 2021-00290, the Commission granted Duke Energy Kentucky's request to recover unrecovered construction, maintenance, closure, and post-closure maintenance costs of the East Landfill and unrecovered maintenance costs of the West Landfill at the East Bend Station through its Environmental Surcharge Mechanism. Beginning with the expense month of February 2022, ES FORM 2.20, will be revised to show the costs associated with the closure of the East Landfill. The amount shown as "Landfill Closure" cash spend in columns (9) and (10) of ES FORM 2.20, which is being amortized for recovery over a period of twelve months, includes \$1,110,406 of costs related to the closure of the East Landfill and \$1,518,734 of unrecovered maintenance costs related to the West Landfill.

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending August 2022

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	203,695	-	90	-	203,605
Dollars	\$ 16,302.69	\$ -	\$ 7.20	\$ -	\$ 16,295.49
\$/Allowance	\$ 0.080035	\$ -	\$ 0.080000	\$ -	\$ 0.080035
NO_x Allowances - Annual					
Quantity	12,961	-	109	-	12,852
Dollars	\$ 2,249.73	\$ -	\$ 18.53	\$ -	\$ 2,231.20
\$/Allowance	\$ 0.173577	\$ -	\$ 0.170000	\$ -	\$ 0.173607
NO_x Allowances - Seasonal (b)					
Quantity	1,083	-	108	-	975
Dollars	\$ 210.16	\$ -	\$ 18.36	\$ -	\$ 191.80
\$/Allowance	\$ 0.194054	\$ -	\$ 0.170000	\$ -	\$ 0.196718
Total Emission Allowances					
Quantity	217,739	-	307	-	217,432
Dollars	\$ 18,762.58	\$ -	\$ 44.09	\$ -	\$ 18,718.49

(a) Note: The SO₂ 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.

(b) Note: Inventory adjustment due to inadvertently excluding NO_x allowances for the CSSO₂G1 Program in prior months.

ES FORM 2.50

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

Environmental Reagent Expenses

For the Expense Month of August 2022

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
1	Ammonia	502020	\$ 69,650	\$ 69,650
2	Lime	502040	580,005	580,005
3	Hydrated Lime	502040	42,521	42,521
4	Magnesium Hydroxide ^(Note 1)	502040	-	-
5	Total		\$ 692,176	\$ 692,176

Note 1: East Bend Station's Flue Gas Desulfurization is a Magnesium Oxide based technology. It is the only one of its kind within Duke Energy's current portfolio. The Magnesium Oxide based technology requires a particular chemical construct of lime to function properly, and as such, the scrubber utilizes a "quicklime" material versus the nominal limestone which is considered a Calcium Carbonate based technology. In March of 2020 the vendor's mining facility supplying the quicklime material to East Bend discontinued operations. This facility's quicklime product contained the proper constituents including the Magnesium required for East Bend's optimal scrubber performance. Upon learning of this facility's closure, Duke Energy Kentucky began exploring different solutions to obtain scrubber material with the correct chemical composition, including different mine sources and adding chemicals to produce the correct product. The vendor made the commitment to continue meeting contractual obligations by supplying East Bend with a blended product (Dolomitic Lime and Quicklime) from an alternate facility. Unfortunately, contractually meeting the specifications of the blended commodity, the reactivity of the substitute dolomitic lime is insufficient and as a result, East Bend found itself not able to meet its scrubber limit. In order for East Bend Station to meet its SO2 scrubbing limit, the Company must add an additional chemical reagent, Magnesium Hydroxide, to the substitute blended lime to produce the correct chemical reaction and achieve East Bend's SO2 limit.

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 August 2022

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge
					(2) - (5)
Sep-21	\$ 14,902,237			\$ 1,012,999	\$ 13,889,238
Oct-21	10,769,498			595,584	10,173,914
Nov-21	11,587,106			375,740	11,211,366
Dec-21	16,001,721			510,096	15,491,625
Jan-22	21,318,327			611,393	20,706,934
Feb-22	19,751,655			604,732	19,146,923
Mar-22	11,607,297			541,161	11,066,136
Apr-22	12,082,416			1,006,766	11,075,650
May-22	11,615,289			956,257	10,659,032
Jun-22	17,910,941			1,614,789	16,296,152
Jul-22	18,563,570			1,659,116	16,904,454
Aug-22	\$ 18,473,401			\$ 640,890	\$ 17,832,511
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 14,537,828
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 32,891,352
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					44.20%

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)
Sep-21	\$ 19,327,541	\$ 5,885,205	\$ 345,938	\$ 1,254,161	\$ 18,073,380	\$ 11,842,237
Oct-21	16,177,896	5,136,292	(259,585)	888,473	15,289,423	10,412,716
Nov-21	18,281,877	4,737,949	3,266,165	482,562	17,799,315	9,795,201
Dec-21	20,902,282	5,194,127	5,087,696	488,554	20,413,728	10,131,905
Jan-22	23,718,760	5,133,317	7,974,524	455,146	23,263,614	10,155,773
Feb-22	21,218,594	4,675,522	5,624,922	492,009	20,726,585	10,426,141
Mar-22	14,758,559	4,840,248	(183,660)	760,990	13,997,569	9,340,981
Apr-22	9,200,787	2,373,083	559,030	832,346	8,368,441	5,436,328
May-22	17,061,583	6,907,083	1,042,516	1,480,087	15,581,496	7,631,897
Jun-22	9,290,552	1,390,573	2,437,838	808,874	8,481,678	4,653,267
Jul-22	37,009,503	10,084,818	5,088,354	2,992,108	34,017,395	18,844,223
Aug-22	\$ 25,443,793	\$ 6,923,013	\$ 3,607,722	\$ 1,214,128	\$ 24,229,665	\$ 13,698,930
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 18,353,524	\$ 10,197,467
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 32,891,352	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					55.80%	

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 September 2022

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	62,304
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	14,650,960
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		0.43%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	79,975
Jurisdictional R(m)	ES Form 1.10, Line 16		\$	10,259,794
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		0.78%

Effective Date for Billing: November 1, 2022

Submitted by: /s/ Libbie S. Miller

Title: Rates & Regulatory Strategy Manager

Date Submitted: October 21, 2022

ES FORM 1.10

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

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of September 2022

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	\$ 57,336,010
2	RB ÷ 12 months	(1) ÷ 12	\$ 4,778,001
3	Pretax Rate of Return (ROR)	ES Form 1.20	7.905%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 377,701
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 2,403,754
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ 2,345,000
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 436,455
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	97.15%
9	Jurisdictional E(m)	(7) x (8)	\$ 424,016
10	Prior Period Adjustment (if necessary)	(A)	+
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ (281,737)
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 142,279
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 12,439

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	43.79%	56.21%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 62,304	\$ 79,975
16	R(m) Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	ES Form 3.00 ES Form 3.00	\$ 14,650,960	\$ 10,259,794
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	0.43%	0.78%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 33,456,734	97.15%
19	Sales for Resale	Company Records	\$ 981,894	2.85%
20	Total Revenue		\$ 34,438,628	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	5.835%	1.710%	0.100%		0.100%
2	Long-term Debt	45.931%	4.028%	1.850%		1.850%
3	Common Equity	48.234%	9.250%	4.462%	1.3346139	5.955%
4	Total	100.000%		6.412%		7.905%

Note: Capital structure, cost of debt and tax rate gross-up factor as approved in Case No. 2019-00271. 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 September 2022

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant) Excluding AFUDC	ES Form 2.10	\$ 67,432,275
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	-
3	Subtotal		\$ 67,432,275
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 18,658
6	Subtotal		\$ 18,658
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 5,313,288
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	4,801,635
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 10,114,923
12	Environmental Compliance Rate Base		\$ 57,336,010
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 138,798
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 69,489
16	Monthly Amortization Expense	ES Form 2.20	\$ 1,380,761
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 52
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 814,654
19	Total Environmental Compliance Operating Expense		\$ 2,403,754
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x Allowances Sales		\$ 2,345,000
23	Total Emission Allowance Sales		\$ 2,345,000
24	<u>(Over) / Under Recovery</u>		
25	Adjusted Jurisdictional E(m) Authorized for Expense Month two Months Prior		\$ 991,468
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		1,273,205
27	(Over) / Under Recovery		\$ (281,737)

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 September 2022

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project No.	Description	Gross Plant in-Service Excl. AFUDC as of September-22	Accumulated Depreciation as of September-22	Net Plant in-Service as of September-22	CWIP Excluding AFUDC as of September-22	Accumulated Deferred ITC as of September-22	Accumulated Deferred Tax Balance as of September-22	Monthly Depreciation Expense	Monthly Property Tax Expense
				(2)-(3)					
1	EB020290 Lined Retention Basin West	\$ 10,324,588	\$ 973,100	\$ 9,351,488	\$ -	\$ -	\$ 1,235,546	\$ 21,251	\$ 10,461
2	EB020745 Lined Retention Basin East	\$ 10,280,726	\$ 694,756	\$ 9,585,970	\$ -	\$ -	\$ 374,579	\$ 21,161	\$ 10,723
3	EB020298 East Bend SW/PW Reroute	\$ 29,882,379	\$ 2,565,746	\$ 27,316,633	\$ -	\$ -	\$ 2,822,481	\$ 61,508	\$ 30,558
4	EB021281 East Bend Landfill Cell 2	\$ 16,944,582	\$ 1,079,686	\$ 15,864,896	\$ -	\$ -	\$ 369,029	\$ 34,878	\$ 17,747
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 67,432,275	\$ 5,313,288	\$ 62,118,987	\$ -	\$ -	\$ 4,801,635	\$ 138,798	\$ 69,489

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Amortization of Coal Ash ARO and Landfill Closure

For the Expense Month of September 2022

Line No.	Period (1)	Coal Ash ARO				Coal Ash ARO and Landfill Closure			Landfill Closure		Total Recovery (11)=(5)+(8)+(10)	
		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)	Cash Spend (9)	Recovery: 1-Yr Amort. (10)		
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	-	-	291,152	-	-
3	Jan-17	Actual	358,148	-	43,243	-	8,182,238	-	-	13,108	-	-
4	Feb-17	Actual	424,021	-	40,351	-	8,646,610	-	-	14,281	-	-
5	Mar-17	Actual	692,184	(26,763)	44,724	-	9,356,755	-	-	20,225	-	-
6	Apr-17	Actual	254,067	-	50,949	-	9,661,771	-	-	30,324	-	-
7	May-17	Actual	608,377	-	56,141	-	10,326,289	-	-	34,997	-	-
8	Jun-17	Actual	265,619	(26,763)	53,472	-	10,618,617	-	-	45,594	-	-
9	Jul-17	Actual	220,636	-	51,558	-	10,890,811	-	-	30,629	-	-
10	Aug-17	Actual	272,053	-	47,731	-	11,210,595	-	-	17,432	-	-
11	Sep-17	Actual	233,743	(26,763)	44,389	-	11,461,964	-	-	23,200	-	-
12	Oct-17	Actual	444,793	-	60,670	-	11,967,427	-	-	47,545	-	-
13	Nov-17	Actual	525,770	-	68,573	-	12,561,770	-	-	33,047	-	-
14	Dec-17	Actual	2,482,493	(26,763)	82,850	-	15,100,350	-	-	18,362	-	-
15	Jan-18	Actual	510,525	-	91,185	-	15,702,060	-	-	18,843	-	-
16	Feb-18	Actual	89,648	-	91,534	-	15,883,242	-	-	-	-	-
17	Mar-18	Actual	396,977	(26,763)	93,696	-	16,347,152	-	-	14,037	-	-
18	Apr-18	Actual	132,294	-	111,722	-	16,591,168	173,000	-	36,260	-	-
19	May-18	Actual	-	-	112,480	-	16,703,648	100,234	-	88,888	-	-
20	Jun-18	Actual	-	-	111,870	(202,486)	16,613,032	150,901	(173,000)	128,843	-	(375,486)
21	Jul-18	Actual	-	-	111,255	(202,486)	16,521,801	196,585	(100,234)	16	-	(302,720)
22	Aug-18	Actual	-	-	110,637	(202,486)	16,429,952	321,815	(150,901)	29,844	-	(353,387)
23	Sep-18	Actual	-	-	110,014	(202,486)	16,337,480	275,135	(196,585)	-	-	(399,071)
24	Oct-18	Actual	-	-	109,387	(202,486)	16,244,381	69,886	(321,815)	-	-	(524,301)
25	Nov-18	Actual	-	-	108,756	(202,486)	16,150,651	238,428	(275,135)	(2,498)	-	(477,621)
26	Dec-18	Actual	-	-	108,121	(202,486)	16,056,286	263,037	(69,886)	-	-	(272,372)
27	Jan-19	Actual	-	-	107,481	(202,486)	15,961,281	177,996	(238,428)	-	-	(440,914)
28	Feb-19	Actual	-	-	106,837	(202,486)	15,865,632	150,851	(263,037)	-	-	(465,523)
29	Mar-19	Actual	-	-	106,188	(202,486)	15,769,334	408,609	(177,996)	-	-	(380,482)
30	Apr-19	Actual	-	-	105,535	(202,486)	15,672,383	1,588,547	(150,851)	-	-	(353,337)
31	May-19	Actual	-	-	104,878	(202,486)	15,574,775	1,641,055	(408,609)	-	-	(611,095)
32	Jun-19	Actual	-	-	104,216	(202,486)	15,476,505	1,423,233	(1,588,547)	-	-	(1,791,033)
33	Jul-19	Actual	-	-	103,550	(202,486)	15,377,569	1,368,585	(1,641,055)	-	-	(1,843,541)
34	Aug-19	Actual	-	-	102,880	(202,486)	15,277,963	487,759	(1,423,233)	-	-	(1,625,719)
35	Sep-19	Actual	-	-	102,204	(202,486)	15,177,681	47,477	(1,368,585)	-	-	(1,571,071)
36	Oct-19	Actual	-	-	101,524	(202,486)	15,076,719	(18,595)	(487,759)	-	-	(690,245)
37	Nov-19	Actual	-	-	100,840	(202,486)	14,975,073	330,375	(47,477)	-	-	(249,963)
38	Dec-19	Actual	-	-	100,151	(202,486)	14,872,738	121,640	18,595	-	-	(183,891)
39	Jan-20	Actual	-	-	99,457	(202,486)	14,769,709	77,416	(330,375)	-	-	(532,861)
40	Feb-20	Actual	-	-	98,759	(202,486)	14,665,982	25,184	(121,640)	-	-	(324,126)
41	Mar-20	Actual	-	-	98,055	(202,486)	14,561,551	27,631	(77,416)	-	-	(279,902)
42	Apr-20	Actual	-	-	97,347	(202,486)	14,456,412	50,807	(25,184)	-	-	(227,670)
43	May-20	Actual	-	-	96,635	(202,486)	14,350,561	82,538	(27,631)	-	-	(230,117)
44	Jun-20	Actual	-	-	95,917	(202,486)	14,243,992	133,817	(50,807)	-	-	(253,293)
45	Jul-20	Actual	-	-	95,194	(202,486)	14,136,700	127,493	(82,538)	-	-	(285,024)
46	Aug-20	Actual	-	-	94,467	(202,486)	14,028,681	64,152	(133,817)	-	-	(336,303)
47	Sep-20	Actual	-	-	93,735	(202,486)	13,919,930	127,860	(127,493)	-	-	(329,979)
48	Oct-20	Actual	-	-	92,997	(202,486)	13,810,441	226,553	(64,152)	-	-	(266,638)
49	Nov-20	Actual	-	-	92,255	(202,486)	13,700,210	423,320	(127,860)	5,465	-	(330,346)
50	Dec-20	Actual	\$ -	\$ -	\$ 91,508	\$ (202,486)	\$13,589,232	\$ 295,353	\$ (226,553)	\$ 17,705	\$ -	\$ (429,039)

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Amortization of Coal Ash ARO and Landfill Closure

For the Expense Month of September 2022

Line No.	Period (1)	Coal Ash ARO				Coal Ash ARO and Landfill Closure			Landfill Closure (a)		Total Recovery (11)=(5)+(8)+(10)
		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)	Cash Spend (9)	Recovery: 1-Yr Amort. (10)	
51	Jan-21	Actual	\$ -	\$ 90,756	\$ (202,486)	\$13,477,502	\$ 80,328	\$ (423,320)	\$ 19,334	\$ -	\$ (625,806)
52	Feb-21	Actual	-	89,998	(202,486)	13,365,014	86,810	(295,353)	4,714	-	(497,839)
53	Mar-21	Actual	-	89,235	(202,486)	13,251,763	71,335	(80,328)	20,845	-	(282,814)
54	Apr-21	Actual	-	88,468	(202,486)	13,137,745	90,503	(86,810)	23,069	-	(289,296)
55	May-21	Actual	-	87,695	(202,486)	13,022,954	208,821	(71,335)	11,618	-	(273,821)
56	Jun-21	Actual	-	86,916	(202,486)	12,907,384	245,017	(90,503)	10,988	-	(292,989)
57	Jul-21	Actual	-	86,133	(202,486)	12,791,031	102,270	(208,821)	-	-	(411,307)
58	Aug-21	Actual	-	85,344	(202,486)	12,673,889	-	(245,017)	144,042	-	(447,503)
59	Sep-21	Actual	-	84,550	(202,486)	12,555,953	-	(102,270)	309,800	-	(304,756)
60	Oct-21	Actual	-	83,750	(202,486)	12,437,217	-	-	411,865	-	(202,486)
61	Nov-21	Actual	-	82,945	(202,486)	12,317,676	-	-	388,963	-	(202,486)
62	Dec-21	Actual	-	82,135	(202,486)	12,197,325	-	-	194,124	-	(202,486)
63	Jan-22	Actual	-	81,319	(202,486)	12,076,158	-	-	105,294	-	(202,486)
64	Feb-22	Actual	-	80,498	(202,486)	11,954,170	103,920	-	27,183	-	(202,486)
65	Mar-22	Actual	-	79,671	(202,486)	11,831,355	131,221	-	-	-	(202,486)
66	Apr-22	Actual	-	78,838	(202,486)	11,707,707	137,219	(103,920)	-	(219,095)	(525,501)
67	May-22	Actual	-	78,000	(202,486)	11,583,221	354,133	(131,221)	-	(219,095)	(552,802)
68	Jun-22	Actual	-	77,156	(202,486)	11,457,891	173,833	(137,219)	-	(219,095)	(558,800)
69	Jul-22	Actual	-	76,306	(202,486)	11,331,711	163,275	(354,133)	-	(219,095)	(775,714)
70	Aug-22	Actual	-	75,451	(202,486)	11,204,676	504,873	(173,833)	-	(219,095)	(595,414)
71	Sep-22	Actual	-	74,589	(202,486)	11,076,779	5,755,078	(163,275)	-	(219,095)	(584,856)
72	Oct-22	Actual	-	73,722	(202,486)	10,948,015	-	(504,873)	-	(219,095)	(926,454)
73	Nov-22	Actual	-	72,849	(202,486)	10,818,378	-	(959,180)	-	(219,095)	(1,380,761)
74	Dec-22	Actual	-	71,971	(202,486)	10,687,863	-	(959,180)	-	(219,095)	(1,380,761)
75	Jan-23	Actual	-	71,086	(202,486)	10,556,463	-	(959,180)	-	(219,095)	(1,380,761)
76	Feb-23	Actual	-	70,195	(202,486)	10,424,172	-	(959,180)	-	(219,095)	(1,380,761)
77	Mar-23	Actual	-	69,298	(202,486)	10,290,984	-	(959,180)	-	(219,095)	(1,380,761)
78	Apr-23	Actual	-	68,395	(202,486)	10,156,893	-	(959,180)	-	-	(1,161,666)
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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization of Coal Ash ARO and Landfill Closure

For the Expense Month of September 2022

Line No.	Period (1)	Coal Ash ARO				Coal Ash ARO and Landfill Closure		Landfill Closure		Total Recovery (11)=(5)+(8)+(10)	
		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)	Cash Spend (9)		Recovery: 1-Yr Amort. (10)
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)
		\$16,256,244	\$ (1,097,279)	\$ 9,139,355	\$ (24,298,320)		\$ 19,387,314	\$ (19,387,314)	\$ 2,629,139	\$ (2,629,140)	\$ (46,314,774)

Monthly Amortization Amount

\$ (1,380,761)

(a) In Case No. 2021-00290, the Commission granted Duke Energy Kentucky's request to recover unrecovered construction, maintenance, closure, and post-closure maintenance costs of the East Landfill and unrecovered maintenance costs of the West Landfill at the East Bend Station through its Environmental Surcharge Mechanism. Beginning with the expense month of February 2022, ES FORM 2.20, will be revised to show the costs associated with the closure of the East Landfill. The amount shown as "Landfill Closure" cash spend in columns (9) and (10) of ES FORM 2.20, which is being amortized for recovery over a period of twelve months, includes \$1,110,406 of costs related to the closure of the East Landfill and \$1,518,734 of unrecovered maintenance costs related to the West Landfill.

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending September 2022

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	203,605	-	116	-	203,489
Dollars	\$ 16,295.49	\$ -	\$ 9.28	\$ -	\$ 16,286.21
\$/Allowance	\$ 0.080035	\$ -	\$ 0.080000	\$ -	\$ 0.080035
NO_x Allowances - Annual					
Quantity	12,852	-	126	-	12,726
Dollars	\$ 2,231.20	\$ -	\$ 21.42	\$ -	\$ 2,209.78
\$/Allowance	\$ 0.173607	\$ -	\$ 0.170000	\$ -	\$ 0.173643
NO_x Allowances - Seasonal					
Quantity	975	-	126	50	799
Dollars	\$ 191.80	\$ -	\$ 21.27	\$ 8	\$ 162.09
\$/Allowance	\$ 0.196718	\$ -	\$ 0.168832	\$ 0.168832	\$ 0.202861
Total Emission Allowances					
Quantity	217,432	-	368	50	217,014
Dollars	\$ 18,718.49	\$ -	\$ 51.97	\$ 8	\$ 18,658.08

(a) Note: The SO₂ 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

#REF!

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
1	Ammonia	502020	\$ 68,650	\$ 68,650
2	Lime	502040	694,404	694,404
3	Hydrated Lime	502040	51,600	51,600
4	Magnesium Hydroxide ^(Note 1)	502040	-	-
5	Total		\$ 814,654	\$ 814,654

Note 1: East Bend Station's Flue Gas Desulfurization is a Magnesium Oxide based technology. It is the only one of its kind within Duke Energy's current portfolio. The Magnesium Oxide based technology requires a particular chemical construct of lime to function properly, and as such, the scrubber utilizes a "quicklime" material versus the nominal limestone which is considered a Calcium Carbonate based technology. In March of 2020 the vendor's mining facility supplying the quicklime material to East Bend discontinued operations. This facility's quicklime product contained the proper constituents including the Magnesium required for East Bend's optimal scrubber performance. Upon learning of this facility's closure, Duke Energy Kentucky began exploring different solutions to obtain scrubber material with the correct chemical composition, including different mine sources and adding chemicals to produce the correct product. The vendor made the commitment to continue meeting contractual obligations by supplying East Bend with a blended product (Dolomitic Lime and Quicklime) from an alternate facility. Unfortunately, contractually meeting the specifications of the blended commodity, the reactivity of the substitute dolomitic lime is insufficient and as a result, East Bend found itself not able to meet its scrubber limit. In order for East Bend Station to meet its SO2 scrubbing limit, the Company must add an additional chemical reagent, Magnesium Hydroxide, to the substitute blended lime to produce the correct chemical reaction and achieve East Bend's SO2 limit.

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 September 2022

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge
					(2) - (5)
Oct-21	\$ 10,769,498			\$ 595,584	\$ 10,173,914
Nov-21	11,587,106			375,740	11,211,366
Dec-21	16,001,721			510,096	15,491,625
Jan-22	21,318,327			611,393	20,706,934
Feb-22	19,751,655			604,732	19,146,923
Mar-22	11,607,297			541,161	11,066,136
Apr-22	12,082,416			1,006,766	11,075,650
May-22	11,615,289			956,257	10,659,032
Jun-22	17,910,941			1,614,789	16,296,152
Jul-22	18,563,570			1,659,116	16,904,454
Aug-22	18,473,401			640,890	17,832,511
Sep-22	\$ 15,720,676			\$ 473,849	\$ 15,246,827
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 14,650,960
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 33,456,734
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					43.79%

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)
Oct-21	\$ 16,177,896	\$ 5,136,292	\$ (259,585)	\$ 888,473	\$ 15,289,423	\$ 10,412,716
Nov-21	18,281,877	4,737,949	3,266,165	482,562	17,799,315	9,795,201
Dec-21	20,902,282	5,194,127	5,087,696	488,554	20,413,728	10,131,905
Jan-22	23,718,760	5,133,317	7,974,524	455,146	23,263,614	10,155,773
Feb-22	21,218,594	4,675,522	5,624,922	492,009	20,726,585	10,426,141
Mar-22	14,758,559	4,840,248	(183,660)	760,990	13,997,569	9,340,981
Apr-22	9,200,787	2,373,083	559,030	832,346	8,368,441	5,436,328
May-22	17,061,583	6,907,083	1,042,516	1,480,087	15,581,496	7,631,897
Jun-22	9,290,552	1,390,573	2,437,838	808,874	8,481,678	4,653,267
Jul-22	37,009,503	10,084,818	5,088,354	2,992,108	34,017,395	18,844,223
Aug-22	25,443,793	6,923,013	3,607,722	1,214,128	24,229,665	13,698,930
Sep-22	\$ 24,299,737	\$ 6,716,720	\$ 4,193,497	\$ 799,356	\$ 23,500,381	\$ 12,590,164
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 18,805,774	\$ 10,259,794
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 33,456,734	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					56.21%	

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 2022

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,117,491
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	14,966,852
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		7.47%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,456,779
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	10,186,744
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		14.30%

Effective Date for Billing: December 1, 2022

Submitted by: /s/ Libbie S. Miller

Title: Rates & Regulatory Strategy Manager

Date Submitted: November 18, 2022

ES FORM 1.10

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

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of October 2022

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	\$ 57,161,054
2	RB ÷ 12 months	(1) ÷ 12	\$ 4,763,421
3	Pretax Rate of Return (ROR)	ES Form 1.20	7.905%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 376,548
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 2,183,393
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 2,559,941
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	97.11%
9	Jurisdictional E(m)	(7) x (8)	\$ 2,485,959
10	Prior Period Adjustment (if necessary)	(A)	+
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ 88,311
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 2,574,270
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 73,982

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	43.41%	56.59%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 1,117,491	\$ 1,456,779
16	R(m) Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	ES Form 3.00 ES Form 3.00	\$ 14,966,852	\$ 10,186,744
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	7.47%	14.30%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 34,477,496	97.11%
19	Sales for Resale	Company Records	\$ 1,025,788	2.89%
20	Total Revenue		\$ 35,503,284	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	5.835%	1.710%	0.100%		0.100%
2	Long-term Debt	45.931%	4.028%	1.850%		1.850%
3	Common Equity	48.234%	9.250%	4.462%	1.3346139	5.955%
4	Total	100.000%		6.412%		7.905%

Note: Capital structure, cost of debt and tax rate gross-up factor as approved in Case No. 2019-00271. 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 2022

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant) Excluding AFUDC	ES Form 2.10	\$ 67,432,275
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	-
3	Subtotal		\$ 67,432,275
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 18,656
6	Subtotal		\$ 18,656
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 5,452,086
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	4,837,791
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 10,289,877
12	Environmental Compliance Rate Base		\$ 57,161,054
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 138,798
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 69,334
16	Monthly Amortization Expense	ES Form 2.20	\$ 1,712,722
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 2
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 262,537
19	Total Environmental Compliance Operating Expense		\$ 2,183,393
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x 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		\$ 1,289,333
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		1,201,022
27	(Over) / Under Recovery		\$ 88,311

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 2022

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
Project No.	Description	Gross Plant in-Service Excl. AFUDC as of October-22	Accumulated Depreciation as of October-22	Net Plant in-Service as of October-22	CWIP Excluding AFUDC as of October-22	Accumulated Deferred ITC as of October-22	Accumulated Deferred Tax Balance as of October-22	Monthly Depreciation Expense	Monthly Property Tax Expense
				(2)-(3)					
1	EB020290 Lined Retention Basin West	\$ 10,324,588	\$ 994,352	\$ 9,330,236	\$ -	\$ -	\$ 1,237,514	\$ 21,251	\$ 10,437
2	EB020745 Lined Retention Basin East	\$ 10,280,726	\$ 715,917	\$ 9,564,809	\$ -	\$ -	\$ 382,648	\$ 21,161	\$ 10,700
3	EB020298 East Bend SW/PW Reroute	\$ 29,882,379	\$ 2,627,254	\$ 27,255,125	\$ -	\$ -	\$ 2,833,551	\$ 61,508	\$ 30,489
4	EB021281 East Bend Landfill Cell 2	\$ 16,944,582	\$ 1,114,563	\$ 15,830,019	\$ -	\$ -	\$ 384,078	\$ 34,878	\$ 17,708
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 67,432,275	\$ 5,452,086	\$ 61,980,189	\$ -	\$ -	\$ 4,837,791	\$ 138,798	\$ 69,334

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Amortization of Coal Ash ARO and Landfill Closure

For the Expense Month of October 2022

Line No.	Period (1)	Coal Ash ARO				Coal Ash ARO and Landfill Closure		Landfill Closure		Total Recovery (11)=(5)+(8)+(10)	
		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)	Cash Spend (9)		Recovery: 1-Yr Amort. (10)
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	-	-	291,152	-	-
3	Jan-17 Actual	358,148	-	43,243	-	8,182,238	-	-	13,108	-	-
4	Feb-17 Actual	424,021	-	40,351	-	8,646,610	-	-	14,281	-	-
5	Mar-17 Actual	692,184	(26,763)	44,724	-	9,356,755	-	-	20,225	-	-
6	Apr-17 Actual	254,067	-	50,949	-	9,661,771	-	-	30,324	-	-
7	May-17 Actual	608,377	-	56,141	-	10,326,289	-	-	34,997	-	-
8	Jun-17 Actual	265,619	(26,763)	53,472	-	10,618,617	-	-	45,594	-	-
9	Jul-17 Actual	220,636	-	51,558	-	10,890,811	-	-	30,629	-	-
10	Aug-17 Actual	272,053	-	47,731	-	11,210,595	-	-	17,432	-	-
11	Sep-17 Actual	233,743	(26,763)	44,389	-	11,461,964	-	-	23,200	-	-
12	Oct-17 Actual	444,793	-	60,670	-	11,967,427	-	-	47,545	-	-
13	Nov-17 Actual	525,770	-	68,573	-	12,561,770	-	-	33,047	-	-
14	Dec-17 Actual	2,482,493	(26,763)	82,850	-	15,100,350	-	-	18,362	-	-
15	Jan-18 Actual	510,525	-	91,185	-	15,702,060	-	-	18,843	-	-
16	Feb-18 Actual	89,648	-	91,534	-	15,883,242	-	-	-	-	-
17	Mar-18 Actual	396,977	(26,763)	93,696	-	16,347,152	-	-	14,037	-	-
18	Apr-18 Actual	132,294	-	111,722	-	16,591,168	173,000	-	36,260	-	-
19	May-18 Actual	-	-	112,480	-	16,703,648	100,234	-	88,888	-	-
20	Jun-18 Actual	-	-	111,870	(202,486)	16,613,032	150,901	(173,000)	128,843	-	(375,486)
21	Jul-18 Actual	-	-	111,255	(202,486)	16,521,801	196,585	(100,234)	16	-	(302,720)
22	Aug-18 Actual	-	-	110,637	(202,486)	16,429,952	321,815	(150,901)	29,844	-	(353,387)
23	Sep-18 Actual	-	-	110,014	(202,486)	16,337,480	275,135	(196,585)	-	-	(399,071)
24	Oct-18 Actual	-	-	109,387	(202,486)	16,244,381	69,886	(321,815)	-	-	(524,301)
25	Nov-18 Actual	-	-	108,756	(202,486)	16,150,651	238,428	(275,135)	(2,498)	-	(477,621)
26	Dec-18 Actual	-	-	108,121	(202,486)	16,056,286	263,037	(69,886)	-	-	(272,372)
27	Jan-19 Actual	-	-	107,481	(202,486)	15,961,281	177,996	(238,428)	-	-	(440,914)
28	Feb-19 Actual	-	-	106,837	(202,486)	15,865,632	150,851	(263,037)	-	-	(465,523)
29	Mar-19 Actual	-	-	106,188	(202,486)	15,769,334	408,609	(177,996)	-	-	(380,482)
30	Apr-19 Actual	-	-	105,535	(202,486)	15,672,383	1,588,547	(150,851)	-	-	(353,337)
31	May-19 Actual	-	-	104,878	(202,486)	15,574,775	1,641,055	(408,609)	-	-	(611,095)
32	Jun-19 Actual	-	-	104,216	(202,486)	15,476,505	1,423,233	(1,588,547)	-	-	(1,791,033)
33	Jul-19 Actual	-	-	103,550	(202,486)	15,377,569	1,368,585	(1,641,055)	-	-	(1,843,541)
34	Aug-19 Actual	-	-	102,880	(202,486)	15,277,963	487,759	(1,423,233)	-	-	(1,625,719)
35	Sep-19 Actual	-	-	102,204	(202,486)	15,177,681	47,477	(1,368,585)	-	-	(1,571,071)
36	Oct-19 Actual	-	-	101,524	(202,486)	15,076,719	(18,595)	(487,759)	-	-	(690,245)
37	Nov-19 Actual	-	-	100,840	(202,486)	14,975,073	330,375	(47,477)	-	-	(249,963)
38	Dec-19 Actual	-	-	100,151	(202,486)	14,872,738	121,640	18,595	-	-	(183,891)
39	Jan-20 Actual	-	-	99,457	(202,486)	14,769,709	77,416	(330,375)	-	-	(532,861)
40	Feb-20 Actual	-	-	98,759	(202,486)	14,665,982	25,184	(121,640)	-	-	(324,126)
41	Mar-20 Actual	-	-	98,055	(202,486)	14,561,551	27,631	(77,416)	-	-	(279,902)
42	Apr-20 Actual	-	-	97,347	(202,486)	14,456,412	50,807	(25,184)	-	-	(227,670)
43	May-20 Actual	-	-	96,635	(202,486)	14,350,561	82,538	(27,631)	-	-	(230,117)
44	Jun-20 Actual	-	-	95,917	(202,486)	14,243,992	133,817	(50,807)	-	-	(253,293)
45	Jul-20 Actual	-	-	95,194	(202,486)	14,136,700	127,493	(82,538)	-	-	(285,024)
46	Aug-20 Actual	-	-	94,467	(202,486)	14,028,681	64,152	(133,817)	-	-	(336,303)
47	Sep-20 Actual	-	-	93,735	(202,486)	13,919,930	127,860	(127,493)	-	-	(329,979)
48	Oct-20 Actual	-	-	92,997	(202,486)	13,810,441	226,553	(64,152)	-	-	(266,636)
49	Nov-20 Actual	-	-	92,255	(202,486)	13,700,210	423,320	(127,860)	5,465	-	(330,346)
50	Dec-20 Actual	-	\$ -	\$ 91,508	\$ (202,486)	\$ 13,589,232	\$ 295,353	\$ (226,553)	\$ 17,705	\$ -	\$ (429,039)

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization of Coal Ash ARO and Landfill Closure

For the Expense Month of October 2022

Line No.	Period (1)	Coal Ash ARO				Coal Ash ARO and Landfill Closure			Landfill Closure (a)		Total Recovery (11)=(5)+(8)+(10)
		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)	Cash Spend (9)	Recovery: 1-Yr Amort. (10)	
51	Jan-21 Actual		\$ -	\$ 90,756	\$ (202,486)	\$ 13,477,502	\$ 80,328	\$ (423,320)	\$ 19,334	\$ -	\$ (625,806)
52	Feb-21 Actual		-	89,998	(202,486)	13,365,014	86,810	(295,353)	4,714	-	(497,839)
53	Mar-21 Actual		-	89,235	(202,486)	13,251,763	71,335	(80,328)	20,845	-	(282,814)
54	Apr-21 Actual		-	88,468	(202,486)	13,137,745	90,503	(86,810)	23,069	-	(289,296)
55	May-21 Actual		-	87,695	(202,486)	13,022,954	208,821	(71,335)	11,618	-	(273,821)
56	Jun-21 Actual		-	86,916	(202,486)	12,907,384	245,017	(90,503)	10,988	-	(292,989)
57	Jul-21 Actual		-	86,133	(202,486)	12,791,031	102,270	(208,821)	-	-	(411,307)
58	Aug-21 Actual		-	85,344	(202,486)	12,673,889	-	(245,017)	144,042	-	(447,503)
59	Sep-21 Actual		-	84,550	(202,486)	12,555,953	-	(102,270)	309,800	-	(304,756)
60	Oct-21 Actual		-	83,750	(202,486)	12,437,217	-	-	411,865	-	(202,486)
61	Nov-21 Actual		-	82,945	(202,486)	12,317,676	-	-	388,963	-	(202,486)
62	Dec-21 Actual		-	82,135	(202,486)	12,197,325	-	-	194,124	-	(202,486)
63	Jan-22 Actual		-	81,319	(202,486)	12,076,158	-	-	105,294	-	(202,486)
64	Feb-22 Actual		-	80,498	(202,486)	11,954,170	103,920	-	27,183	-	(202,486)
65	Mar-22 Actual		-	79,671	(202,486)	11,831,355	131,221	-	-	-	(202,486)
66	Apr-22 Actual		-	78,838	(202,486)	11,707,707	137,219	(103,920)	-	(219,095)	(525,501)
67	May-22 Actual		-	78,000	(202,486)	11,583,221	354,133	(131,221)	-	(219,095)	(552,802)
68	Jun-22 Actual		-	77,156	(202,486)	11,457,891	173,833	(137,219)	-	(219,095)	(558,800)
69	Jul-22 Actual		-	76,306	(202,486)	11,331,711	163,275	(354,133)	-	(219,095)	(775,714)
70	Aug-22 Actual		-	75,451	(202,486)	11,204,676	504,873	(173,833)	-	(219,095)	(595,414)
71	Sep-22 Actual		-	74,589	(202,486)	11,076,779	5,755,078	(163,275)	-	(219,095)	(584,856)
72	Oct-22 Actual		-	73,722	(202,486)	10,948,015	1,659,808	(504,873)	-	(219,095)	(926,454)
73	Nov-22 Actual		-	72,849	(202,486)	10,818,378	-	(959,180)	-	(219,095)	(1,380,761)
74	Dec-22 Actual		-	71,971	(202,486)	10,687,863	-	(1,291,141)	-	(219,095)	(1,712,722)
75	Jan-23 Actual		-	71,086	(202,486)	10,556,463	-	(1,291,141)	-	(219,095)	(1,712,722)
76	Feb-23 Actual		-	70,195	(202,486)	10,424,172	-	(1,291,141)	-	(219,095)	(1,712,722)
77	Mar-23 Actual		-	69,298	(202,486)	10,290,984	-	(1,291,141)	-	(219,095)	(1,712,722)
78	Apr-23 Actual		-	68,395	(202,486)	10,156,893	-	(1,291,139)	-	-	(1,493,625)
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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization of Coal Ash ARO and Landfill Closure

For the Expense Month of October 2022

Line No.	Period (1)	Coal Ash ARO				Coal Ash ARO and Landfill Closure		Landfill Closure		Total Recovery (11)=(5)+(8)+(10)	
		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)	Cash Spend (9)		Recovery: 1-Yr Amort. (10)
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)		\$ 21,047,122	\$ (21,047,120)	\$ 2,629,139	\$ (2,629,140)	\$ (47,974,580)

Monthly Amortization Amount

\$ (1,712,722)

(a) In Case No. 2021-00290, the Commission granted Duke Energy Kentucky's request to recover unrecovered construction, maintenance, closure, and post-closure maintenance costs of the East Landfill and unrecovered maintenance costs of the West Landfill at the East Bend Station through its Environmental Surcharge Mechanism. Beginning with the expense month of February 2022, ES FORM 2.20, will be revised to show the costs associated with the closure of the East Landfill. The amount shown as "Landfill Closure" cash spend in columns (9) and (10) of ES FORM 2.20, which is being amortized for recovery over a period of twelve months, includes \$1,110,406 of costs related to the closure of the East Landfill and \$1,518,734 of unrecovered maintenance costs related to the West Landfill.

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending October 2022

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	203,489	-	-	-	203,489
Dollars	\$ 16,286.21	\$ -	\$ -	\$ -	\$ 16,286.21
\$/Allowance	\$ 0.080035	\$ -	\$ -	\$ -	\$ 0.080035
NO_x Allowances - Annual					
Quantity	12,726	-	10	-	12,716
Dollars	\$ 2,209.78	\$ -	\$ 1.70	\$ -	\$ 2,208.08
\$/Allowance	\$ 0.173643	\$ -	\$ 0.170000	\$ -	\$ 0.173646
NO_x Allowances - Seasonal					
Quantity	799	-	-	-	799
Dollars	\$ 162.09	\$ -	\$ -	\$ -	\$ 162.09
\$/Allowance	\$ 0.202861	\$ -	\$ -	\$ -	\$ 0.202861
Total Emission Allowances					
Quantity	217,014	-	10	-	217,004
Dollars	\$ 18,658.08	\$ -	\$ 1.70	\$ -	\$ 18,656.38

(a) Note: The SO₂ 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 October 2022

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
1	Ammonia	502020	\$ 2,200	\$ 2,200
2	Lime	502040	259,810	259,810
3	Hydrated Lime	502040	527	527
4	Magnesium Hydroxide ^(Note 1)	502040	-	-
5	Total		\$ 262,537	\$ 262,537

Note 1: East Bend Station's Flue Gas Desulfurization is a Magnesium Oxide based technology. It is the only one of its kind within Duke Energy's current portfolio. The Magnesium Oxide based technology requires a particular chemical construct of lime to function properly, and as such, the scrubber utilizes a "quicklime" material versus the nominal limestone which is considered a Calcium Carbonate based technology. In March of 2020 the vendor's mining facility supplying the quicklime material to East Bend discontinued operations. This facility's quicklime product contained the proper constituents including the Magnesium required for East Bend's optimal scrubber performance. Upon learning of this facility's closure, Duke Energy Kentucky began exploring different solutions to obtain scrubber material with the correct chemical composition, including different mine sources and adding chemicals to produce the correct product. The vendor made the commitment to continue meeting contractual obligations by supplying East Bend with a blended product (Dolomitic Lime and Quicklime) from an alternate facility. Unfortunately, contractually meeting the specifications of the blended commodity, the reactivity of the substitute dolomitic lime is insufficient and as a result, East Bend found itself not able to meet its scrubber limit. In order for East Bend Station to meet its SO2 scrubbing limit, the Company must add an additional chemical reagent, Magnesium Hydroxide, to the substitute blended lime to produce the correct chemical reaction and achieve East Bend's SO2 limit.

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 2022

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge
					(2) - (5)
Nov-21	\$ 11,587,106			\$ 375,740	\$ 11,211,366
Dec-21	16,001,721			510,096	15,491,625
Jan-22	21,318,327			611,393	20,706,934
Feb-22	19,751,655			604,732	19,146,923
Mar-22	11,607,297			541,161	11,066,136
Apr-22	12,082,416			1,006,766	11,075,650
May-22	11,615,289			956,257	10,659,032
Jun-22	17,910,941			1,614,789	16,296,152
Jul-22	18,563,570			1,659,116	16,904,454
Aug-22	18,473,401			640,890	17,832,511
Sep-22	15,720,676			473,849	15,246,827
Oct-22	\$ 14,512,662			\$ 548,048	\$ 13,964,614
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 14,966,852
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 34,477,496
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					43.41%

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-21	\$ 18,281,877	\$ 4,737,949	\$ 3,266,165	\$ 482,562	\$ 17,799,315	\$ 9,795,201
Dec-21	20,902,282	5,194,127	5,087,696	488,554	20,413,728	10,131,905
Jan-22	23,718,760	5,133,317	7,974,524	455,146	23,263,614	10,155,773
Feb-22	21,218,594	4,675,522	5,624,922	492,009	20,726,585	10,426,141
Mar-22	14,758,559	4,840,248	(183,660)	760,990	13,997,569	9,340,981
Apr-22	9,200,787	2,373,083	559,030	832,346	8,368,441	5,436,328
May-22	17,061,583	6,907,083	1,042,516	1,480,087	15,581,496	7,631,897
Jun-22	9,290,552	1,390,573	2,437,838	808,874	8,481,678	4,653,267
Jul-22	37,009,503	10,084,818	5,088,354	2,992,108	34,017,395	18,844,223
Aug-22	25,443,793	6,923,013	3,607,722	1,214,128	24,229,665	13,698,930
Sep-22	24,299,737	6,716,720	4,193,497	799,356	23,500,381	12,590,164
Oct-22	\$ 24,400,829	\$ 4,890,802	\$ 9,320,939	\$ 652,974	\$ 23,747,855	\$ 9,536,114
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 19,510,644	\$ 10,186,744
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 34,477,496	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					56.59%	

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 2022

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,554,043
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	15,023,029
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		10.34%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	2,029,179
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	10,070,279
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		20.15%

Effective Date for Billing: January 3, 2023

Submitted by: /s/ Libbie S. Miller

Title: Rates & Regulatory Strategy Manager

Date Submitted: December 16, 2022

ES FORM 1.10

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

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of November 2022

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	\$ 56,986,036
2	RB ÷ 12 months	(1) ÷ 12	\$ 4,748,836
3	Pretax Rate of Return (ROR)	ES Form 1.20	7.905%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 375,395
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 3,384,845
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 3,760,240
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	96.98%
9	Jurisdictional E(m)	(7) x (8)	\$ 3,646,681
10	Prior Period Adjustment (if necessary)	(A)	+
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ (63,459)
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 3,583,222
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 113,559

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	43.37%	56.63%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 1,554,043	\$ 2,029,179
16	R(m) Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	ES Form 3.00 ES Form 3.00	\$ 15,023,029	\$ 10,070,279
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	10.34%	20.15%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 34,638,325	96.98%
19	Sales for Resale	Company Records	\$ 1,077,501	3.02%
20	Total Revenue		\$ 35,715,826	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	5.835%	1.710%	0.100%		0.100%
2	Long-term Debt	45.931%	4.028%	1.850%		1.850%
3	Common Equity	48.234%	9.250%	4.462%	1.3346139	5.955%
4	Total	100.000%		6.412%		7.905%

Note: Capital structure, cost of debt and tax rate gross-up factor as approved in Case No. 2019-00271. 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 2022

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant) Excluding AFUDC	ES Form 2.10	\$ 67,432,275
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	-
3	Subtotal		\$ 67,432,275
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 18,592
6	Subtotal		\$ 18,592
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 5,590,884
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	4,873,947
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 10,464,831
12	Environmental Compliance Rate Base		\$ 56,986,036
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 138,798
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 69,178
16	Monthly Amortization Expense	ES Form 2.20	\$ 1,992,902
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 65
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 1,183,902
19	Total Environmental Compliance Operating Expense		\$ 3,384,845
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x 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		\$ 142,279
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		205,738
27	(Over) / Under Recovery		\$ (63,459)

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 2022

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project No.	Description	Gross Plant in-Service Excl. AFUDC as of November-22	Accumulated Depreciation as of November-22	Net Plant in-Service as of November-22	CWIP Excluding AFUDC as of November-22	Accumulated Deferred ITC as of November-22	Accumulated Deferred Tax Balance as of November-22	Monthly Depreciation Expense	Monthly Property Tax Expense
				(2)-(3)					
1	EB020290 Lined Retention Basin West	\$ 10,324,588	\$ 1,015,603	\$ 9,308,985	\$ -	\$ -	\$ 1,239,481	\$ 21,251	\$ 10,413
2	EB020745 Lined Retention Basin East	\$ 10,280,726	\$ 737,078	\$ 9,543,648	\$ -	\$ -	\$ 390,717	\$ 21,161	\$ 10,676
3	EB020298 East Bend SW/PW Reroute	\$ 29,882,379	\$ 2,688,762	\$ 27,193,617	\$ -	\$ -	\$ 2,844,621	\$ 61,508	\$ 30,420
4	EB021281 East Bend Landfill Cell 2	\$ 16,944,582	\$ 1,149,441	\$ 15,795,141	\$ -	\$ -	\$ 399,128	\$ 34,878	\$ 17,669
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 67,432,275	\$ 5,590,884	\$ 61,841,391	\$ -	\$ -	\$ 4,873,947	\$ 138,798	\$ 69,178

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization of Coal Ash ARO and Landfill Closure

For the Expense Month of November 2022

Line No.	Period (1)	Coal Ash ARO					Coal Ash ARO and Landfill Closure		Landfill Closure		Total Recovery (11)=(5)+(8)+(10)
		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)	Cash Spend (9)	Recovery: 1-Yr Amort. (10)	
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	-	-	291,152	-	-
3	Jan-17	Actual 358,148	-	43,243	-	8,182,238	-	-	13,108	-	-
4	Feb-17	Actual 424,021	-	40,351	-	8,646,610	-	-	14,281	-	-
5	Mar-17	Actual 692,184	(26,763)	44,724	-	9,356,755	-	-	20,225	-	-
6	Apr-17	Actual 254,067	-	50,949	-	9,661,771	-	-	30,324	-	-
7	May-17	Actual 608,377	-	56,141	-	10,326,289	-	-	34,997	-	-
8	Jun-17	Actual 265,619	(26,763)	53,472	-	10,618,617	-	-	45,594	-	-
9	Jul-17	Actual 220,636	-	51,558	-	10,890,811	-	-	30,629	-	-
10	Aug-17	Actual 272,053	-	47,731	-	11,210,595	-	-	17,432	-	-
11	Sep-17	Actual 233,743	(26,763)	44,389	-	11,461,964	-	-	23,200	-	-
12	Oct-17	Actual 444,793	-	60,670	-	11,967,427	-	-	47,545	-	-
13	Nov-17	Actual 525,770	-	68,573	-	12,561,770	-	-	33,047	-	-
14	Dec-17	Actual 2,482,493	(26,763)	82,850	-	15,100,350	-	-	18,362	-	-
15	Jan-18	Actual 510,525	-	91,185	-	15,702,060	-	-	18,843	-	-
16	Feb-18	Actual 89,648	-	91,534	-	15,883,242	-	-	-	-	-
17	Mar-18	Actual 396,977	(26,763)	93,696	-	16,347,152	-	-	14,037	-	-
18	Apr-18	Actual 132,294	-	111,722	-	16,591,168	173,000	-	36,260	-	-
19	May-18	Actual -	-	112,480	-	16,703,648	100,234	-	88,888	-	-
20	Jun-18	Actual -	-	111,870	(202,486)	16,613,032	150,901	(173,000)	128,843	-	(375,486)
21	Jul-18	Actual -	-	111,255	(202,486)	16,521,801	196,585	(100,234)	16	-	(302,720)
22	Aug-18	Actual -	-	110,637	(202,486)	16,429,952	321,815	(150,901)	29,844	-	(353,387)
23	Sep-18	Actual -	-	110,014	(202,486)	16,337,480	275,135	(196,585)	-	-	(399,071)
24	Oct-18	Actual -	-	109,387	(202,486)	16,244,381	69,886	(321,815)	-	-	(524,301)
25	Nov-18	Actual -	-	108,756	(202,486)	16,150,651	238,428	(275,135)	(2,498)	-	(477,621)
26	Dec-18	Actual -	-	108,121	(202,486)	16,056,286	263,037	(69,886)	-	-	(272,372)
27	Jan-19	Actual -	-	107,481	(202,486)	15,961,281	177,996	(238,428)	-	-	(440,914)
28	Feb-19	Actual -	-	106,837	(202,486)	15,865,632	150,851	(263,037)	-	-	(465,523)
29	Mar-19	Actual -	-	106,188	(202,486)	15,769,334	408,609	(177,996)	-	-	(380,482)
30	Apr-19	Actual -	-	105,535	(202,486)	15,672,383	1,588,547	(150,851)	-	-	(353,337)
31	May-19	Actual -	-	104,878	(202,486)	15,574,775	1,641,055	(408,609)	-	-	(611,095)
32	Jun-19	Actual -	-	104,216	(202,486)	15,476,505	1,423,233	(1,588,547)	-	-	(1,791,033)
33	Jul-19	Actual -	-	103,550	(202,486)	15,377,569	1,368,585	(1,641,055)	-	-	(1,843,541)
34	Aug-19	Actual -	-	102,880	(202,486)	15,277,963	487,759	(1,423,233)	-	-	(1,625,719)
35	Sep-19	Actual -	-	102,204	(202,486)	15,177,681	47,477	(1,368,585)	-	-	(1,571,071)
36	Oct-19	Actual -	-	101,524	(202,486)	15,076,719	(18,595)	(487,759)	-	-	(690,245)
37	Nov-19	Actual -	-	100,840	(202,486)	14,975,073	330,375	(47,477)	-	-	(249,963)
38	Dec-19	Actual -	-	100,151	(202,486)	14,872,738	121,640	18,595	-	-	(183,891)
39	Jan-20	Actual -	-	99,457	(202,486)	14,769,709	77,416	(330,375)	-	-	(532,861)
40	Feb-20	Actual -	-	98,759	(202,486)	14,665,982	25,184	(121,640)	-	-	(324,126)
41	Mar-20	Actual -	-	98,055	(202,486)	14,561,551	27,631	(77,416)	-	-	(279,902)
42	Apr-20	Actual -	-	97,347	(202,486)	14,456,412	50,807	(25,184)	-	-	(227,670)
43	May-20	Actual -	-	96,635	(202,486)	14,350,561	82,538	(27,631)	-	-	(230,117)
44	Jun-20	Actual -	-	95,917	(202,486)	14,243,992	133,817	(50,807)	-	-	(253,232)
45	Jul-20	Actual -	-	95,194	(202,486)	14,136,700	127,493	(82,538)	-	-	(285,024)
46	Aug-20	Actual -	-	94,467	(202,486)	14,028,681	64,152	(133,817)	-	-	(336,303)
47	Sep-20	Actual -	-	93,735	(202,486)	13,919,930	127,860	(127,493)	-	-	(329,979)
48	Oct-20	Actual -	-	92,997	(202,486)	13,810,441	226,553	(64,152)	-	-	(266,638)
49	Nov-20	Actual -	-	92,255	(202,486)	13,700,210	423,320	(127,860)	5,465	-	(330,346)
50	Dec-20	Actual -	\$ -	\$ 91,508	\$ (202,486)	\$ 13,589,232	\$ 295,353	\$ (226,553)	\$ 17,705	\$ -	\$ (429,039)

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization of Coal Ash ARO and Landfill Closure

For the Expense Month of November 2022

Line No.	Period (1)	Coal Ash ARO					Coal Ash ARO and Landfill Closure		Landfill Closure (a)		Total Recovery (11)=(5)-(8)+(10)
		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)	Cash Spend (9)	Recovery: 1-Yr Amort. (10)	
51	Jan-21 Actual		\$ -	\$ 90,756	\$ (202,486)	\$ 13,477,502	\$ 80,328	\$ (423,320)	\$ 19,334	\$ -	\$ (625,806)
52	Feb-21 Actual		-	89,998	(202,486)	13,365,014	86,810	(295,353)	4,714	-	(497,839)
53	Mar-21 Actual		-	89,235	(202,486)	13,251,763	71,335	(80,328)	20,845	-	(282,814)
54	Apr-21 Actual		-	88,468	(202,486)	13,137,745	90,503	(86,810)	23,069	-	(289,296)
55	May-21 Actual		-	87,695	(202,486)	13,022,954	208,821	(71,335)	11,618	-	(273,821)
56	Jun-21 Actual		-	86,916	(202,486)	12,907,384	245,017	(90,503)	10,988	-	(292,989)
57	Jul-21 Actual		-	86,133	(202,486)	12,791,031	102,270	(208,821)	-	-	(411,307)
58	Aug-21 Actual		-	85,344	(202,486)	12,673,889	-	(245,017)	144,042	-	(447,503)
59	Sep-21 Actual		-	84,550	(202,486)	12,555,953	-	(102,270)	309,800	-	(304,756)
60	Oct-21 Actual		-	83,750	(202,486)	12,437,217	-	-	411,865	-	(202,486)
61	Nov-21 Actual		-	82,945	(202,486)	12,317,676	-	-	388,963	-	(202,486)
62	Dec-21 Actual		-	82,135	(202,486)	12,197,325	-	-	194,124	-	(202,486)
63	Jan-22 Actual		-	81,319	(202,486)	12,076,158	-	-	105,294	-	(202,486)
64	Feb-22 Actual		-	80,498	(202,486)	11,954,170	103,920	-	27,183	-	(202,486)
65	Mar-22 Actual		-	79,671	(202,486)	11,831,355	131,221	-	-	-	(202,486)
66	Apr-22 Actual		-	78,838	(202,486)	11,707,707	137,219	(103,920)	-	(219,095)	(525,501)
67	May-22 Actual		-	78,000	(202,486)	11,583,221	354,133	(131,221)	-	(219,095)	(552,802)
68	Jun-22 Actual		-	77,156	(202,486)	11,457,891	173,833	(137,219)	-	(219,095)	(558,800)
69	Jul-22 Actual		-	76,306	(202,486)	11,331,711	163,275	(354,133)	-	(219,095)	(775,714)
70	Aug-22 Actual		-	75,451	(202,486)	11,204,676	504,873	(173,833)	-	(219,095)	(595,414)
71	Sep-22 Actual		-	74,589	(202,486)	11,076,779	5,755,078	(163,275)	-	(219,095)	(584,856)
72	Oct-22 Actual		-	73,722	(202,486)	10,948,015	1,659,808	(504,873)	-	(219,095)	(926,454)
73	Nov-22 Actual		-	72,849	(202,486)	10,818,378	1,120,718	(959,180)	-	(219,095)	(1,380,761)
74	Dec-22 Actual		-	71,971	(202,486)	10,687,863	-	(1,291,141)	-	(219,095)	(1,712,722)
75	Jan-23 Actual		-	71,086	(202,486)	10,556,463	-	(1,571,321)	-	(219,095)	(1,992,902)
76	Feb-23 Actual		-	70,195	(202,486)	10,424,172	-	(1,571,321)	-	(219,095)	(1,992,902)
77	Mar-23 Actual		-	69,298	(202,486)	10,290,984	-	(1,571,321)	-	(219,095)	(1,992,902)
78	Apr-23 Actual		-	68,395	(202,486)	10,156,893	-	(1,571,321)	-	-	(1,773,807)
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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization of Coal Ash ARO and Landfill Closure

For the Expense Month of November 2022

Line No.	Period (1)	Coal Ash ARO				Coal Ash ARO and Landfill Closure		Landfill Closure		Total Recovery (11)=(5)-(8)+(10)	
		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)	Cash Spend (9)		Recovery: 1-Yr Amort. (10)
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)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (202,486)
		\$ 16,256,244	\$ (1,097,279)	\$ 9,139,355	\$ (24,298,320)	\$ 22,167,840	\$ (22,167,840)	\$ 2,629,139	\$ (2,629,140)	\$ -	\$ (49,095,300)

Monthly Amortization Amount

\$ (1,992,902)

(a) In Case No. 2021-00290, the Commission granted Duke Energy Kentucky's request to recover unrecovered construction, maintenance, closure, and post-closure maintenance costs of the East Landfill and unrecovered maintenance costs of the West Landfill at the East Bend Station through its Environmental Surcharge Mechanism. Beginning with the expense month of February 2022, ES FORM 2.20, will be revised to show the costs associated with the closure of the East Landfill. The amount shown as "Landfill Closure" cash spend in columns (9) and (10) of ES FORM 2.20, which is being amortized for recovery over a period of twelve months, includes \$1,110,406 of costs related to the closure of the East Landfill and \$1,518,734 of unrecovered maintenance costs related to the West Landfill.

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending November 2022

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	203,489	-	117	-	203,372
Dollars	\$ 16,286.21	\$ -	\$ 9.36	\$ -	\$ 16,276.85
\$/Allowance	\$ 0.080035	\$ -	\$ 0.080000	\$ -	\$ 0.080035
NO_x Allowances - Annual					
Quantity	12,716	-	325	-	12,391
Dollars	\$ 2,208.08	\$ -	\$ 55.25	\$ -	\$ 2,152.83
\$/Allowance	\$ 0.173646	\$ -	\$ 0.170000	\$ -	\$ 0.173741
NO_x Allowances - Seasonal					
Quantity	799	-	-	-	799
Dollars	\$ 162.09	\$ -	\$ -	\$ -	\$ 162.09
\$/Allowance	\$ 0.202861	\$ -	\$ -	\$ -	\$ 0.202861
Total Emission Allowances					
Quantity	217,004	-	442	-	216,562
Dollars	\$ 18,656.38	\$ -	\$ 64.61	\$ -	\$ 18,591.77

(a) Note: The SO₂ 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 2022

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
1	Ammonia	502020	\$ 46,217	\$ 46,217
2	Lime	502040	1,049,192	1,049,192
3	Hydrated Lime	502040	88,493	88,493
4	Magnesium Hydroxide ^(Note 1)	502040	-	-
5	Total		\$ 1,183,902	\$ 1,183,902

Note 1: East Bend Station's Flue Gas Desulfurization is a Magnesium Oxide based technology. It is the only one of its kind within Duke Energy's current portfolio. The Magnesium Oxide based technology requires a particular chemical construct of lime to function properly, and as such, the scrubber utilizes a "quicklime" material versus the nominal limestone which is considered a Calcium Carbonate based technology. In March of 2020 the vendor's mining facility supplying the quicklime material to East Bend discontinued operations. This facility's quicklime product contained the proper constituents including the Magnesium required for East Bend's optimal scrubber performance. Upon learning of this facility's closure, Duke Energy Kentucky began exploring different solutions to obtain scrubber material with the correct chemical composition, including different mine sources and adding chemicals to produce the correct product. The vendor made the commitment to continue meeting contractual obligations by supplying East Bend with a blended product (Dolomitic Lime and Quicklime) from an alternate facility. Unfortunately, contractually meeting the specifications of the blended commodity, the reactivity of the substitute dolomitic lime is insufficient and as a result, East Bend found itself not able to meet its scrubber limit. In order for East Bend Station to meet its SO2 scrubbing limit, the Company must add an additional chemical reagent, Magnesium Hydroxide, to the substitute blended lime to produce the correct chemical reaction and achieve East Bend's SO2 limit.

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 2022

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge
					(2) - (5)
Dec-21	\$ 16,001,721			\$ 510,096	\$ 15,491,625
Jan-22	21,318,327			611,393	20,706,934
Feb-22	19,751,655			604,732	19,146,923
Mar-22	11,607,297			541,161	11,066,136
Apr-22	12,082,416			1,006,766	11,075,650
May-22	11,615,289			956,257	10,659,032
Jun-22	17,910,941			1,614,789	16,296,152
Jul-22	18,563,570			1,659,116	16,904,454
Aug-22	18,473,401			640,890	17,832,511
Sep-22	15,720,676			473,849	15,246,827
Oct-22	14,512,662			548,048	13,964,614
Nov-22	\$ 11,938,112			\$ 52,623	\$ 11,885,489
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 15,023,029
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 34,638,325
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					43.37%

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-21	\$ 20,902,282	\$ 5,194,127	\$ 5,087,696	\$ 488,554	\$ 20,413,728	\$ 10,131,905
Jan-22	23,718,760	5,133,317	7,974,524	455,146	23,263,614	10,155,773
Feb-22	21,218,594	4,675,522	5,624,922	492,009	20,726,585	10,426,141
Mar-22	14,758,559	4,840,248	(183,660)	760,990	13,997,569	9,340,981
Apr-22	9,200,787	2,373,083	559,030	832,346	8,368,441	5,436,328
May-22	17,061,583	6,907,083	1,042,516	1,480,087	15,581,496	7,631,897
Jun-22	9,290,552	1,390,573	2,437,838	808,874	8,481,678	4,653,267
Jul-22	37,009,503	10,084,818	5,088,354	2,992,108	34,017,395	18,844,223
Aug-22	25,443,793	6,923,013	3,607,722	1,214,128	24,229,665	13,698,930
Sep-22	24,299,737	6,716,720	4,193,497	799,356	23,500,381	12,590,164
Oct-22	24,400,829	4,890,802	9,320,939	652,974	23,747,855	9,536,114
Nov-22	\$ 19,208,261	\$ 4,288,703	\$ 6,368,820	\$ 153,115	\$ 19,055,146	\$ 8,397,623
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 19,615,296	\$ 10,070,279
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 34,638,325	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					56.63%	

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 2022

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,765,608
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	15,486,991
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		11.40%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	2,283,951
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	10,028,818
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		22.77%

Effective Date for Billing: February 1, 2023

Submitted by: /s/ Libbie S. Miller

Title: Rates & Regulatory Strategy Manager

Date Submitted: January 20, 2023

ES FORM 1.10

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

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of December 2022

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	\$ 56,811,006
2	RB ÷ 12 months	(1) ÷ 12	\$ 4,734,251
3	Pretax Rate of Return (ROR)	ES Form 1.20	7.905%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 374,243
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 3,977,862
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 4,352,105
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	94.23%
9	Jurisdictional E(m)	(7) x (8)	\$ 4,100,989
10	Prior Period Adjustment (if necessary)	(A)	+
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ (51,430)
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 4,049,559
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 251,116

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	43.60%	56.40%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 1,765,608	\$ 2,283,951
16	R(m) Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	ES Form 3.00 ES Form 3.00	\$ 15,486,991	\$ 10,028,818
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	11.40%	22.77%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 35,524,694	94.23%
19	Sales for Resale	Company Records	\$ 2,175,484	5.77%
20	Total Revenue		\$ 37,700,178	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	5.835%	1.710%	0.100%		0.100%
2	Long-term Debt	45.931%	4.028%	1.850%		1.850%
3	Common Equity	48.234%	9.250%	4.462%	1.3346139	5.955%
4	Total	100.000%		6.412%		7.905%

Note: Capital structure, cost of debt and tax rate gross-up factor as approved in Case No. 2019-00271. 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 2022

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant) Excluding AFUDC	ES Form 2.10	\$ 67,432,275
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	-
3	Subtotal		\$ 67,432,275
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 18,518
6	Subtotal		\$ 18,518
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 5,729,684
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	4,910,103
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 10,639,787
12	Environmental Compliance Rate Base		\$ 56,811,006
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 138,798
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 65,988
16	Monthly Amortization Expense	ES Form 2.20	\$ 2,430,237
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 74
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 1,342,765
19	Total Environmental Compliance Operating Expense		\$ 3,977,862
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x 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		\$ 2,574,270
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		2,625,700
27	(Over) / Under Recovery		\$ (51,430)

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 2022

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project No.	Description	Gross Plant in-Service Excl. AFUDC as of December-22	Accumulated Depreciation as of December-22	Net Plant in-Service as of December-22	CWIP Excluding AFUDC as of December-22	Accumulated Deferred ITC as of December-22	Accumulated Deferred Tax Balance as of December-22	Monthly Depreciation Expense	Monthly Property Tax Expense
				(2)-(3)					
1	EB020290 Lined Retention Basin West	\$ 10,324,588	\$ 1,036,855	\$ 9,287,733	\$ -	\$ -	\$ 1,241,449	\$ 21,251	\$ 9,933
2	EB020745 Lined Retention Basin East	\$ 10,280,726	\$ 758,240	\$ 9,522,486	\$ -	\$ -	\$ 398,786	\$ 21,161	\$ 10,184
3	EB020298 East Bend SW/PW Reroute	\$ 29,882,379	\$ 2,750,270	\$ 27,132,109	\$ -	\$ -	\$ 2,855,691	\$ 61,508	\$ 29,016
4	EB021281 East Bend Landfill Cell 2	\$ 16,944,582	\$ 1,184,319	\$ 15,760,263	\$ -	\$ -	\$ 414,177	\$ 34,878	\$ 16,855
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 67,432,275	\$ 5,729,684	\$ 61,702,591	\$ -	\$ -	\$ 4,910,103	\$ 138,798	\$ 65,988

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization of Coal Ash ARO and Landfill Closure

For the Expense Month of December 2022

Line No.	Period (1)	Coal Ash ARO					Coal Ash ARO and Landfill Closure		Landfill Closure		Total Recovery (11)=(5)+(8)+(10)
		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)	Cash Spend (9)	Recovery: 1-Yr Amort. (10)	
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	-	-	291,152	-
3	Jan-17	Actual	358,148	-	43,243	-	8,182,238	-	-	13,108	-
4	Feb-17	Actual	424,021	-	40,351	-	8,646,610	-	-	14,281	-
5	Mar-17	Actual	692,184	(26,763)	44,724	-	9,356,755	-	-	20,225	-
6	Apr-17	Actual	254,067	-	50,949	-	9,661,771	-	-	30,324	-
7	May-17	Actual	608,377	-	56,141	-	10,326,289	-	-	34,997	-
8	Jun-17	Actual	265,619	(26,763)	53,472	-	10,618,617	-	-	45,594	-
9	Jul-17	Actual	220,636	-	51,558	-	10,890,811	-	-	30,629	-
10	Aug-17	Actual	272,053	-	47,731	-	11,210,595	-	-	17,432	-
11	Sep-17	Actual	233,743	(26,763)	44,389	-	11,461,964	-	-	23,200	-
12	Oct-17	Actual	444,793	-	60,670	-	11,967,427	-	-	47,545	-
13	Nov-17	Actual	525,770	-	68,573	-	12,561,770	-	-	33,047	-
14	Dec-17	Actual	2,482,493	(26,763)	82,850	-	15,100,350	-	-	18,362	-
15	Jan-18	Actual	510,525	-	91,185	-	15,702,060	-	-	18,843	-
16	Feb-18	Actual	89,648	-	91,534	-	15,883,242	-	-	-	-
17	Mar-18	Actual	396,977	(26,763)	93,696	-	16,347,152	-	-	14,037	-
18	Apr-18	Actual	132,294	-	111,722	-	16,591,168	173,000	-	36,260	-
19	May-18	Actual	-	-	112,480	-	16,703,648	100,234	-	88,888	-
20	Jun-18	Actual	-	-	111,870	(202,486)	16,613,032	150,901	(173,000)	128,843	(375,486)
21	Jul-18	Actual	-	-	111,255	(202,486)	16,521,801	196,585	(100,234)	16	(302,720)
22	Aug-18	Actual	-	-	110,637	(202,486)	16,429,952	321,815	(150,901)	29,844	(353,387)
23	Sep-18	Actual	-	-	110,014	(202,486)	16,337,480	275,135	(196,585)	-	(399,071)
24	Oct-18	Actual	-	-	109,387	(202,486)	16,244,381	69,886	(321,815)	-	(524,301)
25	Nov-18	Actual	-	-	108,756	(202,486)	16,150,651	238,428	(275,135)	(2,498)	(477,621)
26	Dec-18	Actual	-	-	108,121	(202,486)	16,056,286	263,037	(69,886)	-	(272,372)
27	Jan-19	Actual	-	-	107,481	(202,486)	15,961,281	177,996	(238,428)	-	(440,914)
28	Feb-19	Actual	-	-	106,837	(202,486)	15,865,632	150,851	(263,037)	-	(465,523)
29	Mar-19	Actual	-	-	106,188	(202,486)	15,769,334	408,609	(177,996)	-	(380,482)
30	Apr-19	Actual	-	-	105,535	(202,486)	15,672,383	1,588,547	(150,851)	-	(353,337)
31	May-19	Actual	-	-	104,878	(202,486)	15,574,775	1,641,055	(408,609)	-	(611,095)
32	Jun-19	Actual	-	-	104,216	(202,486)	15,476,505	1,423,233	(1,588,547)	-	(1,791,033)
33	Jul-19	Actual	-	-	103,550	(202,486)	15,377,569	1,368,585	(1,641,055)	-	(1,843,541)
34	Aug-19	Actual	-	-	102,880	(202,486)	15,277,963	487,759	(1,423,233)	-	(1,625,719)
35	Sep-19	Actual	-	-	102,204	(202,486)	15,177,681	47,477	(1,368,585)	-	(1,571,071)
36	Oct-19	Actual	-	-	101,524	(202,486)	15,076,719	(18,595)	(487,759)	-	(690,245)
37	Nov-19	Actual	-	-	100,840	(202,486)	14,975,073	330,375	(47,477)	-	(249,963)
38	Dec-19	Actual	-	-	100,151	(202,486)	14,872,738	121,640	18,595	-	(183,891)
39	Jan-20	Actual	-	-	99,457	(202,486)	14,769,709	77,416	(330,375)	-	(532,861)
40	Feb-20	Actual	-	-	98,759	(202,486)	14,665,982	25,184	(121,640)	-	(324,126)
41	Mar-20	Actual	-	-	98,055	(202,486)	14,561,551	27,631	(77,416)	-	(279,902)
42	Apr-20	Actual	-	-	97,347	(202,486)	14,456,412	50,807	(25,184)	-	(227,670)
43	May-20	Actual	-	-	96,635	(202,486)	14,350,561	82,538	(27,631)	-	(230,117)
44	Jun-20	Actual	-	-	95,917	(202,486)	14,243,992	133,817	(50,807)	-	(253,293)
45	Jul-20	Actual	-	-	95,194	(202,486)	14,136,700	127,493	(82,538)	-	(285,024)
46	Aug-20	Actual	-	-	94,467	(202,486)	14,028,681	64,152	(133,817)	-	(336,303)
47	Sep-20	Actual	-	-	93,735	(202,486)	13,919,930	127,860	(127,493)	-	(329,979)
48	Oct-20	Actual	-	-	92,997	(202,486)	13,810,441	226,553	(64,152)	-	(266,638)
49	Nov-20	Actual	-	-	92,255	(202,486)	13,700,210	423,320	(127,860)	5,465	(330,346)
50	Dec-20	Actual	\$ -	\$ -	\$ 91,508	\$ (202,486)	\$ 13,589,232	\$ 295,353	\$ (226,553)	\$ 17,705	\$ (429,039)

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization of Coal Ash ARO and Landfill Closure

For the Expense Month of December 2022

Line No.	Period (1)	Coal Ash ARO				Coal Ash ARO and Landfill Closure		Landfill Closure (a)		Total Recovery (11)=(5)+(8)+(10)	
		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)	Cash Spend (9)		Recovery: 1-Yr Amort. (10)
51	Jan-21	Actual	\$ -	\$ 90,756	\$ (202,486)	\$ 13,477,502	\$ 80,328	\$ (423,320)	\$ 19,334	\$ -	\$ (625,806)
52	Feb-21	Actual	-	89,998	(202,486)	13,365,014	86,810	(295,353)	4,714	-	(497,839)
53	Mar-21	Actual	-	89,235	(202,486)	13,251,763	71,335	(80,328)	20,845	-	(282,814)
54	Apr-21	Actual	-	88,468	(202,486)	13,137,745	90,503	(86,810)	23,069	-	(289,296)
55	May-21	Actual	-	87,695	(202,486)	13,022,954	208,821	(71,335)	11,618	-	(273,821)
56	Jun-21	Actual	-	86,916	(202,486)	12,907,384	245,017	(90,503)	10,988	-	(292,989)
57	Jul-21	Actual	-	86,133	(202,486)	12,791,031	102,270	(208,821)	-	-	(411,307)
58	Aug-21	Actual	-	85,344	(202,486)	12,673,889	-	(245,017)	144,042	-	(447,503)
59	Sep-21	Actual	-	84,550	(202,486)	12,555,953	-	(102,270)	309,800	-	(304,756)
60	Oct-21	Actual	-	83,750	(202,486)	12,437,217	-	-	411,865	-	(202,486)
61	Nov-21	Actual	-	82,945	(202,486)	12,317,676	-	-	388,963	-	(202,486)
62	Dec-21	Actual	-	82,135	(202,486)	12,197,325	-	-	194,124	-	(202,486)
63	Jan-22	Actual	-	81,319	(202,486)	12,076,158	-	-	105,294	-	(202,486)
64	Feb-22	Actual	-	80,498	(202,486)	11,954,170	103,920	-	27,183	-	(202,486)
65	Mar-22	Actual	-	79,671	(202,486)	11,831,355	131,221	-	-	-	(202,486)
66	Apr-22	Actual	-	78,838	(202,486)	11,707,707	137,219	(103,920)	-	(219,095)	(525,501)
67	May-22	Actual	-	78,000	(202,486)	11,583,221	354,133	(131,221)	-	(219,095)	(552,802)
68	Jun-22	Actual	-	77,156	(202,486)	11,457,891	173,833	(137,219)	-	(219,095)	(558,800)
69	Jul-22	Actual	-	76,306	(202,486)	11,331,711	163,275	(354,133)	-	(219,095)	(775,714)
70	Aug-22	Actual	-	75,451	(202,486)	11,204,676	504,873	(173,833)	-	(219,095)	(595,414)
71	Sep-22	Actual	-	74,589	(202,486)	11,076,779	5,755,078	(163,275)	-	(219,095)	(584,856)
72	Oct-22	Actual	-	73,722	(202,486)	10,948,015	1,659,808	(504,873)	-	(219,095)	(926,454)
73	Nov-22	Actual	-	72,849	(202,486)	10,818,378	1,120,718	(959,180)	-	(219,095)	(1,380,761)
74	Dec-22	Actual	-	71,971	(202,486)	10,687,863	1,312,007	(1,291,141)	-	(219,095)	(1,712,722)
75	Jan-23	Actual	-	71,086	(202,486)	10,556,463	-	(1,571,321)	-	(219,095)	(1,992,902)
76	Feb-23	Actual	-	70,195	(202,486)	10,424,172	-	(2,008,656)	-	(219,095)	(2,430,237)
77	Mar-23	Actual	-	69,298	(202,486)	10,290,984	-	(2,008,656)	-	(219,095)	(2,430,237)
78	Apr-23	Actual	-	68,395	(202,486)	10,156,893	-	(2,008,656)	-	-	(2,211,142)
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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization of Coal Ash ARO and Landfill Closure

For the Expense Month of December 2022

Line No.	Period (1)	Coal Ash ARO				Coal Ash ARO and Landfill Closure		Landfill Closure		Total Recovery (11)=(5)+(8)+(10)	
		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)	Cash Spend (9)		Recovery: 1-Yr Amort. (10)
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)		\$ 23,479,847	\$ (23,479,847)	\$ 2,629,139	\$ (2,629,140)	\$ (50,407,307)

Monthly Amortization Amount

\$ (2,430,237)

(a) In Case No. 2021-00290, the Commission granted Duke Energy Kentucky's request to recover unrecovered construction, maintenance, closure, and post-closure maintenance costs of the East Landfill and unrecovered maintenance costs of the West Landfill at the East Bend Station through its Environmental Surcharge Mechanism. Beginning with the expense month of February 2022, ES FORM 2.20, will be revised to show the costs associated with the closure of the East Landfill. The amount shown as "Landfill Closure" cash spend in columns (9) and (10) of ES FORM 2.20, which is being amortized for recovery over a period of twelve months, includes \$1,110,406 of costs related to the closure of the East Landfill and \$1,518,734 of unrecovered maintenance costs related to the West Landfill.

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending December 2022

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	203,372	-	133	-	203,239
Dollars	\$ 16,276.85	\$ -	\$ 10.64	\$ -	\$ 16,266.21
\$/Allowance	\$ 0.080035	\$ -	\$ 0.080000	\$ -	\$ 0.080035
NO_x Allowances - Annual					
Quantity	12,391	-	374	-	12,017
Dollars	\$ 2,152.83	\$ -	\$ 63.58	\$ -	\$ 2,089.25
\$/Allowance	\$ 0.173741	\$ -	\$ 0.170000	\$ -	\$ 0.173858
NO_x Allowances - Seasonal					
Quantity	799	-	-	-	799
Dollars	\$ 162.09	\$ -	\$ -	\$ -	\$ 162.09
\$/Allowance	\$ 0.202866	\$ -	\$ -	\$ -	\$ 0.202866
Total Emission Allowances					
Quantity	216,562	-	507	-	216,055
Dollars	\$ 18,591.77	\$ -	\$ 74.22	\$ -	\$ 18,517.55

(a) Note: The SO₂ 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 December 2022

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
1	Ammonia	502020	\$ 88,390	\$ 88,390
2	Lime	502040	1,132,202	1,132,202
3	Hydrated Lime	502040	122,173	122,173
4	Magnesium Hydroxide ^(Note 1)	502040	-	-
5	Total		\$ 1,342,765	\$ 1,342,765

Note 1: East Bend Station's Flue Gas Desulfurization is a Magnesium Oxide based technology. It is the only one of its kind within Duke Energy's current portfolio. The Magnesium Oxide based technology requires a particular chemical construct of lime to function properly, and as such, the scrubber utilizes a "quicklime" material versus the nominal limestone which is considered a Calcium Carbonate based technology. In March of 2020 the vendor's mining facility supplying the quicklime material to East Bend discontinued operations. This facility's quicklime product contained the proper constituents including the Magnesium required for East Bend's optimal scrubber performance. Upon learning of this facility's closure, Duke Energy Kentucky began exploring different solutions to obtain scrubber material with the correct chemical composition, including different mine sources and adding chemicals to produce the correct product. The vendor made the commitment to continue meeting contractual obligations by supplying East Bend with a blended product (Dolomitic Lime and Quicklime) from an alternate facility. Unfortunately, contractually meeting the specifications of the blended commodity, the reactivity of the substitute dolomitic lime is insufficient and as a result, East Bend found itself not able to meet its scrubber limit. In order for East Bend Station to meet its SO2 scrubbing limit, the Company must add an additional chemical reagent, Magnesium Hydroxide, to the substitute blended lime to produce the correct chemical reaction and achieve East Bend's SO2 limit.

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 December 2022

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge
					(2) - (5)
Jan-22	\$ 21,318,327			\$ 611,393	\$ 20,706,934
Feb-22	19,751,655			604,732	19,146,923
Mar-22	11,607,297			541,161	11,066,136
Apr-22	12,082,416			1,006,766	11,075,650
May-22	11,615,289			956,257	10,659,032
Jun-22	17,910,941			1,614,789	16,296,152
Jul-22	18,563,570			1,659,116	16,904,454
Aug-22	18,473,401			640,890	17,832,511
Sep-22	15,720,676			473,849	15,246,827
Oct-22	14,512,662			548,048	13,964,614
Nov-22	11,938,112			52,623	11,885,489
Dec-22	\$ 22,578,516			\$ 1,519,344	\$ 21,059,172
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 15,486,991
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 35,524,694
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					43.60%

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)
Jan-22	\$ 23,718,760	\$ 5,133,317	\$ 7,974,524	\$ 455,146	\$ 23,263,614	\$ 10,155,773
Feb-22	21,218,594	4,675,522	5,624,922	492,009	20,726,585	10,426,141
Mar-22	14,758,559	4,840,248	(183,660)	760,990	13,997,569	9,340,981
Apr-22	9,200,787	2,373,083	559,030	832,346	8,368,441	5,436,328
May-22	17,061,583	6,907,083	1,042,516	1,480,087	15,581,496	7,631,897
Jun-22	9,290,552	1,390,573	2,437,838	808,874	8,481,678	4,653,267
Jul-22	37,009,503	10,084,818	5,088,354	2,992,108	34,017,395	18,844,223
Aug-22	25,443,793	6,923,013	3,607,722	1,214,128	24,229,665	13,698,930
Sep-22	24,299,737	6,716,720	4,193,497	799,356	23,500,381	12,590,164
Oct-22	24,400,829	4,890,802	9,320,939	652,974	23,747,855	9,536,114
Nov-22	19,208,261	4,288,703	6,368,820	153,115	19,055,146	8,397,623
Dec-22	\$ 26,588,963	\$ 5,032,858	\$ 10,815,378	\$ 1,106,356	\$ 25,482,607	\$ 9,634,371
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 20,037,703	\$ 10,028,818
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 35,524,694	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					56.40%	

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 2023

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,842,099
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	15,347,351
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		12.00%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	2,415,120
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	10,037,668
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		24.06%

Effective Date for Billing: March 2, 2023

Submitted by: /s/ Libbie S. Miller

Title: Rates & Regulatory Strategy Manager

Date Submitted: February 17, 2023

ES FORM 1.10

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

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of January 2023

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	\$ 56,642,150
2	RB ÷ 12 months	(1) ÷ 12	\$ 4,720,179
3	Pretax Rate of Return (ROR)	ES Form 1.20	7.905%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 373,130
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 4,490,045
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 4,863,175
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	94.46%
9	Jurisdictional E(m)	(7) x (8)	\$ 4,593,755
10	Prior Period Adjustment (if necessary)	(A)	+
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ (336,536)
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 4,257,219
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 269,420

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	43.27%	56.73%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 1,842,099	\$ 2,415,120
16	R(m) Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	ES Form 3.00 ES Form 3.00	\$ 15,347,351	\$ 10,037,668
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	12.00%	24.06%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 35,471,341	94.46%
19	Sales for Resale	Company Records	\$ 2,081,034	5.54%
20	Total Revenue		\$ 37,552,375	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	5.835%	1.710%	0.100%		0.100%
2	Long-term Debt	45.931%	4.028%	1.850%		1.850%
3	Common Equity	48.234%	9.250%	4.462%	1.3346139	5.955%
4	Total	100.000%		6.412%		7.905%

Note: Capital structure, cost of debt and tax rate gross-up factor as approved in Case No. 2019-00271. 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 2023

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant) Excluding AFUDC	ES Form 2.10	\$ 67,432,275
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	-
3	Subtotal		\$ 67,432,275
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 18,468
6	Subtotal		\$ 18,468
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 5,868,489
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	4,940,104
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 10,808,593
12	Environmental Compliance Rate Base		\$ 56,642,150
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 138,798
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 65,838
16	Monthly Amortization Expense	ES Form 2.20	\$ 2,747,169
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 49
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 1,538,191
19	Total Environmental Compliance Operating Expense		\$ 4,490,045
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x 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		\$ 3,583,222
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		3,919,758
27	(Over) / Under Recovery		\$ (336,536)

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 2023

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project No.	Description	Gross Plant in-Service Excl. AFUDC as of January-23	Accumulated Depreciation as of January-23	Net Plant in-Service as of January-23	CWIP Excluding AFUDC as of January-23	Accumulated Deferred ITC as of January-23	Accumulated Deferred Tax Balance as of January-23	Monthly Depreciation Expense	Monthly Property Tax Expense
				(2)-(3)					
1	EB020290 Lined Retention Basin West	\$ 10,324,588	\$ 1,058,106	\$ 9,266,482	\$ -	\$ -	\$ 1,242,027	\$ 21,251	\$ 9,910
2	EB020745 Lined Retention Basin East	\$ 10,280,726	\$ 779,401	\$ 9,501,325	\$ -	\$ -	\$ 405,853	\$ 21,161	\$ 10,161
3	EB020298 East Bend SW/PW Reroute	\$ 29,882,379	\$ 2,811,786	\$ 27,070,593	\$ -	\$ -	\$ 2,864,776	\$ 61,508	\$ 28,950
4	EB021281 East Bend Landfill Cell 2	\$ 16,944,582	\$ 1,219,196	\$ 15,725,386	\$ -	\$ -	\$ 427,448	\$ 34,878	\$ 16,817
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 67,432,275	\$ 5,868,489	\$ 61,563,786	\$ -	\$ -	\$ 4,940,104	\$ 138,798	\$ 65,838

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization of Coal Ash ARO and Landfill Closure

For the Expense Month of January 2023

Line No.	Period (1)	Coal Ash ARO				Coal Ash ARO and Landfill Closure		Landfill Closure		Total Recovery (11)=(5)+(8)+(10)
		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)	Cash Spend (9)	
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	-	-	291,152	-
3	Jan-17 Actual	358,148	-	43,243	-	8,182,238	-	-	13,108	-
4	Feb-17 Actual	424,021	-	40,351	-	8,646,610	-	-	14,281	-
5	Mar-17 Actual	692,184	(26,763)	44,724	-	9,356,755	-	-	20,225	-
6	Apr-17 Actual	254,067	-	50,949	-	9,661,771	-	-	30,324	-
7	May-17 Actual	608,377	-	56,141	-	10,326,289	-	-	34,997	-
8	Jun-17 Actual	265,619	(26,763)	53,472	-	10,618,617	-	-	45,594	-
9	Jul-17 Actual	220,636	-	51,558	-	10,890,811	-	-	30,629	-
10	Aug-17 Actual	272,053	-	47,731	-	11,210,595	-	-	17,432	-
11	Sep-17 Actual	233,743	(26,763)	44,389	-	11,461,964	-	-	23,200	-
12	Oct-17 Actual	444,793	-	60,670	-	11,967,427	-	-	47,545	-
13	Nov-17 Actual	525,770	-	68,573	-	12,561,770	-	-	33,047	-
14	Dec-17 Actual	2,482,493	(26,763)	82,850	-	15,100,350	-	-	18,362	-
15	Jan-18 Actual	510,525	-	91,185	-	15,702,060	-	-	18,843	-
16	Feb-18 Actual	89,648	-	91,534	-	15,883,242	-	-	-	-
17	Mar-18 Actual	396,977	(26,763)	93,696	-	16,347,152	-	-	14,037	-
18	Apr-18 Actual	132,294	-	111,722	-	16,591,168	173,000	-	36,260	-
19	May-18 Actual	-	-	112,480	-	16,703,648	100,234	-	88,888	-
20	Jun-18 Actual	-	-	111,870	(202,486)	16,613,032	150,901	(173,000)	128,843	(375,486)
21	Jul-18 Actual	-	-	111,255	(202,486)	16,521,801	196,585	(100,234)	16	(302,720)
22	Aug-18 Actual	-	-	110,637	(202,486)	16,429,952	321,815	(150,901)	29,844	(353,387)
23	Sep-18 Actual	-	-	110,014	(202,486)	16,337,480	275,135	(196,585)	-	(399,071)
24	Oct-18 Actual	-	-	109,387	(202,486)	16,244,381	69,886	(321,815)	-	(524,301)
25	Nov-18 Actual	-	-	108,756	(202,486)	16,150,651	238,428	(275,135)	(2,498)	(477,621)
26	Dec-18 Actual	-	-	108,121	(202,486)	16,056,286	263,037	(69,886)	-	(272,372)
27	Jan-19 Actual	-	-	107,481	(202,486)	15,961,281	177,996	(238,428)	-	(440,914)
28	Feb-19 Actual	-	-	106,837	(202,486)	15,865,632	150,851	(263,037)	-	(465,523)
29	Mar-19 Actual	-	-	106,188	(202,486)	15,769,334	408,609	(177,996)	-	(380,482)
30	Apr-19 Actual	-	-	105,535	(202,486)	15,672,383	1,588,547	(150,851)	-	(353,337)
31	May-19 Actual	-	-	104,878	(202,486)	15,574,775	1,641,055	(408,609)	-	(611,095)
32	Jun-19 Actual	-	-	104,216	(202,486)	15,476,505	1,423,233	(1,588,547)	-	(1,791,033)
33	Jul-19 Actual	-	-	103,550	(202,486)	15,377,569	1,368,585	(1,641,055)	-	(1,843,541)
34	Aug-19 Actual	-	-	102,880	(202,486)	15,277,963	487,759	(1,423,233)	-	(1,625,719)
35	Sep-19 Actual	-	-	102,204	(202,486)	15,177,681	47,477	(1,368,585)	-	(1,571,071)
36	Oct-19 Actual	-	-	101,524	(202,486)	15,076,719	(18,595)	(487,759)	-	(690,245)
37	Nov-19 Actual	-	-	100,840	(202,486)	14,975,073	330,375	(47,477)	-	(249,963)
38	Dec-19 Actual	-	-	100,151	(202,486)	14,872,738	121,640	18,595	-	(183,891)
39	Jan-20 Actual	-	-	99,457	(202,486)	14,769,709	77,416	(330,375)	-	(532,861)
40	Feb-20 Actual	-	-	98,759	(202,486)	14,665,982	25,184	(121,640)	-	(324,126)
41	Mar-20 Actual	-	-	98,055	(202,486)	14,561,551	27,631	(77,416)	-	(279,902)
42	Apr-20 Actual	-	-	97,347	(202,486)	14,456,412	50,807	(25,184)	-	(227,670)
43	May-20 Actual	-	-	96,635	(202,486)	14,350,561	82,538	(27,631)	-	(230,117)
44	Jun-20 Actual	-	-	95,917	(202,486)	14,243,992	133,817	(50,807)	-	(253,293)
45	Jul-20 Actual	-	-	95,194	(202,486)	14,136,700	127,493	(82,538)	-	(285,024)
46	Aug-20 Actual	-	-	94,467	(202,486)	14,028,681	64,152	(133,817)	-	(336,303)
47	Sep-20 Actual	-	-	93,735	(202,486)	13,919,930	127,860	(127,493)	-	(329,979)
48	Oct-20 Actual	-	-	92,997	(202,486)	13,810,441	226,553	(64,152)	-	(266,638)
49	Nov-20 Actual	-	-	92,255	(202,486)	13,700,210	423,320	(127,860)	5,465	(330,346)
50	Dec-20 Actual	\$ -	\$ -	\$ 91,508	\$ (202,486)	\$ 13,589,232	\$ 295,353	\$ (226,553)	\$ 17,705	\$ (429,039)

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization of Coal Ash ARO and Landfill Closure

For the Expense Month of January 2023

Line No.	Period (1)	Coal Ash ARO				Coal Ash ARO and Landfill Closure		Landfill Closure (a)		Total Recovery (11)=(5)+(8)+(10)	
		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)	Cash Spend (9)		Recovery: 1-Yr Amort. (10)
51	Jan-21 Actual		\$ -	\$ 90,756	\$ (202,486)	\$ 13,477,502	\$ 80,328	\$ (423,320)	\$ 19,334	\$ -	\$ (625,806)
52	Feb-21 Actual		-	89,998	(202,486)	13,365,014	86,810	(295,353)	4,714	-	(497,839)
53	Mar-21 Actual		-	89,235	(202,486)	13,251,763	71,335	(80,328)	20,845	-	(282,814)
54	Apr-21 Actual		-	88,468	(202,486)	13,137,745	90,503	(86,810)	23,069	-	(289,296)
55	May-21 Actual		-	87,695	(202,486)	13,022,954	208,821	(71,335)	11,618	-	(273,821)
56	Jun-21 Actual		-	86,916	(202,486)	12,907,384	245,017	(90,503)	10,988	-	(292,989)
57	Jul-21 Actual		-	86,133	(202,486)	12,791,031	102,270	(208,821)	-	-	(411,307)
58	Aug-21 Actual		-	85,344	(202,486)	12,673,889	-	(245,017)	144,042	-	(447,503)
59	Sep-21 Actual		-	84,550	(202,486)	12,555,953	-	(102,270)	309,800	-	(304,756)
60	Oct-21 Actual		-	83,750	(202,486)	12,437,217	-	-	411,865	-	(202,486)
61	Nov-21 Actual		-	82,945	(202,486)	12,317,676	-	-	388,963	-	(202,486)
62	Dec-21 Actual		-	82,135	(202,486)	12,197,325	-	-	194,124	-	(202,486)
63	Jan-22 Actual		-	81,319	(202,486)	12,076,158	-	-	105,294	-	(202,486)
64	Feb-22 Actual		-	80,498	(202,486)	11,954,170	103,920	-	27,183	-	(202,486)
65	Mar-22 Actual		-	79,671	(202,486)	11,831,355	131,221	-	-	-	(202,486)
66	Apr-22 Actual		-	78,838	(202,486)	11,707,707	137,219	(103,920)	-	(219,095)	(525,501)
67	May-22 Actual		-	78,000	(202,486)	11,583,221	354,133	(131,221)	-	(219,095)	(552,802)
68	Jun-22 Actual		-	77,156	(202,486)	11,457,891	173,833	(137,219)	-	(219,095)	(558,800)
69	Jul-22 Actual		-	76,306	(202,486)	11,331,711	163,275	(354,133)	-	(219,095)	(775,714)
70	Aug-22 Actual		-	75,451	(202,486)	11,204,676	504,873	(173,833)	-	(219,095)	(595,414)
71	Sep-22 Actual		-	74,589	(202,486)	11,076,779	5,755,078	(163,275)	-	(219,095)	(584,856)
72	Oct-22 Actual		-	73,722	(202,486)	10,948,015	1,659,808	(504,873)	-	(219,095)	(926,454)
73	Nov-22 Actual		-	72,849	(202,486)	10,818,378	1,120,718	(959,180)	-	(219,095)	(1,380,761)
74	Dec-22 Actual		-	71,971	(202,486)	10,687,863	1,312,007	(1,291,141)	-	(219,095)	(1,712,722)
75	Jan-23 Actual		-	71,086	(202,486)	10,556,463	316,932	(1,571,321)	-	(219,095)	(1,992,902)
76	Feb-23 Actual		-	70,195	(202,486)	10,424,172	-	(2,008,656)	-	(219,095)	(2,430,237)
77	Mar-23 Actual		-	69,298	(202,486)	10,290,984	-	(2,325,588)	-	(219,095)	(2,747,169)
78	Apr-23 Actual		-	68,395	(202,486)	10,156,893	-	(2,008,656)	-	-	(2,211,142)
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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization of Coal Ash ARO and Landfill Closure

For the Expense Month of January 2023

Line No.	Period (1)	Coal Ash ARO					Coal Ash ARO and Landfill Closure		Landfill Closure		Total Recovery (11)=(5)+(8)+(10)
		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)	Cash Spend (9)	Recovery: 1-Yr Amort. (10)	
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)		\$ 23,796,779	\$ (23,796,779)	\$ 2,629,139	\$ (2,629,140)	\$ (50,724,239)

Monthly Amortization Amount

\$ (2,747,169)

(a) In Case No. 2021-00290, the Commission granted Duke Energy Kentucky's request to recover unrecovered construction, maintenance, closure, and post-closure maintenance costs of the East Landfill and unrecovered maintenance costs of the West Landfill at the East Bend Station through its Environmental Surcharge Mechanism. Beginning with the expense month of February 2022, ES FORM 2.20, will be revised to show the costs associated with the closure of the East Landfill. The amount shown as "Landfill Closure" cash spend in columns (9) and (10) of ES FORM 2.20, which is being amortized for recovery over a period of twelve months, includes \$1,110,406 of costs related to the closure of the East Landfill and \$1,518,734 of unrecovered maintenance costs related to the West Landfill.

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending January 2023

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases (b)	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	203,239	25,041	120	-	228,160
Dollars	\$ 16,266.21	\$ -	\$ 8.40	\$ -	\$ 16,257.81
\$/Allowance	\$ 0.080035	\$ -	\$ 0.070000	\$ -	\$ 0.071256
NO_x Allowances - Annual					
Quantity	12,017	3,292	291	-	15,018
Dollars	\$ 2,089.25	\$ -	\$ 40.74	\$ -	\$ 2,048.51
\$/Allowance	\$ 0.173858	\$ -	\$ 0.140000	\$ -	\$ 0.136404
NO_x Allowances - Seasonal					
Quantity	799	1,061	-	-	1,860
Dollars	\$ 162.09	\$ -	\$ -	\$ -	\$ 162.09
\$/Allowance	\$ 0.202866	\$ -	\$ -	\$ -	\$ 0.087145
Total Emission Allowances					
Quantity	216,055	29,394	411	-	245,038
Dollars	\$ 18,517.55	\$ -	\$ 49.14	\$ -	\$ 18,468.41

(a) Note: The SO₂ 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.

(b) Note: Annual allowances allocated from the EPA to Duke Energy Kentucky at no cost

ES FORM 2.50

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

Environmental Reagent Expenses

For the Expense Month of January 2023

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
1	Ammonia	502020	\$ 82,590	\$ 82,590
2	Lime	502040	1,363,239	1,363,239
3	Hydrated Lime	502040	92,362	92,362
4	Magnesium Hydroxide ^(Note 1)	502040	-	-
5	Total		\$ 1,538,191	\$ 1,538,191

Note 1: East Bend Station's Flue Gas Desulfurization is a Magnesium Oxide based technology. It is the only one of its kind within Duke Energy's current portfolio. The Magnesium Oxide based technology requires a particular chemical construct of lime to function properly, and as such, the scrubber utilizes a "quicklime" material versus the nominal limestone which is considered a Calcium Carbonate based technology. In March of 2020 the vendor's mining facility supplying the quicklime material to East Bend discontinued operations. This facility's quicklime product contained the proper constituents including the Magnesium required for East Bend's optimal scrubber performance. Upon learning of this facility's closure, Duke Energy Kentucky began exploring different solutions to obtain scrubber material with the correct chemical composition, including different mine sources and adding chemicals to produce the correct product. The vendor made the commitment to continue meeting contractual obligations by supplying East Bend with a blended product (Dolomitic Lime and Quicklime) from an alternate facility. Unfortunately, contractually meeting the specifications of the blended commodity, the reactivity of the substitute dolomitic lime is insufficient and as a result, East Bend found itself not able to meet its scrubber limit. In order for East Bend Station to meet its SO2 scrubbing limit, the Company must add an additional chemical reagent, Magnesium Hydroxide, to the substitute blended lime to produce the correct chemical reaction and achieve East Bend's SO2 limit.

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 January 2023

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge
					(2) - (5)
Feb-22	\$ 19,751,655			\$ 604,732	\$ 19,146,923
Mar-22	11,607,297			541,161	11,066,136
Apr-22	12,082,416			1,006,766	11,075,650
May-22	11,615,289			956,257	10,659,032
Jun-22	17,910,941			1,614,789	16,296,152
Jul-22	18,563,570			1,659,116	16,904,454
Aug-22	18,473,401			640,890	17,832,511
Sep-22	15,720,676			473,849	15,246,827
Oct-22	14,512,662			548,048	13,964,614
Nov-22	11,938,112			52,623	11,885,489
Dec-22	22,578,516			1,519,344	21,059,172
Jan-23	\$ 20,997,982			\$ 1,966,732	\$ 19,031,250
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 15,347,351
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 35,471,341
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					43.27%

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)
Feb-22	\$ 21,218,594	\$ 4,675,522	\$ 5,624,922	\$ 492,009	\$ 20,726,585	\$ 10,426,141
Mar-22	14,758,559	4,840,248	(183,660)	760,990	13,997,569	9,340,981
Apr-22	9,200,787	2,373,083	559,030	832,346	8,368,441	5,436,328
May-22	17,061,583	6,907,083	1,042,516	1,480,087	15,581,496	7,631,897
Jun-22	9,290,552	1,390,573	2,437,838	808,874	8,481,678	4,653,267
Jul-22	37,009,503	10,084,818	5,088,354	2,992,108	34,017,395	18,844,223
Aug-22	25,443,793	6,923,013	3,607,722	1,214,128	24,229,665	13,698,930
Sep-22	24,299,737	6,716,720	4,193,497	799,356	23,500,381	12,590,164
Oct-22	24,400,829	4,890,802	9,320,939	652,974	23,747,855	9,536,114
Nov-22	19,208,261	4,288,703	6,368,820	153,115	19,055,146	8,397,623
Dec-22	26,588,963	5,032,858	10,815,378	1,106,356	25,482,607	9,634,371
Jan-23	\$ 26,252,084	\$ 5,391,975	\$ 8,645,106	\$ 1,953,026	\$ 24,299,058	\$ 10,261,977
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 20,123,990	\$ 10,037,668
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 35,471,341	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					56.73%	

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 2023

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,672,477
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	14,823,942
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		11.28%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	2,227,889
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	9,928,525
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		22.44%

Effective Date for Billing: April 1, 2023

Submitted by: /s/ Libbie S. Miller

Title: Rates & Regulatory Strategy Manager

Date Submitted: March 22, 2023

ES FORM 1.10

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

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of February 2023

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	\$ 56,472,491
2	RB ÷ 12 months	(1) ÷ 12	\$ 4,706,041
3	Pretax Rate of Return (ROR)	ES Form 1.20	7.905%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 372,013
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 3,131,898
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 3,503,911
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	94.45%
9	Jurisdictional E(m)	(7) x (8)	\$ 3,309,444
10	Prior Period Adjustment (if necessary)	(A)	+
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ 590,922
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 3,900,366
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 194,467

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	42.88%	57.12%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 1,672,477	\$ 2,227,889
16	R(m) Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	ES Form 3.00 ES Form 3.00	\$ 14,823,942	\$ 9,928,525
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	11.28%	22.44%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 34,569,925	94.45%
19	Sales for Resale	Company Records	\$ 2,030,582	5.55%
20	Total Revenue		\$ 36,600,507	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	5.835%	1.710%	0.100%		0.100%
2	Long-term Debt	45.931%	4.028%	1.850%		1.850%
3	Common Equity	48.234%	9.250%	4.462%	1.3346139	5.955%
4	Total	100.000%		6.412%		7.905%

Note: Capital structure, cost of debt and tax rate gross-up factor as approved in Case No. 2019-00271. 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 2023

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant) Excluding AFUDC	ES Form 2.10	\$ 67,432,275
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	-
3	Subtotal		\$ 67,432,275
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 18,457
6	Subtotal		\$ 18,457
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 6,007,288
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	4,970,953
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 10,978,241
12	Environmental Compliance Rate Base		\$ 56,472,491
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 138,798
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 65,689
16	Monthly Amortization Expense	ES Form 2.20	\$ 2,570,971
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 12
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 356,428
19	Total Environmental Compliance Operating Expense		\$ 3,131,898
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x 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		\$ 4,049,559
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		3,458,637
27	(Over) / Under Recovery		\$ 590,922

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 2023

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project No.	Description	Gross Plant in-Service Excl. AFUDC as of February-23	Accumulated Depreciation as of February-23	Net Plant in-Service as of February-23	CWIP Excluding AFUDC as of February-23	Accumulated Deferred ITC as of February-23	Accumulated Deferred Tax Balance as of February-23	Monthly Depreciation Expense	Monthly Property Tax Expense
				(2)-(3)					
1	EB020290 Lined Retention Basin West	\$ 10,324,588	\$ 1,079,358	\$ 9,245,230	\$ -	\$ -	\$ 1,243,450	\$ 21,251	\$ 9,887
2	EB020745 Lined Retention Basin East	\$ 10,280,726	\$ 800,562	\$ 9,480,164	\$ -	\$ -	\$ 412,920	\$ 21,161	\$ 10,138
3	EB020298 East Bend SW/PW Reroute	\$ 29,882,379	\$ 2,873,294	\$ 27,009,085	\$ -	\$ -	\$ 2,873,863	\$ 61,508	\$ 28,884
4	EB021281 East Bend Landfill Cell 2	\$ 16,944,582	\$ 1,254,074	\$ 15,690,508	\$ -	\$ -	\$ 440,720	\$ 34,878	\$ 16,780
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 67,432,275	\$ 6,007,288	\$ 61,424,987	\$ -	\$ -	\$ 4,970,953	\$ 138,798	\$ 65,689

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Amortization of Coal Ash ARO and Landfill Closure

For the Expense Month of February 2023

Line No.	Period (1)	Coal Ash ARO					Coal Ash ARO and Landfill Closure		Landfill Closure		Total Recovery (11)=(5)+(8)+(10)
		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)	Cash Spend (9)	Recovery: 1-Yr Amort. (10)	
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	-	-	291,152	-	-
3	Jan-17 Actual	358,148	-	43,243	-	8,182,238	-	-	13,108	-	-
4	Feb-17 Actual	424,021	-	40,351	-	8,646,610	-	-	14,281	-	-
5	Mar-17 Actual	692,184	(26,763)	44,724	-	9,356,755	-	-	20,225	-	-
6	Apr-17 Actual	254,067	-	50,949	-	9,661,771	-	-	30,324	-	-
7	May-17 Actual	608,377	-	56,141	-	10,326,289	-	-	34,997	-	-
8	Jun-17 Actual	265,619	(26,763)	53,472	-	10,618,617	-	-	45,594	-	-
9	Jul-17 Actual	220,636	-	51,558	-	10,890,811	-	-	30,629	-	-
10	Aug-17 Actual	272,053	-	47,731	-	11,210,595	-	-	17,432	-	-
11	Sep-17 Actual	233,743	(26,763)	44,389	-	11,461,964	-	-	23,200	-	-
12	Oct-17 Actual	444,793	-	60,670	-	11,967,427	-	-	47,545	-	-
13	Nov-17 Actual	525,770	-	68,573	-	12,561,770	-	-	33,047	-	-
14	Dec-17 Actual	2,482,493	(26,763)	82,850	-	15,100,350	-	-	18,362	-	-
15	Jan-18 Actual	510,525	-	91,185	-	15,702,060	-	-	18,843	-	-
16	Feb-18 Actual	89,648	-	91,534	-	15,883,242	-	-	-	-	-
17	Mar-18 Actual	396,977	(26,763)	93,696	-	16,347,152	-	-	14,037	-	-
18	Apr-18 Actual	132,294	-	111,722	-	16,591,168	173,000	-	36,260	-	-
19	May-18 Actual	-	-	112,480	-	16,703,648	100,234	-	88,888	-	-
20	Jun-18 Actual	-	-	111,870	(202,486)	16,613,032	150,901	(173,000)	128,843	-	(375,486)
21	Jul-18 Actual	-	-	111,255	(202,486)	16,521,801	196,585	(100,234)	16	-	(302,720)
22	Aug-18 Actual	-	-	110,637	(202,486)	16,429,952	321,815	(150,901)	29,844	-	(353,387)
23	Sep-18 Actual	-	-	110,014	(202,486)	16,337,480	275,135	(196,585)	-	-	(399,071)
24	Oct-18 Actual	-	-	109,387	(202,486)	16,244,381	69,886	(321,815)	-	-	(524,301)
25	Nov-18 Actual	-	-	108,756	(202,486)	16,150,651	238,428	(275,135)	(2,498)	-	(477,621)
26	Dec-18 Actual	-	-	108,121	(202,486)	16,056,286	263,037	(69,886)	-	-	(272,372)
27	Jan-19 Actual	-	-	107,481	(202,486)	15,961,281	177,996	(238,428)	-	-	(440,914)
28	Feb-19 Actual	-	-	106,837	(202,486)	15,865,632	150,851	(263,037)	-	-	(465,523)
29	Mar-19 Actual	-	-	106,188	(202,486)	15,769,334	408,609	(177,996)	-	-	(380,482)
30	Apr-19 Actual	-	-	105,535	(202,486)	15,672,383	1,588,547	(150,851)	-	-	(353,337)
31	May-19 Actual	-	-	104,878	(202,486)	15,574,775	1,641,055	(408,609)	-	-	(611,095)
32	Jun-19 Actual	-	-	104,216	(202,486)	15,476,505	1,423,233	(1,588,547)	-	-	(1,791,033)
33	Jul-19 Actual	-	-	103,550	(202,486)	15,377,569	1,368,585	(1,641,055)	-	-	(1,843,541)
34	Aug-19 Actual	-	-	102,880	(202,486)	15,277,963	487,759	(1,423,233)	-	-	(1,625,719)
35	Sep-19 Actual	-	-	102,204	(202,486)	15,177,681	47,477	(1,368,585)	-	-	(1,571,071)
36	Oct-19 Actual	-	-	101,524	(202,486)	15,076,719	(18,595)	(487,759)	-	-	(690,245)
37	Nov-19 Actual	-	-	100,840	(202,486)	14,975,073	330,375	(47,477)	-	-	(249,963)
38	Dec-19 Actual	-	-	100,151	(202,486)	14,872,738	121,640	18,595	-	-	(183,891)
39	Jan-20 Actual	-	-	99,457	(202,486)	14,769,709	77,416	(330,375)	-	-	(532,861)
40	Feb-20 Actual	-	-	98,759	(202,486)	14,665,982	25,184	(121,640)	-	-	(324,126)
41	Mar-20 Actual	-	-	98,055	(202,486)	14,561,551	27,631	(77,416)	-	-	(279,902)
42	Apr-20 Actual	-	-	97,347	(202,486)	14,456,412	50,807	(25,184)	-	-	(227,670)
43	May-20 Actual	-	-	96,635	(202,486)	14,350,561	82,538	(27,631)	-	-	(230,117)
44	Jun-20 Actual	-	-	95,917	(202,486)	14,243,992	133,817	(50,807)	-	-	(283,293)
45	Jul-20 Actual	-	-	95,194	(202,486)	14,136,700	127,493	(82,538)	-	-	(253,024)
46	Aug-20 Actual	-	-	94,467	(202,486)	14,028,681	64,152	(133,817)	-	-	(336,303)
47	Sep-20 Actual	-	-	93,735	(202,486)	13,919,930	127,860	(127,493)	-	-	(329,979)
48	Oct-20 Actual	-	-	92,997	(202,486)	13,810,441	226,553	(64,152)	-	-	(266,638)
49	Nov-20 Actual	-	-	92,255	(202,486)	13,700,210	423,320	(127,860)	5,465	-	(330,346)
50	Dec-20 Actual	-	\$ -	\$ 91,508	(202,486)	\$ 13,589,232	\$ 295,353	\$ (226,553)	\$ 17,705	\$ -	\$ (429,039)

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization of Coal Ash ARO and Landfill Closure

For the Expense Month of February 2023

Line No.	Period (1)	Coal Ash ARO				Coal Ash ARO and Landfill Closure		Landfill Closure (a)		Total Recovery (11)=(5)+(8)+(10)	
		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)	Cash Spend (9)		Recovery: 1-Yr Amort. (10)
51	Jan-21 Actual		\$ -	\$ 90,756	\$ (202,486)	\$ 13,477,502	\$ 80,328	\$ (423,320)	\$ 19,334	\$ -	\$ (625,806)
52	Feb-21 Actual		-	89,998	(202,486)	13,365,014	86,810	(295,353)	4,714	-	(497,839)
53	Mar-21 Actual		-	89,235	(202,486)	13,251,763	71,335	(80,328)	20,845	-	(282,814)
54	Apr-21 Actual		-	88,468	(202,486)	13,137,745	90,503	(86,810)	23,069	-	(289,296)
55	May-21 Actual		-	87,695	(202,486)	13,022,954	208,821	(71,335)	11,618	-	(273,821)
56	Jun-21 Actual		-	86,916	(202,486)	12,907,384	245,017	(90,503)	10,988	-	(292,989)
57	Jul-21 Actual		-	86,133	(202,486)	12,791,031	102,270	(208,821)	-	-	(411,307)
58	Aug-21 Actual		-	85,344	(202,486)	12,673,889	-	(245,017)	144,042	-	(447,503)
59	Sep-21 Actual		-	84,550	(202,486)	12,555,953	-	(102,270)	309,800	-	(304,756)
60	Oct-21 Actual		-	83,750	(202,486)	12,437,217	-	-	411,865	-	(202,486)
61	Nov-21 Actual		-	82,945	(202,486)	12,317,676	-	-	388,963	-	(202,486)
62	Dec-21 Actual		-	82,135	(202,486)	12,197,325	-	-	194,124	-	(202,486)
63	Jan-22 Actual		-	81,319	(202,486)	12,076,158	-	-	105,294	-	(202,486)
64	Feb-22 Actual		-	80,498	(202,486)	11,954,170	103,920	-	27,183	-	(202,486)
65	Mar-22 Actual		-	79,671	(202,486)	11,831,355	131,221	-	-	-	(202,486)
66	Apr-22 Actual		-	78,838	(202,486)	11,707,707	137,219	(103,920)	-	(219,095)	(525,501)
67	May-22 Actual		-	78,000	(202,486)	11,583,221	354,133	(131,221)	-	(219,095)	(552,802)
68	Jun-22 Actual		-	77,156	(202,486)	11,457,891	173,833	(137,219)	-	(219,095)	(558,800)
69	Jul-22 Actual		-	76,306	(202,486)	11,331,711	163,275	(354,133)	-	(219,095)	(775,714)
70	Aug-22 Actual		-	75,451	(202,486)	11,204,676	504,873	(173,833)	-	(219,095)	(595,414)
71	Sep-22 Actual		-	74,589	(202,486)	11,076,779	5,755,078	(163,275)	-	(219,095)	(584,856)
72	Oct-22 Actual		-	73,722	(202,486)	10,948,015	1,659,808	(504,873)	-	(219,095)	(926,454)
73	Nov-22 Actual		-	72,849	(202,486)	10,818,378	1,120,718	(959,180)	-	(219,095)	(1,380,761)
74	Dec-22 Actual		-	71,971	(202,486)	10,687,863	1,312,007	(1,291,141)	-	(219,095)	(1,712,722)
75	Jan-23 Actual		-	71,086	(202,486)	10,556,463	316,932	(1,571,321)	-	(219,095)	(1,992,902)
76	Feb-23 Actual		-	70,195	(202,486)	10,424,172	359,829	(2,008,656)	-	(219,095)	(2,430,237)
77	Mar-23 Actual		-	69,298	(202,486)	10,290,984	-	(2,325,588)	-	(219,095)	(2,747,169)
78	Apr-23 Actual		-	68,395	(202,486)	10,156,893	-	(2,368,485)	-	-	(2,570,971)
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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization of Coal Ash ARO and Landfill Closure

For the Expense Month of February 2023

Line No.	Period (1)	Coal Ash ARO				Coal Ash ARO and Landfill Closure		Landfill Closure		Total Recovery (11)=(5)+(8)+(10)	
		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)	Cash Spend (9)		Recovery: 1-Yr Amort. (10)
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)	\$ -	\$ -	\$ -	\$ -	\$ -	(51,084,068)

Monthly Amortization Amount

\$ (2,570,971)

(a) In Case No. 2021-00290, the Commission granted Duke Energy Kentucky's request to recover unrecovered construction, maintenance, closure, and post-closure maintenance costs of the East Landfill and unrecovered maintenance costs of the West Landfill at the East Bend Station through its Environmental Surcharge Mechanism. Beginning with the expense month of February 2022, ES FORM 2.20, will be revised to show the costs associated with the closure of the East Landfill. The amount shown as "Landfill Closure" cash spend in columns (9) and (10) of ES FORM 2.20, which is being amortized for recovery over a period of twelve months, includes \$1,110,406 of costs related to the closure of the East Landfill and \$1,518,734 of unrecovered maintenance costs related to the West Landfill.

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending February 2023

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	228,160	-	27	-	228,133
Dollars	\$ 16,257.81	\$ -	\$ 1.89	\$ -	\$ 16,255.92
\$/Allowance	\$ 0.071256	\$ -	\$ 0.070000	\$ -	\$ 0.071256
NO_x Allowances - Annual					
Quantity	15,018	-	71	-	14,947
Dollars	\$ 2,048.51	\$ -	\$ 9.94	\$ -	\$ 2,038.57
\$/Allowance	\$ 0.136404	\$ -	\$ 0.140000	\$ -	\$ 0.136387
NO_x Allowances - Seasonal					
Quantity	1,860	-	-	-	1,860
Dollars	\$ 162.09	\$ -	\$ -	\$ -	\$ 162.09
\$/Allowance	\$ 0.087145	\$ -	\$ -	\$ -	\$ 0.087145
Total Emission Allowances					
Quantity	245,038	-	98	-	244,940
Dollars	\$ 18,468.41	\$ -	\$ 11.83	\$ -	\$ 18,456.58

(a) Note: The SO₂ 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 February 2023

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
1	Ammonia	502020	\$ 19,397	\$ 19,397
2	Lime	502040	299,672	299,672
3	Hydrated Lime	502040	37,359	37,359
4	Magnesium Hydroxide ^(Note 1)	502040	-	-
5	Total		\$ 356,428	\$ 356,428

Note 1: East Bend Station's Flue Gas Desulfurization is a Magnesium Oxide based technology. It is the only one of its kind within Duke Energy's current portfolio. The Magnesium Oxide based technology requires a particular chemical construct of lime to function properly, and as such, the scrubber utilizes a "quicklime" material versus the nominal limestone which is considered a Calcium Carbonate based technology. In March of 2020 the vendor's mining facility supplying the quicklime material to East Bend discontinued operations. This facility's quicklime product contained the proper constituents including the Magnesium required for East Bend's optimal scrubber performance. Upon learning of this facility's closure, Duke Energy Kentucky began exploring different solutions to obtain scrubber material with the correct chemical composition, including different mine sources and adding chemicals to produce the correct product. The vendor made the commitment to continue meeting contractual obligations by supplying East Bend with a blended product (Dolomitic Lime and Quicklime) from an alternate facility. Unfortunately, contractually meeting the specifications of the blended commodity, the reactivity of the substitute dolomitic lime is insufficient and as a result, East Bend found itself not able to meet its scrubber limit. In order for East Bend Station to meet its SO2 scrubbing limit, the Company must add an additional chemical reagent, Magnesium Hydroxide, to the substitute blended lime to produce the correct chemical reaction and achieve East Bend's SO2 limit.

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 2023

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge
					(2) - (5)
Mar-22	\$ 11,607,297			\$ 541,161	\$ 11,066,136
Apr-22	12,082,416			1,006,766	11,075,650
May-22	11,615,289			956,257	10,659,032
Jun-22	17,910,941			1,614,789	16,296,152
Jul-22	18,563,570			1,659,116	16,904,454
Aug-22	18,473,401			640,890	17,832,511
Sep-22	15,720,676			473,849	15,246,827
Oct-22	14,512,662			548,048	13,964,614
Nov-22	11,938,112			52,623	11,885,489
Dec-22	22,578,516			1,519,344	21,059,172
Jan-23	20,997,982			1,966,732	19,031,250
Feb-23	\$ 14,334,759			\$ 1,468,748	\$ 12,866,011
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 14,823,942
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 34,569,925
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					42.88%

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-22	\$ 14,758,559	\$ 4,840,248	\$ (183,660)	\$ 760,990	\$ 13,997,569	\$ 9,340,981
Apr-22	9,200,787	2,373,083	559,030	832,346	8,368,441	5,436,328
May-22	17,061,583	6,907,083	1,042,516	1,480,087	15,581,496	7,631,897
Jun-22	9,290,552	1,390,573	2,437,838	808,874	8,481,678	4,653,267
Jul-22	37,009,503	10,084,818	5,088,354	2,992,108	34,017,395	18,844,223
Aug-22	25,443,793	6,923,013	3,607,722	1,214,128	24,229,665	13,698,930
Sep-22	24,299,737	6,716,720	4,193,497	799,356	23,500,381	12,590,164
Oct-22	24,400,829	4,890,802	9,320,939	652,974	23,747,855	9,536,114
Nov-22	19,208,261	4,288,703	6,368,820	153,115	19,055,146	8,397,623
Dec-22	26,588,963	5,032,858	10,815,378	1,106,356	25,482,607	9,634,371
Jan-23	26,252,084	5,391,975	8,645,106	1,953,026	24,299,058	10,261,977
Feb-23	\$ 18,180,393	\$ 4,767,499	\$ 2,306,582	\$ 1,989,889	\$ 16,190,504	\$ 9,116,423
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 19,745,983	\$ 9,928,525
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 34,569,925	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					57.12%	

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 2023

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,048,429
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	14,756,845
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		7.10%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,402,890
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	9,889,774
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		14.19%

Effective Date for Billing: May 1, 2023

Submitted by: /s/ Libbie S. Miller

Title: Rates & Regulatory Strategy Manager

Date Submitted: April 21, 2023

ES FORM 1.10

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

Calculation of Current Month Environmental Surcharge Factors
 For the Expense Month of March 2023

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	\$ 56,302,831
2	RB ÷ 12 months	(1) ÷ 12	\$ 4,691,903
3	Pretax Rate of Return (ROR)	ES Form 1.20	7.905%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 370,895
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 1,232,394
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 1,603,289
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	94.59%
9	Jurisdictional E(m)	(7) x (8)	\$ 1,516,551
10	Prior Period Adjustment (if necessary)	(A)	+
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ 934,768
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 2,451,319
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 86,738

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	42.77%	57.23%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 1,048,429	\$ 1,402,890
16	R(m) Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	ES Form 3.00 ES Form 3.00	\$ 14,756,845	\$ 9,889,774
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	7.10%	14.19%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 34,504,262	94.59%
19	Sales for Resale	Company Records	\$ 1,972,520	5.41%
20	Total Revenue		\$ 36,476,782	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	5.835%	1.710%	0.100%		0.100%
2	Long-term Debt	45.931%	4.028%	1.850%		1.850%
3	Common Equity	48.234%	9.250%	4.462%	1.3346139	5.955%
4	Total	100.000%		6.412%		7.905%

Note: Capital structure, cost of debt and tax rate gross-up factor as approved in Case No. 2019-00271. 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 2023

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant) Excluding AFUDC	ES Form 2.10	\$ 67,432,275
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	-
3	Subtotal		\$ 67,432,275
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 18,440
6	Subtotal		\$ 18,440
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 6,146,085
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	5,001,799
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 11,147,884
12	Environmental Compliance Rate Base		\$ 56,302,831
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 138,798
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 65,542
16	Monthly Amortization Expense	ES Form 2.20	\$ 564,189
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 17
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 463,848
19	Total Environmental Compliance Operating Expense		\$ 1,232,394
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x 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		\$ 4,257,219
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		3,322,451
27	(Over) / Under Recovery		\$ 934,768

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 2023

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project No.	Description	Gross Plant in-Service Excl. AFUDC as of March-23	Accumulated Depreciation as of March-23	Net Plant in-Service as of March-23	CWIP Excluding AFUDC as of March-23	Accumulated Deferred ITC as of March-23	Accumulated Deferred Tax Balance as of March-23	Monthly Depreciation Expense	Monthly Property Tax Expense
				(2)-(3)					
1	EB020290 Lined Retention Basin West	\$ 10,324,588	\$ 1,100,609	\$ 9,223,979	\$ -	\$ -	\$ 1,244,872	\$ 21,251	\$ 9,864
2	EB020745 Lined Retention Basin East	\$ 10,280,726	\$ 821,723	\$ 9,459,003	\$ -	\$ -	\$ 419,987	\$ 21,161	\$ 10,116
3	EB020298 East Bend SW/PW Reroute	\$ 29,882,379	\$ 2,934,802	\$ 26,947,577	\$ -	\$ -	\$ 2,882,949	\$ 61,508	\$ 28,819
4	EB021281 East Bend Landfill Cell 2	\$ 16,944,582	\$ 1,288,951	\$ 15,655,631	\$ -	\$ -	\$ 453,991	\$ 34,878	\$ 16,743
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 67,432,275	\$ 6,146,085	\$ 61,286,190	\$ -	\$ -	\$ 5,001,799	\$ 138,798	\$ 65,542

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization of Coal Ash ARO and Landfill Closure

For the Expense Month of March 2023

Line No.	Period (1)	Coal Ash ARO					Coal Ash ARO and Landfill Closure		Landfill Closure		Total Recovery (11)=(5)+(8)+(10)	
		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)	Cash Spend (9)	Recovery: 1-Yr Amort. (10)		
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	-	-	291,152	-	-
3	Jan-17	Actual	358,148	-	43,243	-	8,182,238	-	-	13,108	-	-
4	Feb-17	Actual	424,021	-	40,351	-	8,646,610	-	-	14,281	-	-
5	Mar-17	Actual	692,184	(26,763)	44,724	-	9,356,755	-	-	20,225	-	-
6	Apr-17	Actual	254,067	-	50,949	-	9,661,771	-	-	30,324	-	-
7	May-17	Actual	608,377	-	56,141	-	10,326,289	-	-	34,997	-	-
8	Jun-17	Actual	265,619	(26,763)	53,472	-	10,618,617	-	-	45,594	-	-
9	Jul-17	Actual	220,636	-	51,558	-	10,890,811	-	-	30,629	-	-
10	Aug-17	Actual	272,053	-	47,731	-	11,210,595	-	-	17,432	-	-
11	Sep-17	Actual	233,743	(26,763)	44,389	-	11,461,964	-	-	23,200	-	-
12	Oct-17	Actual	444,793	-	60,670	-	11,967,427	-	-	47,545	-	-
13	Nov-17	Actual	525,770	-	68,573	-	12,561,770	-	-	33,047	-	-
14	Dec-17	Actual	2,482,493	(26,763)	82,850	-	15,100,350	-	-	18,362	-	-
15	Jan-18	Actual	510,525	-	91,185	-	15,702,060	-	-	18,843	-	-
16	Feb-18	Actual	89,648	-	91,534	-	15,883,242	-	-	-	-	-
17	Mar-18	Actual	396,977	(26,763)	93,696	-	16,347,152	-	-	14,037	-	-
18	Apr-18	Actual	132,294	-	111,722	-	16,591,168	173,000	-	36,260	-	-
19	May-18	Actual	-	-	112,480	-	16,703,648	100,234	-	88,888	-	-
20	Jun-18	Actual	-	-	111,870	(202,486)	16,613,032	150,901	(173,000)	128,843	-	(375,486)
21	Jul-18	Actual	-	-	111,255	(202,486)	16,521,801	196,585	(100,234)	16	-	(302,720)
22	Aug-18	Actual	-	-	110,637	(202,486)	16,429,952	321,815	(150,901)	29,844	-	(353,387)
23	Sep-18	Actual	-	-	110,014	(202,486)	16,337,480	275,135	(196,585)	-	-	(399,071)
24	Oct-18	Actual	-	-	109,387	(202,486)	16,244,381	69,886	(321,815)	-	-	(524,301)
25	Nov-18	Actual	-	-	108,756	(202,486)	16,150,651	238,428	(275,135)	(2,498)	-	(477,621)
26	Dec-18	Actual	-	-	108,121	(202,486)	16,056,286	263,037	(69,886)	-	-	(272,372)
27	Jan-19	Actual	-	-	107,481	(202,486)	15,961,281	177,996	(238,428)	-	-	(440,914)
28	Feb-19	Actual	-	-	106,837	(202,486)	15,865,632	150,851	(263,037)	-	-	(465,523)
29	Mar-19	Actual	-	-	106,188	(202,486)	15,769,334	408,609	(177,996)	-	-	(380,482)
30	Apr-19	Actual	-	-	105,535	(202,486)	15,672,383	1,588,547	(150,851)	-	-	(353,337)
31	May-19	Actual	-	-	104,878	(202,486)	15,574,775	1,641,055	(408,609)	-	-	(611,095)
32	Jun-19	Actual	-	-	104,216	(202,486)	15,476,505	1,423,233	(1,588,547)	-	-	(1,791,033)
33	Jul-19	Actual	-	-	103,550	(202,486)	15,377,569	1,368,585	(1,641,055)	-	-	(1,843,541)
34	Aug-19	Actual	-	-	102,880	(202,486)	15,277,963	487,759	(1,423,233)	-	-	(1,625,719)
35	Sep-19	Actual	-	-	102,204	(202,486)	15,177,681	47,477	(1,368,585)	-	-	(1,571,071)
36	Oct-19	Actual	-	-	101,524	(202,486)	15,076,719	(18,595)	(487,759)	-	-	(690,245)
37	Nov-19	Actual	-	-	100,840	(202,486)	14,975,073	330,375	(47,477)	-	-	(249,963)
38	Dec-19	Actual	-	-	100,151	(202,486)	14,872,738	121,640	18,595	-	-	(183,891)
39	Jan-20	Actual	-	-	99,457	(202,486)	14,769,709	77,416	(330,375)	-	-	(532,861)
40	Feb-20	Actual	-	-	98,759	(202,486)	14,665,982	25,184	(121,640)	-	-	(324,126)
41	Mar-20	Actual	-	-	98,055	(202,486)	14,561,551	27,631	(77,416)	-	-	(279,902)
42	Apr-20	Actual	-	-	97,347	(202,486)	14,456,412	50,807	(25,184)	-	-	(227,670)
43	May-20	Actual	-	-	96,635	(202,486)	14,350,561	82,538	(27,631)	-	-	(230,117)
44	Jun-20	Actual	-	-	95,917	(202,486)	14,243,992	133,817	(50,807)	-	-	(253,293)
45	Jul-20	Actual	-	-	95,194	(202,486)	14,136,700	127,493	(82,538)	-	-	(285,024)
46	Aug-20	Actual	-	-	94,467	(202,486)	14,028,681	64,152	(133,817)	-	-	(336,303)
47	Sep-20	Actual	-	-	93,735	(202,486)	13,919,930	127,860	(127,493)	-	-	(329,979)
48	Oct-20	Actual	-	-	92,997	(202,486)	13,810,441	226,553	(64,152)	-	-	(266,638)
49	Nov-20	Actual	-	-	92,255	(202,486)	13,700,210	423,320	(127,860)	5,465	-	(330,346)
50	Dec-20	Actual	\$ -	\$ -	\$ 91,508	\$ (202,486)	\$ 13,589,232	\$ 295,353	\$ (226,553)	\$ 17,705	\$ -	\$ (429,039)

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization of Coal Ash ARO and Landfill Closure

For the Expense Month of March 2023

Line No.	Period (1)	Coal Ash ARO					Coal Ash ARO and Landfill Closure		Landfill Closure (a)		Total Recovery (11)=(5)+(8)+(10)
		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)	Cash Spend (9)	Recovery: 1-Yr Amort. (10)	
51	Jan-21	Actual		\$ 90,756	\$(202,486)	\$ 13,477,502	\$ 80,328	\$(423,320)	\$ 19,334	\$ -	\$(625,806)
52	Feb-21	Actual		89,998	(202,486)	13,365,014	86,810	(295,353)	4,714	-	(497,839)
53	Mar-21	Actual		89,235	(202,486)	13,251,763	71,335	(80,328)	20,845	-	(282,814)
54	Apr-21	Actual		88,468	(202,486)	13,137,745	90,503	(86,810)	23,069	-	(289,296)
55	May-21	Actual		87,695	(202,486)	13,022,954	208,821	(71,335)	11,618	-	(273,821)
56	Jun-21	Actual		86,916	(202,486)	12,907,384	245,017	(90,503)	10,988	-	(292,989)
57	Jul-21	Actual		86,133	(202,486)	12,791,031	102,270	(208,821)	-	-	(411,307)
58	Aug-21	Actual		85,344	(202,486)	12,673,889	-	(245,017)	144,042	-	(447,503)
59	Sep-21	Actual		84,550	(202,486)	12,555,953	-	(102,270)	309,800	-	(304,756)
60	Oct-21	Actual		83,750	(202,486)	12,437,217	-	-	411,865	-	(202,486)
61	Nov-21	Actual		82,945	(202,486)	12,317,676	-	-	388,963	-	(202,486)
62	Dec-21	Actual		82,135	(202,486)	12,197,325	-	-	194,124	-	(202,486)
63	Jan-22	Actual		81,319	(202,486)	12,076,158	-	-	105,294	-	(202,486)
64	Feb-22	Actual		80,498	(202,486)	11,954,170	103,920	-	27,183	-	(202,486)
65	Mar-22	Actual		79,671	(202,486)	11,831,355	131,221	-	-	-	(202,486)
66	Apr-22	Actual		78,838	(202,486)	11,707,707	137,219	(103,920)	-	(219,095)	(525,501)
67	May-22	Actual		78,000	(202,486)	11,583,221	354,133	(131,221)	-	(219,095)	(552,802)
68	Jun-22	Actual		77,156	(202,486)	11,457,891	173,833	(137,219)	-	(219,095)	(558,800)
69	Jul-22	Actual		76,306	(202,486)	11,331,711	163,275	(354,133)	-	(219,095)	(775,714)
70	Aug-22	Actual		75,451	(202,486)	11,204,676	504,873	(173,833)	-	(219,095)	(595,414)
71	Sep-22	Actual		74,589	(202,486)	11,076,779	5,755,078	(163,275)	-	(219,095)	(584,856)
72	Oct-22	Actual		73,722	(202,486)	10,948,015	1,659,808	(504,873)	-	(219,095)	(926,454)
73	Nov-22	Actual		72,849	(202,486)	10,818,378	1,120,718	(959,180)	-	(219,095)	(1,380,761)
74	Dec-22	Actual		71,971	(202,486)	10,687,863	1,312,007	(1,291,141)	-	(219,095)	(1,712,722)
75	Jan-23	Actual		71,086	(202,486)	10,556,463	316,932	(1,571,321)	-	(219,095)	(1,992,902)
76	Feb-23	Actual		70,195	(202,486)	10,424,172	359,829	(2,008,656)	-	(219,095)	(2,430,237)
77	Mar-23	Actual		69,298	(202,486)	10,290,984	361,703	(2,325,588)	-	(219,095)	(2,747,169)
78	Apr-23	Actual		68,395	(202,486)	10,156,893	-	(2,368,485)	-	-	(2,570,971)
79	May-23	Actual		67,486	(202,486)	10,021,893	-	(361,703)	-	-	(564,189)
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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization of Coal Ash ARO and Landfill Closure

For the Expense Month of March 2023

Line No.	Period (1)	Coal Ash ARO				Coal Ash ARO and Landfill Closure		Landfill Closure		Total Recovery (11)=(5)+(8)+(10)	
		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)	Cash Spend (9)		Recovery: 1-Yr Amort. (10)
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)	\$ 24,518,311	\$(24,518,311)	\$ 2,629,139	\$(2,629,140)	\$(51,445,771)

Monthly Amortization Amount

\$(564,189)

(a) In Case No. 2021-00290, the Commission granted Duke Energy Kentucky's request to recover unrecovered construction, maintenance, closure, and post-closure maintenance costs of the East Landfill and unrecovered maintenance costs of the West Landfill at the East Bend Station through its Environmental Surcharge Mechanism. Beginning with the expense month of February 2022, ES FORM 2.20, will be revised to show the costs associated with the closure of the East Landfill. The amount shown as "Landfill Closure" cash spend in columns (9) and (10) of ES FORM 2.20, which is being amortized for recovery over a period of twelve months, includes \$1,110,406 of costs related to the closure of the East Landfill and \$1,518,734 of unrecovered maintenance costs related to the West Landfill.

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending March 2023

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	228,133	-	75	-	228,058
Dollars	\$ 16,255.92	\$ -	\$ 5.25	\$ -	\$ 16,250.67
\$/Allowance	\$ 0.071256	\$ -	\$ 0.070000	\$ -	\$ 0.071257
NO_x Allowances - Annual					
Quantity	14,947	-	81	-	14,866
Dollars	\$ 2,038.57	\$ -	\$ 11.34	\$ -	\$ 2,027.23
\$/Allowance	\$ 0.136387	\$ -	\$ 0.140000	\$ -	\$ 0.136367
NO_x Allowances - Seasonal					
Quantity	1,860	-	-	-	1,860
Dollars	\$ 162.09	\$ -	\$ -	\$ -	\$ 162.09
\$/Allowance	\$ 0.087145	\$ -	\$ -	\$ -	\$ 0.087145
Total Emission Allowances					
Quantity	244,940	-	156	-	244,784
Dollars	\$ 18,456.58	\$ -	\$ 16.59	\$ -	\$ 18,439.99

(a) Note: The SO₂ 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 March 2023

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
1	Ammonia	502020	\$ 61,443	\$ 61,443
2	Lime	502040	355,046	355,046
3	Hydrated Lime	502040	47,359	47,359
4	Magnesium Hydroxide ^(Note 1)	502040	-	-
5	Total		\$ 463,848	\$ 463,848

Note 1: East Bend Station's Flue Gas Desulfurization is a Magnesium Oxide based technology. It is the only one of its kind within Duke Energy's current portfolio. The Magnesium Oxide based technology requires a particular chemical construct of lime to function properly, and as such, the scrubber utilizes a "quicklime" material versus the nominal limestone which is considered a Calcium Carbonate based technology. In March of 2020 the vendor's mining facility supplying the quicklime material to East Bend discontinued operations. This facility's quicklime product contained the proper constituents including the Magnesium required for East Bend's optimal scrubber performance. Upon learning of this facility's closure, Duke Energy Kentucky began exploring different solutions to obtain scrubber material with the correct chemical composition, including different mine sources and adding chemicals to produce the correct product. The vendor made the commitment to continue meeting contractual obligations by supplying East Bend with a blended product (Dolomitic Lime and Quicklime) from an alternate facility. Unfortunately, contractually meeting the specifications of the blended commodity, the reactivity of the substitute dolomitic lime is insufficient and as a result, East Bend found itself not able to meet its scrubber limit. In order for East Bend Station to meet its SO2 scrubbing limit, the Company must add an additional chemical reagent, Magnesium Hydroxide, to the substitute blended lime to produce the correct chemical reaction and achieve East Bend's SO2 limit.

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 2023

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge
					(2) - (5)
Apr-22	\$ 12,082,416			\$ 1,006,766	\$ 11,075,650
May-22	11,615,289			956,257	10,659,032
Jun-22	17,910,941			1,614,789	16,296,152
Jul-22	18,563,570			1,659,116	16,904,454
Aug-22	18,473,401			640,890	17,832,511
Sep-22	15,720,676			473,849	15,246,827
Oct-22	14,512,662			548,048	13,964,614
Nov-22	11,938,112			52,623	11,885,489
Dec-22	22,578,516			1,519,344	21,059,172
Jan-23	20,997,982			1,966,732	19,031,250
Feb-23	14,334,759			1,468,748	12,866,011
Mar-23	\$ 11,491,838			\$ 1,230,864	\$ 10,260,974
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 14,756,845
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 34,504,262
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					42.77%

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)
Apr-22	\$ 9,200,787	\$ 2,373,083	\$ 559,030	\$ 832,346	\$ 8,368,441	\$ 5,436,328
May-22	17,061,583	6,907,083	1,042,516	1,480,087	15,581,496	7,631,897
Jun-22	9,290,552	1,390,573	2,437,838	808,874	8,481,678	4,653,267
Jul-22	37,009,503	10,084,818	5,088,354	2,992,108	34,017,395	18,844,223
Aug-22	25,443,793	6,923,013	3,607,722	1,214,128	24,229,665	13,698,930
Sep-22	24,299,737	6,716,720	4,193,497	799,356	23,500,381	12,590,164
Oct-22	24,400,829	4,890,802	9,320,939	652,974	23,747,855	9,536,114
Nov-22	19,208,261	4,288,703	6,368,820	153,115	19,055,146	8,397,623
Dec-22	26,588,963	5,032,858	10,815,378	1,106,356	25,482,607	9,634,371
Jan-23	26,252,084	5,391,975	8,645,106	1,953,026	24,299,058	10,261,977
Feb-23	18,180,393	4,767,499	2,306,582	1,989,889	16,190,504	9,116,423
Mar-23	\$ 16,106,361	\$ 5,220,034	\$ (81,232)	\$ 2,091,587	\$ 14,014,774	\$ 8,875,972
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 19,747,417	\$ 9,889,774
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 34,504,262	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					57.23%	

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 April 2023

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,733,847
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	14,605,838
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		11.87%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	2,317,198
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	9,774,292
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		23.71%

Effective Date for Billing: June 1, 2023

Submitted by: /s/ Libbie S. Miller

Title: Rates & Regulatory Strategy Manager

Date Submitted: May 19, 2023

ES FORM 1.10

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

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of April 2023

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	\$ 56,133,157
2	RB ÷ 12 months	(1) ÷ 12	\$ 4,677,763
3	Pretax Rate of Return (ROR)	ES Form 1.20	7.905%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 369,777
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 2,264,060
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 2,633,837
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	94.68%
9	Jurisdictional E(m)	(7) x (8)	\$ 2,493,717
10	Prior Period Adjustment (if necessary)	(A)	+
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ 1,557,328
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 4,051,045
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 140,120

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	42.80%	57.20%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 1,733,847	\$ 2,317,198
16	R(m) Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	ES Form 3.00 ES Form 3.00	\$ 14,605,838	\$ 9,774,292
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	11.87%	23.71%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 34,128,665	94.68%
19	Sales for Resale	Company Records	\$ 1,919,080	5.32%
20	Total Revenue		\$ 36,047,745	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	5.835%	1.710%	0.100%		0.100%
2	Long-term Debt	45.931%	4.028%	1.850%		1.850%
3	Common Equity	48.234%	9.250%	4.462%	1.3346139	5.955%
4	Total	100.000%		6.412%		7.905%

Note: Capital structure, cost of debt and tax rate gross-up factor as approved in Case No. 2019-00271. 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 April 2023

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant) Excluding AFUDC	ES Form 2.10	\$ 67,432,275
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	-
3	Subtotal		\$ 67,432,275
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 18,412
6	Subtotal		\$ 18,412
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 6,284,883
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	5,032,647
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 11,317,530
12	Environmental Compliance Rate Base		\$ 56,133,157
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 138,798
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 65,393
16	Monthly Amortization Expense	ES Form 2.20	\$ 1,379,067
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 28
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 680,774
19	Total Environmental Compliance Operating Expense		\$ 2,264,060
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x 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		\$ 3,900,366
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		2,343,038
27	(Over) / Under Recovery		\$ 1,557,328

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 April 2023

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
Project No.	Description	Gross Plant in-Service Excl. AFUDC as of April-23	Accumulated Depreciation as of April-23	Net Plant in-Service as of April-23	CWIP Excluding AFUDC as of April-23	Accumulated Deferred ITC as of April-23	Accumulated Deferred Tax Balance as of April-23	Monthly Depreciation Expense	Monthly Property Tax Expense
				(2)-(3)					
1	EB020290 Lined Retention Basin West	\$ 10,324,588	\$ 1,121,861	\$ 9,202,727	\$ -	\$ -	\$ 1,246,295	\$ 21,251	\$ 9,842
2	EB020745 Lined Retention Basin East	\$ 10,280,726	\$ 842,884	\$ 9,437,842	\$ -	\$ -	\$ 427,054	\$ 21,161	\$ 10,093
3	EB020298 East Bend SW/PW Reroute	\$ 29,882,379	\$ 2,996,309	\$ 26,886,070	\$ -	\$ -	\$ 2,892,036	\$ 61,508	\$ 28,753
4	EB021281 East Bend Landfill Cell 2	\$ 16,944,582	\$ 1,323,829	\$ 15,620,753	\$ -	\$ -	\$ 467,262	\$ 34,878	\$ 16,705
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 67,432,275	\$ 6,284,883	\$ 61,147,392	\$ -	\$ -	\$ 5,032,647	\$ 138,798	\$ 65,393

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Amortization of Coal Ash ARO and Landfill Closure

For the Expense Month of April 2023

Line No.	Period (1)	Coal Ash ARO				Coal Ash ARO and Landfill Closure		Landfill Closure		Total Recovery (11)=(5)+(8)+(10)
		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)	Cash Spend (9)	
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	-	-	291,152	-
3	Jan-17	Actual 358,148	-	43,243	-	8,182,238	-	-	13,108	-
4	Feb-17	Actual 424,021	-	40,351	-	8,646,610	-	-	14,281	-
5	Mar-17	Actual 692,184	(26,763)	44,724	-	9,356,755	-	-	20,225	-
6	Apr-17	Actual 254,067	-	50,949	-	9,661,771	-	-	30,324	-
7	May-17	Actual 608,377	-	56,141	-	10,326,289	-	-	34,997	-
8	Jun-17	Actual 265,619	(26,763)	53,472	-	10,618,617	-	-	45,594	-
9	Jul-17	Actual 220,636	-	51,558	-	10,890,811	-	-	30,629	-
10	Aug-17	Actual 272,053	-	47,731	-	11,210,595	-	-	17,432	-
11	Sep-17	Actual 233,743	(26,763)	44,389	-	11,461,964	-	-	23,200	-
12	Oct-17	Actual 444,793	-	60,670	-	11,967,427	-	-	47,545	-
13	Nov-17	Actual 525,770	-	68,573	-	12,561,770	-	-	33,047	-
14	Dec-17	Actual 2,482,493	(26,763)	82,850	-	15,100,350	-	-	18,362	-
15	Jan-18	Actual 510,525	-	91,185	-	15,702,060	-	-	18,843	-
16	Feb-18	Actual 89,648	-	91,534	-	15,883,242	-	-	-	-
17	Mar-18	Actual 396,977	(26,763)	93,696	-	16,347,152	-	-	14,037	-
18	Apr-18	Actual 132,294	-	111,722	-	16,591,168	173,000	-	36,260	-
19	May-18	Actual -	-	112,480	-	16,703,648	-	-	88,888	-
20	Jun-18	Actual -	-	111,870	(202,486)	16,613,032	150,901	(173,000)	128,843	(375,486)
21	Jul-18	Actual -	-	111,255	(202,486)	16,521,801	196,585	(100,234)	16	(302,720)
22	Aug-18	Actual -	-	110,637	(202,486)	16,429,952	321,815	(150,901)	29,844	(353,387)
23	Sep-18	Actual -	-	110,014	(202,486)	16,337,480	275,135	(196,585)	-	(399,071)
24	Oct-18	Actual -	-	109,387	(202,486)	16,244,381	69,886	(321,815)	-	(524,301)
25	Nov-18	Actual -	-	108,756	(202,486)	16,150,651	238,428	(275,135)	(2,498)	(477,621)
26	Dec-18	Actual -	-	108,121	(202,486)	16,056,286	263,037	(69,886)	-	(272,372)
27	Jan-19	Actual -	-	107,481	(202,486)	15,961,281	177,996	(238,428)	-	(440,914)
28	Feb-19	Actual -	-	106,837	(202,486)	15,865,632	150,851	(263,037)	-	(465,523)
29	Mar-19	Actual -	-	106,188	(202,486)	15,769,334	408,609	(177,996)	-	(380,482)
30	Apr-19	Actual -	-	105,535	(202,486)	15,672,383	1,588,547	(150,851)	-	(353,337)
31	May-19	Actual -	-	104,878	(202,486)	15,574,775	1,641,055	(408,609)	-	(611,095)
32	Jun-19	Actual -	-	104,216	(202,486)	15,476,505	1,423,233	(1,588,547)	-	(1,791,033)
33	Jul-19	Actual -	-	103,550	(202,486)	15,377,569	1,368,585	(1,641,055)	-	(1,843,541)
34	Aug-19	Actual -	-	102,880	(202,486)	15,277,963	487,759	(1,423,233)	-	(1,625,719)
35	Sep-19	Actual -	-	102,204	(202,486)	15,177,681	47,477	(1,368,585)	-	(1,571,071)
36	Oct-19	Actual -	-	101,524	(202,486)	15,076,719	(18,595)	(487,759)	-	(690,245)
37	Nov-19	Actual -	-	100,840	(202,486)	14,975,073	330,375	(47,477)	-	(249,963)
38	Dec-19	Actual -	-	100,151	(202,486)	14,872,738	121,640	18,595	-	(183,891)
39	Jan-20	Actual -	-	99,457	(202,486)	14,769,709	77,416	(330,375)	-	(532,861)
40	Feb-20	Actual -	-	98,759	(202,486)	14,665,982	25,184	(121,640)	-	(324,126)
41	Mar-20	Actual -	-	98,055	(202,486)	14,561,551	27,631	(77,416)	-	(279,902)
42	Apr-20	Actual -	-	97,347	(202,486)	14,456,412	50,807	(25,184)	-	(227,670)
43	May-20	Actual -	-	96,635	(202,486)	14,350,561	82,538	(27,631)	-	(230,117)
44	Jun-20	Actual -	-	95,917	(202,486)	14,243,992	133,817	(50,807)	-	(253,293)
45	Jul-20	Actual -	-	95,194	(202,486)	14,136,700	127,493	(82,538)	-	(285,024)
46	Aug-20	Actual -	-	94,467	(202,486)	14,028,681	64,152	(133,817)	-	(336,303)
47	Sep-20	Actual -	-	93,735	(202,486)	13,919,930	127,860	(127,493)	-	(329,979)
48	Oct-20	Actual -	-	92,997	(202,486)	13,810,441	226,553	(64,152)	-	(266,638)
49	Nov-20	Actual -	-	92,255	(202,486)	13,700,210	423,320	(127,860)	5,465	(330,346)
50	Dec-20	Actual -	\$ -	\$ 91,508	\$ (202,486)	\$ 13,589,232	\$ 295,353	\$ (226,553)	\$ 17,705	\$ (429,039)

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization of Coal Ash ARO and Landfill Closure

For the Expense Month of April 2023

Line No.	Period (1)	Coal Ash ARO				Coal Ash ARO and Landfill Closure		Landfill Closure (a)		Total Recovery (11)=(5)+(8)+(10)	
		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)	Cash Spend (9)		Recovery: 1-Yr Amort. (10)
51	Jan-21	Actual	\$ -	\$ 90,756	\$ (202,486)	\$ 13,477,502	\$ 80,328	\$ (423,320)	\$ 19,334	\$ -	\$ (625,806)
52	Feb-21	Actual	-	89,998	(202,486)	13,365,014	86,810	(295,353)	4,714	-	(497,839)
53	Mar-21	Actual	-	89,235	(202,486)	13,251,763	71,335	(80,328)	20,845	-	(282,814)
54	Apr-21	Actual	-	88,468	(202,486)	13,137,745	90,503	(86,810)	23,069	-	(289,296)
55	May-21	Actual	-	87,695	(202,486)	13,022,954	208,821	(71,335)	11,618	-	(273,821)
56	Jun-21	Actual	-	86,916	(202,486)	12,907,384	245,017	(90,503)	10,988	-	(292,989)
57	Jul-21	Actual	-	86,133	(202,486)	12,791,031	102,270	(208,821)	-	-	(411,307)
58	Aug-21	Actual	-	85,344	(202,486)	12,673,889	-	(245,017)	144,042	-	(447,503)
59	Sep-21	Actual	-	84,550	(202,486)	12,555,953	-	(102,270)	309,800	-	(304,756)
60	Oct-21	Actual	-	83,750	(202,486)	12,437,217	-	-	411,865	-	(202,486)
61	Nov-21	Actual	-	82,945	(202,486)	12,317,676	-	-	388,963	-	(202,486)
62	Dec-21	Actual	-	82,135	(202,486)	12,197,325	-	-	194,124	-	(202,486)
63	Jan-22	Actual	-	81,319	(202,486)	12,076,158	-	-	105,294	-	(202,486)
64	Feb-22	Actual	-	80,498	(202,486)	11,954,170	103,920	-	27,183	-	(202,486)
65	Mar-22	Actual	-	79,671	(202,486)	11,831,355	131,221	-	-	-	(202,486)
66	Apr-22	Actual	-	78,838	(202,486)	11,707,707	137,219	(103,920)	-	(219,095)	(525,501)
67	May-22	Actual	-	78,000	(202,486)	11,583,221	354,133	(131,221)	-	(219,095)	(552,802)
68	Jun-22	Actual	-	77,156	(202,486)	11,457,891	173,833	(137,219)	-	(219,095)	(558,800)
69	Jul-22	Actual	-	76,306	(202,486)	11,331,711	163,275	(354,133)	-	(219,095)	(775,714)
70	Aug-22	Actual	-	75,451	(202,486)	11,204,676	504,873	(173,833)	-	(219,095)	(595,414)
71	Sep-22	Actual	-	74,589	(202,486)	11,076,779	5,755,078	(163,275)	-	(219,095)	(584,856)
72	Oct-22	Actual	-	73,722	(202,486)	10,948,015	1,659,808	(504,873)	-	(219,095)	(926,454)
73	Nov-22	Actual	-	72,849	(202,486)	10,818,378	1,120,718	(959,180)	-	(219,095)	(1,380,761)
74	Dec-22	Actual	-	71,971	(202,486)	10,687,863	1,312,007	(1,291,141)	-	(219,095)	(1,712,722)
75	Jan-23	Actual	-	71,086	(202,486)	10,556,463	316,932	(1,571,321)	-	(219,095)	(1,992,902)
76	Feb-23	Actual	-	70,195	(202,486)	10,424,172	359,829	(2,008,656)	-	(219,095)	(2,430,237)
77	Mar-23	Actual	-	69,298	(202,486)	10,290,984	361,703	(2,325,588)	-	(219,095)	(2,747,169)
78	Apr-23	Actual	-	68,395	(202,486)	10,156,893	1,176,581	(2,368,485)	-	-	(2,570,971)
79	May-23	Actual	-	67,486	(202,486)	10,021,893	-	(361,703)	-	-	(564,189)
80	Jun-23	Actual	-	66,571	(202,486)	9,885,978	-	(1,176,581)	-	-	(1,379,067)
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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization of Coal Ash ARO and Landfill Closure

For the Expense Month of April 2023

Line No.	Period (1)	Coal Ash ARO				Coal Ash ARO and Landfill Closure		Landfill Closure		Total Recovery (11)=(5)+(8)+(10)	
		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)	Cash Spend (9)		Recovery: 1-Yr Amort. (10)
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)
			\$ 16,256,244	\$ (1,097,279)	\$ 9,139,355	\$ (24,298,320)	\$ 25,694,892	\$ (25,694,892)	\$ 2,629,139	\$ (2,629,140)	\$ (52,622,352)

Monthly Amortization Amount

\$ (1,379,067)

(a) In Case No. 2021-00290, the Commission granted Duke Energy Kentucky's request to recover unrecovered construction, maintenance, closure, and post-closure maintenance costs of the East Landfill and unrecovered maintenance costs of the West Landfill at the East Bend Station through its Environmental Surcharge Mechanism. Beginning with the expense month of February 2022, ES FORM 2.20, will be revised to show the costs associated with the closure of the East Landfill. The amount shown as "Landfill Closure" cash spend in columns (9) and (10) of ES FORM 2.20, which is being amortized for recovery over a period of twelve months, includes \$1,110,406 of costs related to the closure of the East Landfill and \$1,518,734 of unrecovered maintenance costs related to the West Landfill.

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending April 2023

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	228,058	-	139	-	227,919
Dollars	\$ 16,250.67	\$ -	\$ 9.73	\$ -	\$ 16,240.94
\$/Allowance	\$ 0.071257	\$ -	\$ 0.070000	\$ -	\$ 0.071258
NO_x Allowances - Annual					
Quantity	14,866	-	127	-	14,739
Dollars	\$ 2,027.23	\$ -	\$ 17.78	\$ -	\$ 2,009.45
\$/Allowance	\$ 0.136367	\$ -	\$ 0.140000	\$ -	\$ 0.136336
NO_x Allowances - Seasonal					
Quantity	1,860	-	-	-	1,860
Dollars	\$ 162.09	\$ -	\$ -	\$ -	\$ 162.09
\$/Allowance	\$ 0.087145	\$ -	\$ -	\$ -	\$ 0.087145
Total Emission Allowances					
Quantity	244,784	-	266	-	244,518
Dollars	\$ 18,439.99	\$ -	\$ 27.51	\$ -	\$ 18,412.48

(a) Note: The SO₂ 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 April 2023

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
1	Ammonia	502020	\$ 30,337	\$ 30,337
2	Lime	502040	612,424	612,424
3	Hydrated Lime	502040	38,013	38,013
4	Magnesium Hydroxide	502100	-	-
5	Total		\$ 680,774	\$ 680,774

ES FORM 3.00

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

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

For the Expense Month of April 2023

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge
					(2) - (5)
May-22	\$ 11,615,289			\$ 956,257	\$ 10,659,032
Jun-22	17,910,941			1,614,789	16,296,152
Jul-22	18,563,570			1,659,116	16,904,454
Aug-22	18,473,401			640,890	17,832,511
Sep-22	15,720,676			473,849	15,246,827
Oct-22	14,512,662			548,048	13,964,614
Nov-22	11,938,112			52,623	11,885,489
Dec-22	22,578,516			1,519,344	21,059,172
Jan-23	20,997,982			1,966,732	19,031,250
Feb-23	14,334,759			1,468,748	12,866,011
Mar-23	11,491,838			1,230,864	10,260,974
Apr-23	\$ 10,311,974			\$ 1,048,407	\$ 9,263,567
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 14,605,838
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 34,128,665
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					42.80%

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)
May-22	\$ 17,061,583	\$ 6,907,083	\$ 1,042,516	\$ 1,480,087	\$ 15,581,496	\$ 7,631,897
Jun-22	9,290,552	1,390,573	2,437,838	808,874	8,481,678	4,653,267
Jul-22	37,009,503	10,084,818	5,088,354	2,992,108	34,017,395	18,844,223
Aug-22	25,443,793	6,923,013	3,607,722	1,214,128	24,229,665	13,698,930
Sep-22	24,299,737	6,716,720	4,193,497	799,356	23,500,381	12,590,164
Oct-22	24,400,829	4,890,802	9,320,939	652,974	23,747,855	9,536,114
Nov-22	19,208,261	4,288,703	6,368,820	153,115	19,055,146	8,397,623
Dec-22	26,588,963	5,032,858	10,815,378	1,106,356	25,482,607	9,634,371
Jan-23	26,252,084	5,391,975	8,645,106	1,953,026	24,299,058	10,261,977
Feb-23	18,180,393	4,767,499	2,306,582	1,989,889	16,190,504	9,116,423
Mar-23	16,106,361	5,220,034	(81,232)	2,091,587	14,014,774	8,875,972
Apr-23	\$ 6,967,991	\$ 2,756,800	\$ (1,133,984)	\$ 1,294,631	\$ 5,673,360	\$ 4,050,544
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 19,522,827	\$ 9,774,292
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 34,128,665	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					57.20%	

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 May 2023

Residential (Total Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,094,855
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	14,469,260
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		7.57%

Non-Residential (Net Revenue)

Jurisdictional E(m)	ES Form 1.10, Line 15	=	\$	1,524,415
Jurisdictional R(m)	ES Form 1.10, Line 16	=	\$	10,199,452
Environmental Surcharge Billing Factor	ES Form 1.10, Line 17	=		14.95%

Effective Date for Billing: July 1, 2023

Submitted by: /s/ Libbie S. Miller

Title: Rates & Regulatory Strategy Manager

Date Submitted: June 21, 2023

ES FORM 1.10

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

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of May 2023

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	\$ 55,963,471
2	RB ÷ 12 months	(1) ÷ 12	\$ 4,663,623
3	Pretax Rate of Return (ROR)	ES Form 1.20	7.905%
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$ 368,659
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$ 2,415,156
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$ -
7	Sub-Total E(m)	(4) + (5) - (6)	\$ 2,783,815
8	Jurisdictional Allocation Ratio for Expense Month	Line 18	95.16%
9	Jurisdictional E(m)	(7) x (8)	\$ 2,649,078
10	Prior Period Adjustment (if necessary)	(A)	+
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+ \$ (29,808)
12	Total Adjusted Jurisdictional E(m)	(9) + (10) + (11)	\$ 2,619,270
13	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$ 134,737

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	41.80%	58.20%
15	Adjusted Jurisdictional E(m) - Allocated	(12) x (14)	\$ 1,094,855	\$ 1,524,415
16	R(m) Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Revenue) Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	ES Form 3.00 ES Form 3.00	\$ 14,469,260	\$ 10,199,452
17	Jurisdictional E(m) / R(m)	(15) ÷ (16)	7.57%	14.95%

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

18	Retail Revenue	ES Form 3.00	\$ 34,617,085	95.16%
19	Sales for Resale	Company Records	\$ 1,760,634	4.84%
20	Total Revenue		\$ 36,377,719	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	5.835%	1.710%	0.100%		0.100%
2	Long-term Debt	45.931%	4.028%	1.850%		1.850%
3	Common Equity	48.234%	9.250%	4.462%	1.3346139	5.955%
4	Total	100.000%		6.412%		7.905%

Note: Capital structure, cost of debt and tax rate gross-up factor as approved in Case No. 2019-00271. 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 May 2023

Line No.	Determination of Environmental Compliance Rate Base (RB)	Source	Amount
1	Eligible Environmental Compliance Plant (Gross Plant) Excluding AFUDC	ES Form 2.10	\$ 67,432,275
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.10	-
3	Subtotal		\$ 67,432,275
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.30	\$ 18,372
6	Subtotal		\$ 18,372
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.10	\$ 6,423,681
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.10	5,063,495
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.10	-
11	Subtotal		\$ 11,487,176
12	Environmental Compliance Rate Base		\$ 55,963,471
13	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
14	Monthly Depreciation Expense	ES Form 2.10	\$ 138,798
15	Monthly Taxes Other Than Income Taxes	ES Form 2.10	\$ 65,245
16	Monthly Amortization Expense	ES Form 2.20	\$ 1,603,839
17	Monthly Emission Allowance Expense	ES Form 2.30	\$ 41
18	Monthly Environmental Reagent Expense	ES Form 2.50	\$ 607,233
19	Total Environmental Compliance Operating Expense		\$ 2,415,156
20	<u>Proceeds from Emission Allowance Sales (EAS)</u>		
21	SO ₂ Allowance Sales		\$ -
22	NO _x 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		\$ 2,451,319
26	Jurisdictional E(m) Revenue Recovered in Current Expense Month		2,481,127
27	(Over) / Under Recovery		\$ (29,808)

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 May 2023

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Project No.	Description	Gross Plant in-Service Excl. AFUDC as of May-23	Accumulated Depreciation as of May-23	Net Plant in-Service as of May-23	CWIP Excluding AFUDC as of May-23	Accumulated Deferred ITC as of May-23	Accumulated Deferred Tax Balance as of May-23	Monthly Depreciation Expense	Monthly Property Tax Expense
				(2)-(3)					
1	EB020290 Lined Retention Basin West	\$ 10,324,588	\$ 1,143,112	\$ 9,181,476	\$ -	\$ -	\$ 1,247,717	\$ 21,251	\$ 9,819
2	EB020745 Lined Retention Basin East	\$ 10,280,726	\$ 864,045	\$ 9,416,681	\$ -	\$ -	\$ 434,121	\$ 21,161	\$ 10,071
3	EB020298 East Bend SW/PW Reroute	\$ 29,882,379	\$ 3,057,817	\$ 26,824,562	\$ -	\$ -	\$ 2,901,123	\$ 61,508	\$ 28,687
4	EB021281 East Bend Landfill Cell 2	\$ 16,944,582	\$ 1,358,707	\$ 15,585,875	\$ -	\$ -	\$ 480,534	\$ 34,878	\$ 16,668
5				\$ -					
6				\$ -					
7				\$ -					
8				\$ -					
9				\$ -					
10				\$ -					
11				\$ -					
12				\$ -					
13				\$ -					
14				\$ -					
15				\$ -					
		\$ 67,432,275	\$ 6,423,681	\$ 61,008,594	\$ -	\$ -	\$ 5,063,495	\$ 138,798	\$ 65,245

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Amortization of Coal Ash ARO and Landfill Closure

For the Expense Month of May 2023

Line No.	Period (1)	Coal Ash ARO				Coal Ash ARO and Landfill Closure		Landfill Closure		Total Recovery (11)=(5)+(8)+(10)	
		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)	Cash Spend (9)		Recovery: 1-Yr Amort. (10)
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	-	-	291,152	-
3	Jan-17	Actual	358,148	-	43,243	-	8,182,238	-	-	13,108	-
4	Feb-17	Actual	424,021	-	40,351	-	8,646,610	-	-	14,281	-
5	Mar-17	Actual	692,184	(26,763)	44,724	-	9,356,755	-	-	20,225	-
6	Apr-17	Actual	254,067	-	50,949	-	9,661,771	-	-	30,324	-
7	May-17	Actual	608,377	-	56,141	-	10,326,289	-	-	34,997	-
8	Jun-17	Actual	265,619	(26,763)	53,472	-	10,618,617	-	-	45,594	-
9	Jul-17	Actual	220,636	-	51,558	-	10,890,811	-	-	30,629	-
10	Aug-17	Actual	272,053	-	47,731	-	11,210,595	-	-	17,432	-
11	Sep-17	Actual	233,743	(26,763)	44,389	-	11,461,964	-	-	23,200	-
12	Oct-17	Actual	444,793	-	60,670	-	11,967,427	-	-	47,545	-
13	Nov-17	Actual	525,770	-	68,573	-	12,561,770	-	-	33,047	-
14	Dec-17	Actual	2,482,493	(26,763)	82,850	-	15,100,350	-	-	18,362	-
15	Jan-18	Actual	510,525	-	91,185	-	15,702,060	-	-	18,843	-
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	-	36,260	-
19	May-18	Actual	-	-	112,480	-	16,703,648	100,234	-	88,888	-
20	Jun-18	Actual	-	-	111,870	(202,486)	16,613,032	150,901	(173,000)	128,843	(375,486)
21	Jul-18	Actual	-	-	111,255	(202,486)	16,521,801	196,585	(100,234)	16	(302,720)
22	Aug-18	Actual	-	-	110,637	(202,486)	16,429,952	321,815	(150,901)	29,844	(353,387)
23	Sep-18	Actual	-	-	110,014	(202,486)	16,337,480	275,135	(196,585)	-	(399,071)
24	Oct-18	Actual	-	-	109,387	(202,486)	16,244,381	69,886	(321,815)	-	(524,301)
25	Nov-18	Actual	-	-	108,756	(202,486)	16,150,651	238,428	(275,135)	(2,498)	(477,621)
26	Dec-18	Actual	-	-	108,121	(202,486)	16,056,286	263,037	(69,886)	-	(272,372)
27	Jan-19	Actual	-	-	107,481	(202,486)	15,961,281	177,996	(238,428)	-	(440,914)
28	Feb-19	Actual	-	-	106,837	(202,486)	15,865,632	150,851	(263,037)	-	(465,523)
29	Mar-19	Actual	-	-	106,188	(202,486)	15,769,334	408,609	(177,996)	-	(380,482)
30	Apr-19	Actual	-	-	105,535	(202,486)	15,672,383	1,588,547	(150,851)	-	(353,337)
31	May-19	Actual	-	-	104,878	(202,486)	15,574,775	1,641,055	(408,609)	-	(611,095)
32	Jun-19	Actual	-	-	104,216	(202,486)	15,476,505	1,423,233	(1,588,547)	-	(1,791,033)
33	Jul-19	Actual	-	-	103,550	(202,486)	15,377,569	1,368,585	(1,641,055)	-	(1,843,541)
34	Aug-19	Actual	-	-	102,880	(202,486)	15,277,963	487,759	(1,423,233)	-	(1,625,719)
35	Sep-19	Actual	-	-	102,204	(202,486)	15,177,681	47,477	(1,368,585)	-	(1,571,071)
36	Oct-19	Actual	-	-	101,524	(202,486)	15,076,719	(18,595)	(487,759)	-	(690,245)
37	Nov-19	Actual	-	-	100,840	(202,486)	14,975,073	330,375	(47,477)	-	(249,963)
38	Dec-19	Actual	-	-	100,151	(202,486)	14,872,738	121,640	18,595	-	(183,891)
39	Jan-20	Actual	-	-	99,457	(202,486)	14,769,709	77,416	(330,375)	-	(532,861)
40	Feb-20	Actual	-	-	98,759	(202,486)	14,665,982	25,184	(121,640)	-	(324,126)
41	Mar-20	Actual	-	-	98,055	(202,486)	14,561,551	27,631	(77,416)	-	(279,902)
42	Apr-20	Actual	-	-	97,347	(202,486)	14,456,412	50,807	(25,184)	-	(227,670)
43	May-20	Actual	-	-	96,635	(202,486)	14,350,561	82,538	(27,631)	-	(230,117)
44	Jun-20	Actual	-	-	95,917	(202,486)	14,243,992	133,817	(50,807)	-	(253,293)
45	Jul-20	Actual	-	-	95,194	(202,486)	14,136,700	127,493	(82,538)	-	(285,024)
46	Aug-20	Actual	-	-	94,467	(202,486)	14,028,681	64,152	(133,817)	-	(336,303)
47	Sep-20	Actual	-	-	93,735	(202,486)	13,919,930	127,860	(127,493)	-	(329,979)
48	Oct-20	Actual	-	-	92,997	(202,486)	13,810,441	226,553	(64,152)	-	(266,638)
49	Nov-20	Actual	-	-	92,255	(202,486)	13,700,210	423,320	(127,860)	5,465	(330,346)
50	Dec-20	Actual	\$ -	\$ -	\$ 91,508	\$ (202,486)	\$ 13,589,232	\$ 295,353	\$ (226,553)	\$ 17,705	\$ (429,039)

ES FORM 2.20

DUKE ENERGY KENTUCKY, INC.
 ENVIRONMENTAL SURCHARGE REPORT

Amortization of Coal Ash ARO and Landfill Closure

For the Expense Month of May 2023

Line No.	Period (1)	Coal Ash ARO					Coal Ash ARO and Landfill Closure		Landfill Closure (a)		Total Recovery (11)=(5)+(8)+(10)
		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)	Cash Spend (9)	Recovery: 1-Yr Amort. (10)	
51	Jan-21 Actual		\$ -	\$ 90,756	\$ (202,486)	\$ 13,477,502	\$ 80,328	\$ (423,320)	\$ 19,334	\$ -	\$ (625,806)
52	Feb-21 Actual		-	89,998	(202,486)	13,365,014	86,810	(295,353)	4,714	-	(497,839)
53	Mar-21 Actual		-	89,235	(202,486)	13,251,763	71,335	(80,328)	20,845	-	(282,814)
54	Apr-21 Actual		-	88,468	(202,486)	13,137,745	90,503	(86,810)	23,069	-	(289,296)
55	May-21 Actual		-	87,695	(202,486)	13,022,954	208,821	(71,335)	11,618	-	(273,821)
56	Jun-21 Actual		-	86,916	(202,486)	12,907,384	245,017	(90,503)	10,988	-	(292,989)
57	Jul-21 Actual		-	86,133	(202,486)	12,791,031	102,270	(208,821)	-	-	(411,307)
58	Aug-21 Actual		-	85,344	(202,486)	12,673,889	-	(245,017)	144,042	-	(447,503)
59	Sep-21 Actual		-	84,550	(202,486)	12,555,953	-	(102,270)	309,800	-	(304,756)
60	Oct-21 Actual		-	83,750	(202,486)	12,437,217	-	-	411,865	-	(202,486)
61	Nov-21 Actual		-	82,945	(202,486)	12,317,676	-	-	388,963	-	(202,486)
62	Dec-21 Actual		-	82,135	(202,486)	12,197,325	-	-	194,124	-	(202,486)
63	Jan-22 Actual		-	81,319	(202,486)	12,076,158	-	-	105,294	-	(202,486)
64	Feb-22 Actual		-	80,498	(202,486)	11,954,170	103,920	-	27,183	-	(202,486)
65	Mar-22 Actual		-	79,671	(202,486)	11,831,355	131,221	-	-	-	(202,486)
66	Apr-22 Actual		-	78,838	(202,486)	11,707,707	137,219	(103,920)	-	(219,095)	(525,501)
67	May-22 Actual		-	78,000	(202,486)	11,583,221	354,133	(131,221)	-	(219,095)	(552,802)
68	Jun-22 Actual		-	77,156	(202,486)	11,457,891	173,833	(137,219)	-	(219,095)	(558,800)
69	Jul-22 Actual		-	76,306	(202,486)	11,331,711	163,275	(354,133)	-	(219,095)	(775,714)
70	Aug-22 Actual		-	75,451	(202,486)	11,204,676	504,873	(173,833)	-	(219,095)	(595,414)
71	Sep-22 Actual		-	74,589	(202,486)	11,076,779	5,755,078	(163,275)	-	(219,095)	(584,856)
72	Oct-22 Actual		-	73,722	(202,486)	10,948,015	1,659,808	(504,873)	-	(219,095)	(926,454)
73	Nov-22 Actual		-	72,849	(202,486)	10,818,378	1,120,718	(959,180)	-	(219,095)	(1,380,761)
74	Dec-22 Actual		-	71,971	(202,486)	10,687,863	1,312,007	(1,291,141)	-	(219,095)	(1,712,722)
75	Jan-23 Actual		-	71,086	(202,486)	10,556,463	316,932	(1,571,321)	-	(219,095)	(1,992,902)
76	Feb-23 Actual		-	70,195	(202,486)	10,424,172	359,829	(2,008,656)	-	(219,095)	(2,430,237)
77	Mar-23 Actual		-	69,298	(202,486)	10,290,984	361,703	(2,325,588)	-	(219,095)	(2,747,169)
78	Apr-23 Actual		-	68,395	(202,486)	10,156,893	1,176,581	(2,368,485)	-	-	(2,570,971)
79	May-23 Actual		-	67,486	(202,486)	10,021,893	1,401,353	(361,703)	-	-	(564,189)
80	Jun-23 Actual		-	66,571	(202,486)	9,885,978	-	(1,176,581)	-	-	(1,379,067)
81	Jul-23 Actual		-	65,649	(202,486)	9,749,141	-	(1,401,353)	-	-	(1,603,839)
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

DUKE ENERGY KENTUCKY, INC.
ENVIRONMENTAL SURCHARGE REPORT

Amortization of Coal Ash ARO and Landfill Closure

For the Expense Month of May 2023

Line No.	Period (1)	Coal Ash ARO				Coal Ash ARO and Landfill Closure		Landfill Closure		Total Recovery (11)=(5)+(8)+(10)	
		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)	Cash Spend (9)		Recovery: 1-Yr Amort. (10)
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)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ (54,023,705)

Monthly Amortization Amount

\$ (1,603,839)

(a) In Case No. 2021-00290, the Commission granted Duke Energy Kentucky's request to recover unrecovered construction, maintenance, closure, and post-closure maintenance costs of the East Landfill and unrecovered maintenance costs of the West Landfill at the East Bend Station through its Environmental Surcharge Mechanism. Beginning with the expense month of February 2022, ES FORM 2.20, will be revised to show the costs associated with the closure of the East Landfill. The amount shown as "Landfill Closure" cash spend in columns (9) and (10) of ES FORM 2.20, which is being amortized for recovery over a period of twelve months, includes \$1,110,406 of costs related to the closure of the East Landfill and \$1,518,734 of unrecovered maintenance costs related to the West Landfill.

ES FORM 2.30

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

Inventory and Expense of Emission Allowances

For the Expense Month Ending May 2023

Total SO₂ and NO_x Emission Allowances					
	Beginning Inventory	Allocations / Purchases	Utilized	Sold	Ending Inventory
SO₂ Allowances - Acid Rain Program (a)					
Quantity	227,919	-	119	-	227,800
Dollars	\$ 16,240.94	\$ -	\$ 8.33	\$ -	\$ 16,232.61
\$/Allowance	\$ 0.071258	\$ -	\$ 0.070000	\$ -	\$ 0.071258
NO_x Allowances - Annual					
Quantity	14,739	-	130	-	14,609
Dollars	\$ 2,009.45	\$ -	\$ 18.20	\$ -	\$ 1,991.25
\$/Allowance	\$ 0.136336	\$ -	\$ 0.140000	\$ -	\$ 0.136303
NO_x Allowances - Seasonal					
Quantity	1,860	-	130	-	1,730
Dollars	\$ 162.09	\$ -	\$ 13.98	\$ -	\$ 148.11
\$/Allowance	\$ 0.087145	\$ -	\$ 0.107538	\$ -	\$ 0.085613
Total Emission Allowances					
Quantity	244,518	-	379	-	244,139
Dollars	\$ 18,412.48	\$ -	\$ 40.51	\$ -	\$ 18,371.97

(a) Note: The SO₂ 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 May 2023

Line No.	Expense Type	Account Number	East Bend Unit 2	Total
1	Ammonia	502020	\$ 24,846	\$ 24,846
2	Lime	502040	549,295	549,295
3	Hydrated Lime	502040	33,092	33,092
4	Magnesium Hydroxide	502100	-	-
5	Total		\$ 607,233	\$ 607,233

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 May 2023

Residential - Kentucky Jurisdictional Revenues					
(1)	(2)	(3)	(4)	(5)	(6)
Month	Total Revenues			Environmental Surcharge Revenues	Total Excluding Environmental Surcharge
					(2) - (5)
Jun-22	\$ 17,910,941			\$ 1,614,789	\$ 16,296,152
Jul-22	18,563,570			1,659,116	16,904,454
Aug-22	18,473,401			640,890	17,832,511
Sep-22	15,720,676			473,849	15,246,827
Oct-22	14,512,662			548,048	13,964,614
Nov-22	11,938,112			52,623	11,885,489
Dec-22	22,578,516			1,519,344	21,059,172
Jan-23	20,997,982			1,966,732	19,031,250
Feb-23	14,334,759			1,468,748	12,866,011
Mar-23	11,491,838			1,230,864	10,260,974
Apr-23	10,311,974			1,048,407	9,263,567
May-23	\$ 9,665,165			\$ 645,062	\$ 9,020,103
Average Monthly Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 14,469,260
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 34,617,085
Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					41.80%

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)
Jun-22	\$ 9,290,552	\$ 1,390,573	\$ 2,437,838	\$ 808,874	\$ 8,481,678	\$ 4,653,267
Jul-22	37,009,503	10,084,818	5,088,354	2,992,108	34,017,395	18,844,223
Aug-22	25,443,793	6,923,013	3,607,722	1,214,128	24,229,665	13,698,930
Sep-22	24,299,737	6,716,720	4,193,497	799,356	23,500,381	12,590,164
Oct-22	24,400,829	4,890,802	9,320,939	652,974	23,747,855	9,536,114
Nov-22	19,208,261	4,288,703	6,368,820	153,115	19,055,146	8,397,623
Dec-22	26,588,963	5,032,858	10,815,378	1,106,356	25,482,607	9,634,371
Jan-23	26,252,084	5,391,975	8,645,106	1,953,026	24,299,058	10,261,977
Feb-23	18,180,393	4,767,499	2,306,582	1,989,889	16,190,504	9,116,423
Mar-23	16,106,361	5,220,034	(81,232)	2,091,587	14,014,774	8,875,972
Apr-23	6,967,991	2,756,800	(1,133,984)	1,294,631	5,673,360	4,050,544
May-23	\$ 24,917,540	\$ 6,720,466	\$ 3,627,194	\$ 1,836,065	\$ 23,081,475	\$ 12,733,815
Average Monthly Non-Residential Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 20,147,825	\$ 10,199,452
Average Total Kentucky Revenues, Excluding Environmental Surcharge, for 12 Months Ending Current Expense Month					\$ 34,617,085	
Non-Residential Revenues as a Percentage of Total Revenues for 12 Months Ending with the Current Expense Month					58.20%	

**Duke Energy Kentucky
Case No. 2023-00374
STAFF First Set of Data Requests
Date Received: December 8, 2023**

STAFF-DR-01-002

REQUEST:

For the periods under review, provide a calculation of any additional over or under-recovery amount Duke Kentucky believes needs to be recognized, and, if any, propose an amortization period. Provide the schedule and all supporting calculations and documentation in Excel spreadsheet format with all formulas, columns, and rows unprotected and fully accessible.

RESPONSE:

Duke Energy Kentucky does not have any additional over- or under-recovery amounts 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: Libbie S. Miller

**Duke Energy Kentucky
Case No. 2023-00374
STAFF First Set of Data Requests
Date Received: December 8, 2023**

STAFF-DR-01-003

REQUEST:

Provide the actual average residential customer's monthly usage as of May 31, 2023. Based on this usage amount, provide the dollar impact any additional over- or under-recovery will have on the average residential customer's monthly bill for the requested amortization period.

RESPONSE:

The average residential customer usage was 897 kWh per month for the 12 months ending May 31, 2023.

As indicated in the response to STAFF-DR-01-002, Duke Energy Kentucky is not proposing any additional over- or under-recovery for the periods under review.

PERSON RESPONSIBLE: Libbie S. Miller

Duke Energy Kentucky
Case No. 2023-00374
STAFF First Set of Data Requests
Date Received: December 8, 2023

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 periods.

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 periods and the last six-month period of the two-year review periods, explain how any purchases of allowances comply with Duke Kentucky's emissions allowance strategy plan.

d. For each month in the six-month review periods and the last six-month period of the two-year review periods, provide the calculation that supports the total cost of allowances utilized that is then carried to ES Form 2.00. Provide the schedule and all supporting calculations and documentation in Excel spreadsheet format with all formulas, columns, and rows unprotected and fully accessible.

e. Provide an explanation for any fluctuations in the monthly average cost of allowances determined in 4.d.

RESPONSE:

a. Duke Energy Kentucky did not purchase any sulfur dioxide emission allowances during the expense months of the review period. The zero-cost emission

allowances allocated from the EPA are recorded in the “Allocations / Purchases” column of STAFF-DR-01-004 Attachment. In May 2019, there was a private transfer of allowances from Miami Fort 6.

b. Duke Energy Kentucky did not purchase any nitrogen oxide emission allowances during the expense months of the review period. The zero-cost emission allowances allocated from the EPA are recorded in the “Allocations / Purchases” column of STAFF-DR-01-004 Attachment. In May 2019, there was a private transfer of allowances from Miami Fort 6.

c. Duke Energy Kentucky did not purchase any allowances during the expense months of the review period.

d. Please see STAFF-DR-01-004 Attachment.

e. No major fluctuations in the monthly average cost of allowances determined in 4.d.

PERSON RESPONSIBLE: Krista Markel

2023

SO2 Allowances - Acid Rain Program (a)

	Quantities Begin Bal	QuantitiesA locations	Quantities Utilized	Quantities Sold	Quantities End Bal	Dollars Begin Bal	Dollars Allocations	Dollars Utilized	Dollars Sold	Dollars End Bal	WACI
Jan	203,239	25,041	(120)	0	228,160	\$16,266.21	\$ -	\$ (8.40)		\$16,257.81	\$ 0.07
Feb	228,160	0	(27)	0	228,133	\$16,257.81	\$ -	\$ (1.89)		\$16,255.92	\$ 0.07
Mar	228,133	0	(75)	0	228,058	\$16,255.92	\$ -	\$ (5.25)		\$16,250.67	\$ 0.07
Apr	228,058	0	(139)	0	227,919	\$16,250.67	\$ -	\$ (9.73)		\$16,240.94	\$ 0.07
May	227,919	0	(119)	0	227,800	\$16,240.94	\$ -	\$ (8.33)		\$16,232.61	\$ 0.07
Jun	227,800	0	0	0	227,800	\$16,232.61	\$ -	\$ -		\$16,232.61	\$ 0.07
Jul	227,800	0	0	0	227,800	\$16,232.61	\$ -	\$ -		\$16,232.61	\$ 0.07
Aug	227,800	0	0	0	227,800	\$16,232.61	\$ -	\$ -		\$16,232.61	\$ 0.07
Sep	227,800	0	0	0	227,800	\$16,232.61	\$ -	\$ -		\$16,232.61	\$ 0.07
Oct	227,800	0	0	0	227,800	\$16,232.61	\$ -	\$ -		\$16,232.61	\$ 0.07
Nov	227,800	0	0	0	227,800	\$16,232.61	\$ -	\$ -		\$16,232.61	\$ 0.07
Dec	227,800	0	0	0	227,800	\$16,232.61	\$ -	\$ -		\$16,232.61	\$ 0.07

Tons	\$
Utilized	Utilized
120	\$ 8.40
27	\$ 1.89
75	\$ 5.25
139	\$ 9.73
119	\$ 8.33
-	\$ -
-	\$ -
-	\$ -
-	\$ -
-	\$ -
-	\$ -
-	\$ -
-	\$ -
-	\$ -
480	\$ 33.60

NOx Allowances - Annual

	Quantities Begin Bal	QuantitiesA locations	Quantities Utilized	Quantities Sold	Quantities End Bal	Dollars Begin Bal	Dollars Allocations	Dollars Utilized	Dollars Sold	Dollars End Bal	WACI
Jan	12,017	3,292	(291)	0	15,018	\$ 2,089.25	\$ -	\$ (40.74)		\$ 2,048.51	\$ 0.14
Feb	15,018	0	(71)	0	14,947	\$ 2,048.51	\$ -	\$ (9.94)		\$ 2,038.57	\$ 0.14
Mar	14,947	0	(81)	0	14,866	\$ 2,038.57	\$ -	\$ (11.34)		\$ 2,027.23	\$ 0.14
Apr	14,866	0	(127)	0	14,739	\$ 2,027.23	\$ -	\$ (17.78)		\$ 2,009.45	\$ 0.14
May	14,739	0	(130)	0	14,609	\$ 2,009.45	\$ -	\$ (18.20)		\$ 1,991.25	\$ 0.14
Jun	14,609	0	0	0	14,609	\$ 1,991.25	\$ -	\$ -		\$ 1,991.25	\$ 0.14
Jul	14,609	0	0	0	14,609	\$ 1,991.25	\$ -	\$ -		\$ 1,991.25	\$ 0.14
Aug	14,609	0	0	0	14,609	\$ 1,991.25	\$ -	\$ -		\$ 1,991.25	\$ 0.14
Sep	14,609	0	0	0	14,609	\$ 1,991.25	\$ -	\$ -		\$ 1,991.25	\$ 0.14
Oct	14,609	0	0	0	14,609	\$ 1,991.25	\$ -	\$ -		\$ 1,991.25	\$ 0.14
Nov	14,609	0	0	0	14,609	\$ 1,991.25	\$ -	\$ -		\$ 1,991.25	\$ 0.14
Dec	14,609	0	0	0	14,609	\$ 1,991.25	\$ -	\$ -		\$ 1,991.25	\$ 0.14

Tons	\$
Utilized	Utilized
291	\$ 40.74
71	\$ 9.94
81	\$ 11.34
127	\$ 17.78
130	\$ 18.20
-	\$ -
-	\$ -
-	\$ -
-	\$ -
-	\$ -
-	\$ -
-	\$ -
-	\$ -
700	\$ 98.00

NOx Allowances - Seasonal

	Quantities Begin Bal	QuantitiesA locations	Quantities Utilized	Quantities Sold	Quantities End Bal	Dollars Begin Bal	Dollars Allocations	Dollars Utilized	Dollars Sold	Dollars End Bal	WACI
Jan	799	1,061	0	0	1,860	\$ 162.09	\$ -	\$ -		\$ 162.09	\$ 0.09
Feb	1,860	0	0	0	1,860	\$ 162.09	\$ -	\$ -		\$ 162.09	\$ 0.09
Mar	1,860	0	0	0	1,860	\$ 162.09	\$ -	\$ -		\$ 162.09	\$ 0.09
Apr	1,860	0	0	0	1,860	\$ 162.09	\$ -	\$ -		\$ 162.09	\$ 0.09
May	1,860	0	(130)	0	1,730	\$ 162.09	\$ -	\$ (13.98)		\$ 148.11	\$ 0.09
Jun	1,730	0	0	0	1,730	\$ 148.11	\$ -	\$ -		\$ 148.11	\$ 0.09
Jul	1,730	0	0	0	1,730	\$ 148.11	\$ -	\$ -		\$ 148.11	\$ 0.09
Aug	1,730	0	0	0	1,730	\$ 148.11	\$ -	\$ -		\$ 148.11	\$ 0.09
Sep	1,730	0	0	0	1,730	\$ 148.11	\$ -	\$ -		\$ 148.11	\$ 0.09
Oct	1,730	0	0	0	1,730	\$ 148.11	\$ -	\$ -		\$ 148.11	\$ 0.09
Nov	1,730	0	0	0	1,730	\$ 148.11	\$ -	\$ -		\$ 148.11	\$ 0.09
Dec	1,730	0	0	0	1,730	\$ 148.11	\$ -	\$ -		\$ 148.11	\$ 0.09

Tons	\$
Utilized	Utilized
-	\$ -
-	\$ -
-	\$ -
-	\$ -
130	\$ 13.98
-	\$ -
-	\$ -
-	\$ -
-	\$ -
-	\$ -
-	\$ -
-	\$ -
130	\$ 13.98

Total Emission Allowances

	Quantities Begin Bal	QuantitiesA locations	Quantities Utilized	Quantities Sold	Quantities End Bal	Dollars Begin Bal	Dollars Allocations	Dollars Utilized	Dollars Sold	Dollars End Bal
Jan	216,055	29,394	(411)	0	245,038	\$18,517.54	\$ -	\$ (49.14)	\$ -	\$18,468.40
Feb	245,038	0	(98)	0	244,940	\$18,468.40	\$ -	\$ (11.83)	\$ -	\$18,456.57
Mar	244,940	0	(156)	0	244,784	\$18,456.57	\$ -	\$ (16.59)	\$ -	\$18,439.98
Apr	244,784	0	(266)	0	244,518	\$18,439.98	\$ -	\$ (27.51)	\$ -	\$18,412.47
May	244,518	0	(379)	0	244,139	\$18,412.47	\$ -	\$ (40.51)	\$ -	\$18,371.96
Jun	244,139	0	0	0	244,139	\$18,371.96	\$ -	\$ -	\$ -	\$18,371.96
Jul	244,139	0	0	0	244,139	\$18,371.96	\$ -	\$ -	\$ -	\$18,371.96
Aug	244,139	0	0	0	244,139	\$18,371.96	\$ -	\$ -	\$ -	\$18,371.96
Sep	244,139	0	0	0	244,139	\$18,371.96	\$ -	\$ -	\$ -	\$18,371.96
Oct	244,139	0	0	0	244,139	\$18,371.96	\$ -	\$ -	\$ -	\$18,371.96
Nov	244,139	0	0	0	244,139	\$18,371.96	\$ -	\$ -	\$ -	\$18,371.96
Dec	244,139	0	0	0	244,139	\$18,371.96	\$ -	\$ -	\$ -	\$18,371.96

Tons	\$
Utilized	Utilized
411	\$ 49.14
98	\$ 11.83
156	\$ 16.59
266	\$ 27.51
379	\$ 40.51
-	\$ -
-	\$ -
-	\$ -
-	\$ -
-	\$ -
-	\$ -
-	\$ -
-	\$ -
1,310	\$ 145.58

2022

SO2 Allowances - Acid Rain Program (a)

	Quantities Begin Bal	QuantitiesA locations	Quantities Utilized	Quantities Sold	Quantities End Bal	Dollars Begin Bal	Dollars Allocations	Dollars Utilized	Dollars Sold	Dollars End Bal	WACI
Jan	180,020	0	0	0	180,020	\$16,411.97	\$ -	\$ -	\$ -	\$16,411.97	\$ 0.09
Feb	180,020	25,041	(402)	0	204,659	\$16,411.97	\$ -	\$ (32.16)	\$ -	\$16,379.81	\$ 0.08
Mar	204,659	0	(191)	0	204,468	\$16,379.81	\$ -	\$ (15.00)	\$ -	\$16,364.81	\$ 0.08
Apr	204,468	0	0	0	204,468	\$16,364.81	\$ (0.28)	\$ -	\$ -	\$16,364.53	\$ 0.08
May	204,468	0	(194)	0	204,274	\$16,364.53	\$ -	\$ (15.52)	\$ -	\$16,349.01	\$ 0.08
Jun	204,274	(134)	(222)	0	203,918	\$16,349.01	\$ (10.72)	\$ (17.76)	\$ -	\$16,320.53	\$ 0.08
Jul	203,918	0	(223)	0	203,695	\$16,320.53	\$ -	\$ (17.84)	\$ -	\$16,302.69	\$ 0.08
Aug	203,695	0	(90)	0	203,605	\$16,302.69	\$ -	\$ (7.20)	\$ -	\$16,295.49	\$ 0.08
Sep	203,605	0	(116)	0	203,489	\$16,295.49	\$ -	\$ (9.28)	\$ -	\$16,286.21	\$ 0.08
Oct	203,489	0	0	0	203,489	\$16,286.21	\$ -	\$ -	\$ -	\$16,286.21	\$ 0.08
Nov	203,489	0	(117)	0	203,372	\$16,286.21	\$ -	\$ (9.36)	\$ -	\$16,276.85	\$ 0.08
Dec	203,372	0	(133)	0	203,239	\$16,276.85	\$ -	\$ (10.64)	\$ -	\$16,266.21	\$ 0.08

Tons	\$
Utilized	Utilized
-	\$ -
402	\$ 32.16
191	\$ 15.00
-	\$ -
194	\$ 15.52
222	\$ 17.76
223	\$ 17.84
90	\$ 7.20
116	\$ 9.28
-	\$ -
117	\$ 9.36
133	\$ 10.64
1,688	\$ 134.76

NOx Allowances - Annual

	Quantities Begin Bal	QuantitiesA locations	Quantities Utilized	Quantities Sold	Quantities End Bal	Dollars Begin Bal	Dollars Allocations	Dollars Utilized	Dollars Sold	Dollars End Bal	WACI
Jan	11,025	0	0	0	11,025	\$ 2,480.25	\$ -	\$ -	\$ -	\$ 2,480.25	\$ 0.22
Feb	11,025	3,292	(487)	0	13,830	\$ 2,480.25	\$ -	\$ (82.79)	\$ -	\$ 2,397.46	\$ 0.17
Mar	13,830	0	(198)	0	13,632	\$ 2,397.46	\$ -	\$ (33.66)	\$ -	\$ 2,363.80	\$ 0.17
Apr	13,632	0	0	0	13,632	\$ 2,363.80	\$ -	\$ -	\$ -	\$ 2,363.80	\$ 0.17
May	13,632	0	(126)	0	13,506	\$ 2,363.80	\$ -	\$ (21.42)	\$ -	\$ 2,342.38	\$ 0.17
Jun	13,506	(137)	(165)	0	13,204	\$ 2,342.38	\$ (23.29)	\$ (28.05)	\$ -	\$ 2,291.04	\$ 0.18
Jul	13,204	0	(243)	0	12,961	\$ 2,291.04	\$ -	\$ (41.31)	\$ -	\$ 2,249.73	\$ 0.17
Aug	12,961	0	(109)	0	12,852	\$ 2,249.73	\$ -	\$ (18.53)	\$ -	\$ 2,231.20	\$ 0.17
Sep	12,852	0	(126)	0	12,726	\$ 2,231.20	\$ -	\$ (21.42)	\$ -	\$ 2,209.78	\$ 0.17
Oct	12,726	0	(10)	0	12,716	\$ 2,209.78	\$ -	\$ (1.70)	\$ -	\$ 2,208.08	\$ 0.17
Nov	12,716	0	(325)	0	12,391	\$ 2,208.08	\$ -	\$ (55.25)	\$ -	\$ 2,152.83	\$ 0.17
Dec	12,391	0	(374)	0	12,017	\$ 2,152.83	\$ -	\$ (63.58)	\$ -	\$ 2,089.25	\$ 0.17

Tons	\$
Utilized	Utilized
-	\$ -
487	\$ 82.79
198	\$ 33.66
-	\$ -
126	\$ 21.42
165	\$ 28.05
243	\$ 41.31
109	\$ 18.53
126	\$ 21.42
10	\$ 1.70
325	\$ 55.25
374	\$ 63.58
2,163	\$ 367.71

NOx Allowances - Seasonal

	Quantities Begin Bal	QuantitiesA locations	Quantities Utilized	Quantities Sold	Quantities End Bal	Dollars Begin Bal	Dollars Allocations	Dollars Utilized	Dollars Sold	Dollars End Bal	WACI
Jan	953	0	0	0	953	\$ 206.31	\$ -	\$ -	\$ -	\$ 206.31	\$ 0.22
Feb	953	0	0	0	953	\$ 206.31	\$ -	\$ -	\$ -	\$ 206.31	\$ 0.22
Mar	953	0	0	0	953	\$ 206.31	\$ -	\$ -	\$ -	\$ 206.31	\$ 0.22
Apr	953	0	0	0	953	\$ 206.31	\$ -	\$ -	\$ -	\$ 206.31	\$ 0.22
May	953	0	(126)	0	827	\$ 206.31	\$ -	\$ (27.72)	\$ -	\$ 178.59	\$ 0.22
Jun	827	0	(165)	(397)	265	\$ 178.59	\$ -	\$ (34.65)	\$ (86.65)	\$ 57.29	\$ 0.22
Jul	265	0	(243)	0	22	\$ 57.29	\$ -	\$ (53.46)	\$ -	\$ 3.83	\$ 0.22
Aug	22	1,061	(108)	0	975	\$ 3.83	\$ 206.32	\$ (18.36)	\$ -	\$ 191.79	\$ 0.19
Sep	975	0	(126)	(50)	799	\$ 191.79	\$ -	\$ (21.27)	\$ (8.43)	\$ 162.09	\$ 0.20
Oct	799	0	0	0	799	\$ 162.09	\$ -	\$ -	\$ -	\$ 162.09	\$ 0.20
Nov	799	0	0	0	799	\$ 162.09	\$ -	\$ -	\$ -	\$ 162.09	\$ 0.20
Dec	799	0	0	0	799	\$ 162.09	\$ -	\$ -	\$ -	\$ 162.09	\$ 0.20

Tons	\$
Utilized	Utilized
-	\$ -
-	\$ -
-	\$ -
-	\$ -
126	\$ 27.72
165	\$ 34.65
243	\$ 53.46
108	\$ 18.36
126	\$ 21.27
-	\$ -
-	\$ -
-	\$ -
768	\$ 155.46

Total Emission Allowances

	Quantities Begin Bal	QuantitiesA locations	Quantities Utilized	Quantities Sold	Quantities End Bal	Dollars Begin Bal	Dollars Allocations	Dollars Utilized	Dollars Sold	Dollars End Bal
Jan	191,998	0	0	0	191,998	\$19,098.53	\$ -	\$ -	\$ -	\$19,098.53
Feb	191,998	28,333	(889)	0	219,442	\$19,098.53	\$ -	\$ (114.95)	\$ -	\$18,983.58
Mar	219,442	0	(389)	0	219,053	\$18,983.58	\$ -	\$ (48.66)	\$ -	\$18,934.92
Apr	219,053	0	0	0	219,053	\$18,934.92	\$ (0.28)	\$ -	\$ -	\$18,934.64
May	219,053	0	(446)	0	218,607	\$18,934.64	\$ -	\$ (64.66)	\$ -	\$18,869.98
Jun	218,607	(271)	(552)	(397)	217,387	\$18,869.98	\$ (34.01)	\$ (80.46)	\$ (86.65)	\$18,668.86
Jul	217,387	0	(709)	0	216,678	\$18,668.86	\$ -	\$ (112.61)	\$ -	\$18,556.25
Aug	216,678	1,061	(307)	0	217,432	\$18,556.25	\$ 206.32	\$ (44.09)	\$ -	\$18,718.48
Sep	217,432	0	(368)	(50)	217,014	\$18,718.48	\$ -	\$ (51.97)	\$ (8.43)	\$18,658.07
Oct	217,014	0	(10)	0	217,004	\$18,658.07	\$ -	\$ (1.70)	\$ -	\$18,656.37
Nov	217,004	0	(442)	0	216,562	\$18,656.37	\$ -	\$ (64.61)	\$ -	\$18,591.76
Dec	216,562	0	(507)	0	216,055	\$18,591.76	\$ -	\$ (74.22)	\$ -	\$18,517.54

Tons	\$
Utilized	Utilized
-	\$ -
889	\$ 114.95
389	\$ 48.66
-	\$ -
446	\$ 64.66
552	\$ 80.46
709	\$ 112.61
307	\$ 44.09
368	\$ 51.97
10	\$ 1.70
442	\$ 64.61
507	\$ 74.22
4,619	\$ 657.93

2021

SO2 Allowances - Acid Rain Program (a)

	Quantities Begin Bal	QuantitiesA locations	Quantities Utilized	Quantities Sold	Quantities End Bal	Dollars Begin Bal	Dollars Allocations	Dollars Utilized	Dollars Sold	Dollars End Bal	WACI
Jan	156,740	25,041	(191)	0	181,590	\$16,569.56	\$ -	\$ (17.19)		\$16,552.37	\$ 0.09
Feb	181,590	0	(225)	0	181,365	\$16,552.37	\$ -	\$ (20.25)		\$16,532.12	\$ 0.09
Mar	181,365	0	(199)	0	181,166	\$16,532.12	\$ -	\$ (17.91)		\$16,514.21	\$ 0.09
Apr	181,166	(5)	(146)	0	181,015	\$16,514.21	\$ 0.45	\$ (13.14)		\$16,501.52	\$ 0.09
May	181,015	0	(180)	0	180,835	\$16,501.52	\$ -	\$ (16.20)		\$16,485.32	\$ 0.09
Jun	180,835	0	(279)	0	180,556	\$16,485.32	\$ -	\$ (25.11)		\$16,460.21	\$ 0.09
Jul	180,556	0	(252)	0	180,304	\$16,460.21	\$ -	\$ (22.68)		\$16,437.53	\$ 0.09
Aug	180,304	0	(222)	0	180,082	\$16,437.53	\$ -	\$ (19.98)		\$16,417.55	\$ 0.09
Sep	180,082	0	(222)	0	179,860	\$16,417.55	\$ -	\$ (19.98)		\$16,397.57	\$ 0.09
Oct	179,860	0	186	0	180,046	\$16,397.57	\$ -	\$ 16.74		\$16,414.31	\$ 0.09
Nov	180,046	0	(1)	0	180,045	\$16,414.31	\$ -	\$ (0.09)		\$16,414.22	\$ 0.09
Dec	180,045	0	(25)	0	180,020	\$16,414.22	\$ -	\$ (2.25)		\$16,411.97	\$ 0.09

Tons	\$
Utilized	Utilized
191	\$ 17.19
225	\$ 20.25
199	\$ 17.91
146	\$ 13.14
180	\$ 16.20
279	\$ 25.11
252	\$ 22.68
222	\$ 19.98
222	\$ 19.98
(186)	\$ (16.74)
1	\$ 0.09
25	\$ 2.25
1,756	\$ 158.04

NOx Allowances - Annual

	Quantities Begin Bal	QuantitiesA locations	Quantities Utilized	Quantities Sold	Quantities End Bal	Dollars Begin Bal	Dollars Allocations	Dollars Utilized	Dollars Sold	Dollars End Bal	WACI
Jan	9,275	3,292	(151)	0	12,416	\$ 2,819.74	\$ -	\$ (33.22)		\$ 2,786.52	\$ 0.22
Feb	12,416	0	(182)	0	12,234	\$ 2,786.52	\$ -	\$ (40.04)		\$ 2,746.48	\$ 0.22
Mar	12,234	0	(185)	0	12,049	\$ 2,746.48	\$ -	\$ (40.70)		\$ 2,705.78	\$ 0.22
Apr	12,049	(4)	(189)	0	11,856	\$ 2,705.78	\$ (0.88)	\$ (41.58)		\$ 2,663.32	\$ 0.22
May	11,856	0	(151)	0	11,705	\$ 2,663.32	\$ -	\$ (33.22)		\$ 2,630.10	\$ 0.22
Jun	11,705	0	(192)	0	11,513	\$ 2,630.10	\$ -	\$ (42.24)		\$ 2,587.86	\$ 0.22
Jul	11,513	0	(204)	0	11,309	\$ 2,587.86	\$ -	\$ (44.88)		\$ 2,542.98	\$ 0.22
Aug	11,309	0	(179)	0	11,130	\$ 2,542.98	\$ -	\$ (39.38)		\$ 2,503.60	\$ 0.22
Sep	11,130	0	(179)	0	10,951	\$ 2,503.60	\$ -	\$ (39.38)		\$ 2,464.22	\$ 0.22
Oct	10,951	0	127	0	11,078	\$ 2,464.22	\$ -	\$ 27.69		\$ 2,491.91	\$ 0.23
Nov	11,078	0	(10)	0	11,068	\$ 2,491.91	\$ -	\$ (2.20)		\$ 2,489.71	\$ 0.22
Dec	11,068	0	(43)	0	11,025	\$ 2,489.71	\$ -	\$ (9.46)		\$ 2,480.25	\$ 0.22

Tons	\$
Utilized	Utilized
151	\$ 33.22
182	\$ 40.04
185	\$ 40.70
189	\$ 41.58
151	\$ 33.22
192	\$ 42.24
204	\$ 44.88
179	\$ 39.38
179	\$ 39.38
(127)	\$ (27.69)
10	\$ 2.20
43	\$ 9.46
1,538	\$ 338.61

NOx Allowances - Seasonal

	Quantities Begin Bal	QuantitiesA locations	Quantities Utilized	Quantities Sold	Quantities End Bal	Dollars Begin Bal	Dollars Allocations	Dollars Utilized	Dollars Sold	Dollars End Bal	WACI
Jan	813	913	(1)	0	1,725	\$ 376.20	\$ -	\$ (0.22)		\$ 375.98	\$ 0.22
Feb	1,725	0	1	0	1,726	\$ 375.98	\$ -	\$ 0.22		\$ 376.20	\$ 0.22
Mar	1,726	0	0	0	1,726	\$ 376.20	\$ -	\$ -		\$ 376.20	\$ 0.22
Apr	1,726	0	0	0	1,726	\$ 376.20	\$ -	\$ -		\$ 376.20	\$ 0.22
May	1,726	0	(147)	0	1,579	\$ 376.20	\$ -	\$ (32.34)		\$ 343.86	\$ 0.22
Jun	1,579	0	(192)	0	1,387	\$ 343.86	\$ -	\$ (42.24)		\$ 301.62	\$ 0.22
Jul	1,387	0	(204)	0	1,183	\$ 301.62	\$ -	\$ (44.88)		\$ 256.74	\$ 0.22
Aug	1,183	0	(179)	0	1,004	\$ 256.74	\$ -	\$ (39.38)		\$ 217.36	\$ 0.22
Sep	1,004	0	(179)	0	825	\$ 217.36	\$ -	\$ (39.38)		\$ 177.98	\$ 0.22
Oct	825	0	129	0	954	\$ 177.98	\$ -	\$ 28.55		\$ 206.53	\$ 0.22
Nov	954	0	(1)	0	953	\$ 206.53	\$ -	\$ (0.22)		\$ 206.31	\$ 0.22
Dec	953	0	0	0	953	\$ 206.31	\$ -	\$ -		\$ 206.31	\$ 0.22

Tons	\$
Utilized	Utilized
1	\$ 0.22
(1)	\$ (0.22)
-	\$ -
-	\$ -
147	\$ 32.34
192	\$ 42.24
204	\$ 44.88
179	\$ 39.38
179	\$ 39.38
(129)	\$ (28.55)
1	\$ 0.22
-	\$ -
773	\$ 169.89

Total Emission Allowances

	Quantities Begin Bal	QuantitiesA locations	Quantities Utilized	Quantities Sold	Quantities End Bal	Dollars Begin Bal	Dollars Allocations	Dollars Utilized	Dollars Sold	Dollars End Bal
Jan	166,828	29,246	(343)	0	195,731	\$19,765.50	\$ -	\$ (50.63)	\$ -	\$19,714.87
Feb	195,731	0	(406)	0	195,325	\$19,714.87	\$ -	\$ (60.07)	\$ -	\$19,654.80
Mar	195,325	0	(384)	0	194,941	\$19,654.80	\$ -	\$ (58.61)	\$ -	\$19,596.19
Apr	194,941	(9)	(335)	0	194,597	\$19,596.19	\$ (0.43)	\$ (54.72)	\$ -	\$19,541.04
May	194,597	0	(478)	0	194,119	\$19,541.04	\$ -	\$ (81.76)	\$ -	\$19,459.28
Jun	194,119	0	(663)	0	193,456	\$19,459.28	\$ -	\$ (109.59)	\$ -	\$19,349.69
Jul	193,456	0	(660)	0	192,796	\$19,349.69	\$ -	\$ (112.44)	\$ -	\$19,237.25
Aug	192,796	0	(580)	0	192,216	\$19,237.25	\$ -	\$ (98.74)	\$ -	\$19,138.51
Sep	192,216	0	(580)	0	191,636	\$19,138.51	\$ -	\$ (98.74)	\$ -	\$19,039.77
Oct	191,636	0	442	0	192,078	\$19,039.77	\$ -	\$ 72.98	\$ -	\$19,112.75
Nov	192,078	0	(12)	0	192,066	\$19,112.75	\$ -	\$ (2.51)	\$ -	\$19,110.24
Dec	192,066	0	(68)	0	191,998	\$19,110.24	\$ -	\$ (11.71)	\$ -	\$19,098.53

Tons	\$
Utilized	Utilized
343	\$ 50.63
406	\$ 60.07
384	\$ 58.61
335	\$ 54.72
478	\$ 81.76
663	\$ 109.59
660	\$ 112.44
580	\$ 98.74
580	\$ 98.74
(442)	\$ (72.98)
12	\$ 2.51
68	\$ 11.71
4,067	\$ 666.54

2020

SO2 Allowances - Acid Rain Program (a)

	Quantities Begin Bal	QuantitiesA locations	Quantities Utilized	Quantities Sold	Quantities End Bal	Dollars Begin Bal	Dollars Allocations	Dollars Utilized	Dollars Sold	Dollars End Bal	WACI
Jan	133,631	25,041	(177)	0	158,495	\$16,782.30	\$ -	\$ (19.47)		\$16,762.83	\$ 0.11
Feb	158,495	0	(125)	0	158,370	\$16,762.83	\$ -	\$ (13.75)		\$16,749.08	\$ 0.11
Mar	158,370	0	0	0	158,370	\$16,749.08	\$ -	\$ -		\$16,749.08	\$ 0.11
Apr	158,370	0	(209)	0	158,161	\$16,749.08	\$ -	\$ (23.21)		\$16,725.87	\$ 0.11
May	158,161	0	(2)	0	158,159	\$16,725.87	\$ -	\$ (0.22)		\$16,725.65	\$ 0.11
Jun	158,159	0	(268)	0	157,891	\$16,725.65	\$ -	\$ (29.48)		\$16,696.17	\$ 0.11
Jul	157,891	0	(345)	0	157,546	\$16,696.17	\$ -	\$ (37.95)		\$16,658.22	\$ 0.11
Aug	157,546	0	(371)	0	157,175	\$16,658.22	\$ -	\$ (40.81)		\$16,617.41	\$ 0.11
Sep	157,175	0	(179)	0	156,996	\$16,617.41	\$ -	\$ (19.69)		\$16,597.72	\$ 0.11
Oct	156,996	0	0	0	156,996	\$16,597.72	\$ -	\$ -		\$16,597.72	\$ 0.11
Nov	156,996	0	(44)	0	156,952	\$16,597.72	\$ -	\$ (4.84)		\$16,592.88	\$ 0.11
Dec	156,952	0	(212)	0	156,740	\$16,592.88	\$ -	\$ (23.32)		\$16,569.56	\$ 0.11

Tons	\$
Utilized	Utilized
177	\$ 19.47
125	\$ 13.75
-	\$ -
209	\$ 23.21
2	\$ 0.22
268	\$ 29.48
345	\$ 37.95
371	\$ 40.81
179	\$ 19.69
-	\$ -
44	\$ 4.84
212	\$ 23.32
1,932	\$ 212.74

NOx Allowances - Annual

	Quantities Begin Bal	QuantitiesA locations	Quantities Utilized	Quantities Sold	Quantities End Bal	Dollars Begin Bal	Dollars Allocations	Dollars Utilized	Dollars Sold	Dollars End Bal	WACI
Jan	6,638	3,977	(145)	0	10,470	\$ 3,239.34	\$ -	\$ (44.95)		\$ 3,194.39	\$ 0.31
Feb	10,470	0	131	0	10,601	\$ 3,194.39	\$ -	\$ 40.61		\$ 3,235.00	\$ 0.31
Mar	10,601	0	0	0	10,601	\$ 3,235.00	\$ -	\$ -		\$ 3,235.00	\$ 0.31
Apr	10,601	49	(392)	0	10,258	\$ 3,235.00	\$ -	\$ (119.95)		\$ 3,115.05	\$ 0.30
May	10,258	0	(4)	0	10,254	\$ 3,115.05	\$ -	\$ (1.20)		\$ 3,113.85	\$ 0.30
Jun	10,254	0	(190)	0	10,064	\$ 3,113.85	\$ -	\$ (57.00)		\$ 3,056.85	\$ 0.30
Jul	10,064	0	(228)	0	9,836	\$ 3,056.85	\$ -	\$ (68.40)		\$ 2,988.45	\$ 0.30
Aug	9,836	0	(189)	0	9,647	\$ 2,988.45	\$ -	\$ (56.70)		\$ 2,931.75	\$ 0.30
Sep	9,647	0	(104)	0	9,543	\$ 2,931.75	\$ -	\$ (31.61)		\$ 2,900.14	\$ 0.30
Oct	9,543	0	(8)	0	9,535	\$ 2,900.14	\$ -	\$ (2.40)		\$ 2,897.74	\$ 0.30
Nov	9,535	0	(61)	0	9,474	\$ 2,897.74	\$ -	\$ (18.30)		\$ 2,879.44	\$ 0.30
Dec	9,474	0	(199)	0	9,275	\$ 2,879.44	\$ -	\$ (59.70)		\$ 2,819.74	\$ 0.30

Tons	\$
Utilized	Utilized
145	\$ 44.95
(131)	\$ (40.61)
-	\$ -
392	\$ 119.95
4	\$ 1.20
190	\$ 57.00
228	\$ 68.40
189	\$ 56.70
104	\$ 31.61
8	\$ 2.40
61	\$ 18.30
199	\$ 59.70
1,389	\$ 419.60

NOx Allowances - Seasonal

	Quantities Begin Bal	QuantitiesA locations	Quantities Utilized	Quantities Sold	Quantities End Bal	Dollars Begin Bal	Dollars Allocations	Dollars Utilized	Dollars Sold	Dollars End Bal	WACI
Jan	448	1,082	0	0	1,530	\$ 706.31	\$ -	\$ -		\$ 706.31	\$ 0.46
Feb	1,530	0	0	0	1,530	\$ 706.31	\$ -	\$ -		\$ 706.31	\$ 0.46
Mar	1,530	0	0	0	1,530	\$ 706.31	\$ -	\$ -		\$ 706.31	\$ 0.46
Apr	1,530	0	(2)	0	1,528	\$ 706.31	\$ -	\$ (0.92)		\$ 705.39	\$ 0.46
May	1,528	0	(3)	0	1,525	\$ 705.39	\$ -	\$ (1.38)		\$ 704.01	\$ 0.46
Jun	1,525	0	(190)	0	1,335	\$ 704.01	\$ -	\$ (87.40)		\$ 616.61	\$ 0.46
Jul	1,335	0	(228)	0	1,107	\$ 616.61	\$ -	\$ (104.88)		\$ 511.73	\$ 0.46
Aug	1,107	0	(189)	0	918	\$ 511.73	\$ -	\$ (86.94)		\$ 424.79	\$ 0.46
Sep	918	0	(104)	0	814	\$ 424.79	\$ -	\$ (48.12)		\$ 376.66	\$ 0.46
Oct	814	0	0	0	814	\$ 376.66	\$ -	\$ -		\$ 376.66	\$ 0.46
Nov	814	0	(1)	0	813	\$ 376.66	\$ -	\$ (0.46)		\$ 376.20	\$ 0.46
Dec	813	0	0	0	813	\$ 376.20	\$ -	\$ -		\$ 376.20	\$ 0.46

Tons	\$
Utilized	Utilized
-	\$ -
-	\$ -
-	\$ -
2	\$ 0.92
3	\$ 1.38
190	\$ 87.40
228	\$ 104.88
189	\$ 86.94
104	\$ 48.12
-	\$ -
1	\$ 0.46
-	\$ -
717	\$ 330.10

Total Emission Allowances

	Quantities Begin Bal	QuantitiesA locations	Quantities Utilized	Quantities Sold	Quantities End Bal	Dollars Begin Bal	Dollars Allocations	Dollars Utilized	Dollars Sold	Dollars End Bal
Jan	140,717	30,100	(322)	0	170,495	\$20,727.95	\$ -	\$ (64.42)		\$20,663.53
Feb	170,495	0	6	0	170,501	\$20,663.53	\$ -	\$ 26.86		\$20,690.39
Mar	170,501	0	0	0	170,501	\$20,690.39	\$ -	\$ -		\$20,690.39
Apr	170,501	49	(603)	0	169,947	\$20,690.39	\$ -	\$ (144.08)		\$20,546.31
May	169,947	0	(9)	0	169,938	\$20,546.31	\$ -	\$ (2.80)		\$20,543.51
Jun	169,938	0	(648)	0	169,290	\$20,543.51	\$ -	\$ (173.88)		\$20,369.63
Jul	169,290	0	(801)	0	168,489	\$20,369.63	\$ -	\$ (211.23)		\$20,158.40
Aug	168,489	0	(749)	0	167,740	\$20,158.40	\$ -	\$ (184.45)		\$19,973.95
Sep	167,740	0	(387)	0	167,353	\$19,973.95	\$ -	\$ (99.43)		\$19,874.52
Oct	167,353	0	(8)	0	167,345	\$19,874.52	\$ -	\$ (2.40)		\$19,872.12
Nov	167,345	0	(106)	0	167,239	\$19,872.12	\$ -	\$ (23.60)		\$19,848.52
Dec	167,239	0	(411)	0	166,828	\$19,848.52	\$ -	\$ (83.02)		\$19,765.50

Tons	\$
Utilized	Utilized
322	\$ 64.42
(6)	\$ (26.86)
-	\$ -
603	\$ 144.08
9	\$ 2.80
648	\$ 173.88
801	\$ 211.23
749	\$ 184.45
387	\$ 99.42
8	\$ 2.40
106	\$ 23.60
411	\$ 83.02
4,038	\$ 962.44

2019

SO2 Allowances - Acid Rain Program (a)

	Quantities Begin Bal	QuantitiesA locations	Quantities Utilized	Quantities Sold	Quantities End Bal	Dollars Begin Bal	Dollars Allocations	Dollars Utilized	Dollars Sold	Dollars End Bal	WACI
Jan	110,067	0	(273)	0	109,794	\$17,129.79	\$ -	\$ (43.68)		\$17,086.11	\$ 0.16
Feb	109,794	25,041	(298)	0	134,537	\$17,086.11	\$ -	\$ (38.74)		\$17,047.37	\$ 0.13
Mar	134,537	0	0	0	134,537	\$17,047.37	\$ -	\$ -		\$17,047.37	\$ 0.13
Apr	134,537	0	(238)	0	134,299	\$17,047.37	\$ -	\$ (30.94)		\$17,016.43	\$ 0.13
May	134,299	1,133	(225)	0	135,207	\$17,016.43	\$ -	\$ (29.25)		\$16,987.18	\$ 0.13
Jun	135,207	0	(249)	0	134,958	\$16,987.18	\$ -	\$ (32.37)		\$16,954.81	\$ 0.13
Jul	134,958	0	(200)	0	134,758	\$16,954.81	\$ -	\$ (26.00)		\$16,928.81	\$ 0.13
Aug	134,758	0	(561)	0	134,197	\$16,928.81	\$ -	\$ (72.93)		\$16,855.88	\$ 0.13
Sep	134,197	0	(238)	0	133,959	\$16,855.88	\$ -	\$ (30.94)		\$16,824.94	\$ 0.13
Oct	133,959	0	(17)	0	133,942	\$16,824.94	\$ -	\$ (2.21)		\$16,822.73	\$ 0.13
Nov	133,942	0	(36)	0	133,906	\$16,822.73	\$ -	\$ (4.68)		\$16,818.05	\$ 0.13
Dec	133,906	0	(275)	0	133,631	\$16,818.05	\$ -	\$ (35.75)		\$16,782.30	\$ 0.13

Tons	\$
Utilized	Utilized
273	\$ 43.68
298	\$ 38.74
-	\$ -
238	\$ 30.94
225	\$ 29.25
249	\$ 32.37
200	\$ 26.00
561	\$ 72.93
238	\$ 30.94
17	\$ 2.21
36	\$ 4.68
275	\$ 35.75
2,610	\$ 347.49

NOx Allowances - Annual

	Quantities Begin Bal	QuantitiesA locations	Quantities Utilized	Quantities Sold	Quantities End Bal	Dollars Begin Bal	Dollars Allocations	Dollars Utilized	Dollars Sold	Dollars End Bal	WACI
Jan	4,698	0	(221)	0	4,477	\$ 4,393.65	\$ -	\$ (207.74)		\$ 4,185.91	\$ 0.94
Feb	4,477	3,292	(212)	0	7,557	\$ 4,185.91	\$ -	\$ (114.48)		\$ 4,071.43	\$ 0.54
Mar	7,557	0	0	0	7,557	\$ 4,071.43	\$ -	\$ -		\$ 4,071.43	\$ 0.54
Apr	7,557	0	(137)	0	7,420	\$ 4,071.43	\$ -	\$ (73.98)		\$ 3,997.45	\$ 0.54
May	7,420	766	(176)	0	8,010	\$ 3,997.45	\$ -	\$ (86.24)		\$ 3,911.21	\$ 0.49
Jun	8,010	0	(247)	0	7,763	\$ 3,911.21	\$ -	\$ (121.03)		\$ 3,790.18	\$ 0.49
Jul	7,763	0	(211)	0	7,552	\$ 3,790.18	\$ -	\$ (103.39)		\$ 3,686.79	\$ 0.49
Aug	7,552	0	(445)	0	7,107	\$ 3,686.79	\$ -	\$ (218.05)		\$ 3,468.74	\$ 0.49
Sep	7,107	0	(211)	0	6,896	\$ 3,468.74	\$ -	\$ (102.98)		\$ 3,365.76	\$ 0.49
Oct	6,896	0	(23)	0	6,873	\$ 3,365.76	\$ -	\$ (11.27)		\$ 3,354.49	\$ 0.49
Nov	6,873	0	(53)	0	6,820	\$ 3,354.49	\$ -	\$ (25.97)		\$ 3,328.52	\$ 0.49
Dec	6,820	0	(182)	0	6,638	\$ 3,328.52	\$ -	\$ (89.18)		\$ 3,239.34	\$ 0.49

Tons	\$
Utilized	Utilized
221	\$ 207.74
212	\$ 114.48
-	\$ -
137	\$ 73.98
176	\$ 86.24
247	\$ 121.03
211	\$ 103.39
445	\$ 218.05
211	\$ 102.98
23	\$ 11.27
53	\$ 25.97
182	\$ 89.18
2,118	\$ 1,154.31

NOx Allowances - Seasonal

	Quantities Begin Bal	QuantitiesA locations	Quantities Utilized	Quantities Sold	Quantities End Bal	Dollars Begin Bal	Dollars Allocations	Dollars Utilized	Dollars Sold	Dollars End Bal	WACI
Jan	485	0	0	0	485	\$ 2,484.70	\$ -	\$ -		\$ 2,484.70	\$ 5.12
Feb	485	913	0	0	1,398	\$ 2,484.70	\$ -	\$ -		\$ 2,484.70	\$ 1.78
Mar	1,398	0	0	0	1,398	\$ 2,484.70	\$ -	\$ -		\$ 2,484.70	\$ 1.78
Apr	1,398	0	0	0	1,398	\$ 2,484.70	\$ -	\$ -		\$ 2,484.70	\$ 1.78
May	1,398	176	0	0	1,574	\$ 2,484.70	\$ -	\$ -		\$ 2,484.70	\$ 1.58
Jun	1,574	0	(245)	0	1,329	\$ 2,484.70	\$ -	\$ (387.10)		\$ 2,097.60	\$ 1.58
Jul	1,329	0	(211)	0	1,118	\$ 2,097.60	\$ -	\$ (333.38)		\$ 1,764.22	\$ 1.58
Aug	1,118	0	(444)	0	674	\$ 1,764.22	\$ -	\$ (701.52)		\$ 1,062.70	\$ 1.58
Sep	674	0	(211)	0	463	\$ 1,062.70	\$ -	\$ (332.69)		\$ 730.01	\$ 1.58
Oct	463	0	(15)	0	448	\$ 730.01	\$ -	\$ (23.70)		\$ 706.31	\$ 1.58
Nov	448	0	1	0	449	\$ 706.31	\$ -	\$ 1.58		\$ 707.89	\$ 1.58
Dec	449	0	(1)	0	448	\$ 707.89	\$ -	\$ (1.58)		\$ 706.31	\$ 1.58

Tons	\$
Utilized	Utilized
-	\$ -
-	\$ -
-	\$ -
-	\$ -
-	\$ -
245	\$ 387.10
211	\$ 333.38
444	\$ 701.52
211	\$ 332.69
15	\$ 23.70
(1)	\$ (1.58)
1	\$ 1.58
1,126	\$ 1,778.39

Total Emission Allowances

	Quantities Begin Bal	QuantitiesA locations	Quantities Utilized	Quantities Sold	Quantities End Bal	Dollars Begin Bal	Dollars Allocations	Dollars Utilized	Dollars Sold	Dollars End Bal
Jan	115,250	0	(494)	0	114,756	\$24,008.14	\$ -	\$ (251.42)		\$23,756.72
Feb	114,756	29,246	(510)	0	143,492	\$23,756.72	\$ -	\$ (153.22)		\$23,603.50
Mar	143,492	0	0	0	143,492	\$23,603.50	\$ -	\$ -		\$23,603.50
Apr	143,492	0	(375)	0	143,117	\$23,603.50	\$ -	\$ (104.92)		\$23,498.58
May	143,117	2,075	(401)	0	144,791	\$23,498.58	\$ -	\$ (115.49)		\$23,383.09
Jun	144,791	0	(741)	0	144,050	\$23,383.09	\$ -	\$ (540.50)		\$22,842.59
Jul	144,050	0	(622)	0	143,428	\$22,842.59	\$ -	\$ (462.77)		\$22,379.82
Aug	143,428	0	(1,450)	0	141,978	\$22,379.82	\$ -	\$ (992.50)		\$21,387.32
Sep	141,978	0	(660)	0	141,318	\$21,387.32	\$ -	\$ (466.61)		\$20,920.71
Oct	141,318	0	(55)	0	141,263	\$20,920.71	\$ -	\$ (37.18)		\$20,883.53
Nov	141,263	0	(88)	0	141,175	\$20,883.53	\$ -	\$ (29.07)		\$20,854.46
Dec	141,175	0	(458)	0	140,717	\$20,854.46	\$ -	\$ (126.51)		\$20,727.95

Tons	\$
Utilized	Utilized
494	\$ 251.42
510	\$ 153.22
-	\$ -
375	\$ 104.92
401	\$ 115.49
741	\$ 540.50
622	\$ 462.77
1,450	\$ 992.50
660	\$ 466.61
55	\$ 37.18
88	\$ 29.07
458	\$ 126.51
5,854	\$ 3,280.19

2018

SO2 Allowances - Acid Rain Program (a)

	Quantities Begin Bal	QuantitiesA locations	Quantities Utilized	Quantities Sold	Quantities End Bal	Dollars Begin Bal	Dollars Allocations	Dollars Utilized	Dollars Sold	Dollars End Bal	WACI	Tons Utilized	\$ Utilized
Jan												-	-
Feb												-	-
Mar												-	-
Apr	111,265	0	0	0	111,265	\$17,321.63	\$ -	\$ -		\$17,321.63	\$ 0.16	-	\$ -
May	111,265	0	24	0	111,289	\$17,321.63	\$ -	\$ 3.84		\$17,325.47	\$ 0.16	(24)	\$ (3.84)
Jun	111,289	1	(1)	0	111,289	\$17,325.47	\$ -	\$ (0.16)		\$17,325.31	\$ 0.16	1	\$ 0.16
Jul	111,289	0	(161)	0	111,128	\$17,325.31	\$ -	\$ (25.76)		\$17,299.55	\$ 0.16	161	\$ 25.76
Aug	111,128	0	(207)	0	110,921	\$17,299.55	\$ -	\$ (33.12)		\$17,266.43	\$ 0.16	207	\$ 33.12
Sep	110,921	0	(204)	0	110,717	\$17,266.43	\$ -	\$ (32.64)		\$17,233.79	\$ 0.16	204	\$ 32.64
Oct	110,717	0	(188)	0	110,529	\$17,233.79	\$ -	\$ (30.08)		\$17,203.71	\$ 0.16	188	\$ 30.08
Nov	110,529	0	(229)	0	110,300	\$17,203.71	\$ -	\$ (36.64)		\$17,167.07	\$ 0.16	229	\$ 36.64
Dec	110,300	0	(233)	0	110,067	\$17,167.07	\$ -	\$ (37.28)		\$17,129.79	\$ 0.16	233	\$ 37.28
												1,199	\$ 191.84

NOx Allowances - Annual

	Quantities Begin Bal	QuantitiesA locations	Quantities Utilized	Quantities Sold	Quantities End Bal	Dollars Begin Bal	Dollars Allocations	Dollars Utilized	Dollars Sold	Dollars End Bal	WACI	Tons Utilized	\$ Utilized
Jan												-	-
Feb												-	-
Mar												-	-
Apr	5,861	0	0	0	5,861	\$ 5,542.64	\$ -	\$ -		\$ 5,542.64	\$ 0.95	-	\$ -
May	5,861	0	(35)	0	5,826	\$ 5,542.64	\$ -	\$ (33.25)		\$ 5,509.39	\$ 0.95	35	\$ 33.25
Jun	5,826	60	16	0	5,902	\$ 5,509.39	\$ -	\$ 15.20		\$ 5,524.59	\$ 0.94	(16)	\$ (15.20)
Jul	5,902	0	(194)	0	5,708	\$ 5,524.59	\$ -	\$ (182.36)		\$ 5,342.23	\$ 0.94	194	\$ 182.36
Aug	5,708	0	(227)	0	5,481	\$ 5,342.23	\$ -	\$ (213.38)		\$ 5,128.85	\$ 0.94	227	\$ 213.38
Sep	5,481	0	(245)	0	5,236	\$ 5,128.85	\$ -	\$ (230.30)		\$ 4,898.55	\$ 0.94	245	\$ 230.30
Oct	5,236	0	(185)	0	5,051	\$ 4,898.55	\$ -	\$ (173.08)		\$ 4,725.47	\$ 0.94	185	\$ 173.08
Nov	5,051	0	(196)	0	4,855	\$ 4,725.47	\$ -	\$ (184.24)		\$ 4,541.23	\$ 0.94	196	\$ 184.24
Dec	4,855	0	(157)	0	4,698	\$ 4,541.23	\$ -	\$ (147.58)		\$ 4,393.65	\$ 0.94	157	\$ 147.58
												1,223	\$ 1,148.99

NOx Allowances - Seasonal

	Quantities Begin Bal	QuantitiesA locations	Quantities Utilized	Quantities Sold	Quantities End Bal	Dollars Begin Bal	Dollars Allocations	Dollars Utilized	Dollars Sold	Dollars End Bal	WACI	Tons Utilized	\$ Utilized
Jan												-	-
Feb												-	-
Mar												-	-
Apr	1,356	0	0		1,356	\$ 6,939.67	\$ -	\$ -		\$ 6,939.67	\$ 5.12	-	\$ -
May	1,356	0	0		1,356	\$ 6,939.67	\$ -	\$ -		\$ 6,939.67	\$ 5.12	-	\$ -
Jun	1,356	(1)	(11)		1,344	\$ 6,939.67	\$ -	\$ (56.32)		\$ 6,883.35	\$ 5.12	11	\$ 56.32
Jul	1,344	0	(195)		1,149	\$ 6,883.35	\$ -	\$ (998.40)		\$ 5,884.95	\$ 5.12	195	\$ 998.40
Aug	1,149	0	(227)		922	\$ 5,884.95	\$ -	\$ (1,162.24)		\$ 4,722.71	\$ 5.12	227	\$ 1,162.24
Sep	922	0	(246)		676	\$ 4,722.71	\$ -	\$ (1,259.52)		\$ 3,463.19	\$ 5.12	246	\$ 1,259.52
Oct	676	0	(185)		491	\$ 3,463.19	\$ -	\$ (947.77)		\$ 2,515.42	\$ 5.12	185	\$ 947.77
Nov	491	0	(6)		485	\$ 2,515.42	\$ -	\$ (30.72)		\$ 2,484.70	\$ 5.12	6	\$ 30.72
Dec	485	0	0		485	\$ 2,484.70	\$ -	\$ -		\$ 2,484.70	\$ 5.12	-	\$ -
												870	\$ 4,454.97

Total Emission Allowances

	Quantities Begin Bal	QuantitiesA locations	Quantities Utilized	Quantities Sold	Quantities End Bal	Dollars Begin Bal	Dollars Allocations	Dollars Utilized	Dollars Sold	Dollars End Bal	WACI	Tons Utilized	\$ Utilized
Jan												-	\$ -
Feb												-	\$ -
Mar												-	\$ -
Apr	118,482	0	0	0	118,482	\$29,803.94	\$ -	\$ -		\$29,803.94		-	\$ -
May	118,482	0	(11)	0	118,471	\$29,803.94	\$ -	\$ (29.41)		\$29,774.53		11	\$ 29.41
Jun	118,471	60	4	0	118,535	\$29,774.53	\$ -	\$ (41.28)		\$29,733.25		(4)	\$ 41.28
Jul	118,535	0	(550)	0	117,985	\$29,733.25	\$ -	\$ (1,206.52)		\$28,526.73		550	\$ 1,206.52
Aug	117,985	0	(661)	0	117,324	\$28,526.73	\$ -	\$ (1,408.74)		\$27,117.99		661	\$ 1,408.74
Sep	117,324	0	(695)	0	116,629	\$27,117.99	\$ -	\$ (1,522.46)		\$25,595.53		695	\$ 1,522.46
Oct	116,629	0	(558)	0	116,071	\$25,595.53	\$ -	\$ (1,150.93)		\$24,444.60		558	\$ 1,150.92
Nov	116,071	0	(431)	0	115,640	\$24,444.60	\$ -	\$ (251.60)		\$24,193.00		431	\$ 251.60
Dec	115,640	0	(390)	0	115,250	\$24,193.00	\$ -	\$ (184.86)		\$24,008.14		390	\$ 184.86
												3,292	\$ 5,795.79

Duke Energy Kentucky
Case No. 2023-00374
STAFF First Set of Data Requests
Date Received: December 8, 2023

STAFF-DR-01-005

REQUEST:

KRS 278.183(3) provides that during the two-year review the Commission shall, to the extent appropriate, incorporate environmental surcharge amounts found just and reasonable into the existing base rates of the utility.

a. State whether Duke Kentucky believes any surcharge amounts need to be incorporated into its base rates in conjunction with these two-year reviews. If so, provide the surcharge amount that Duke Kentucky believes should be incorporated into its existing base rates.

b. For subpart a. above, explain how the surcharge amount should be incorporated into the base rates, including all supporting calculations, workpapers, and assumptions as well as any analysis that Duke Kentucky believes supports its position. Provide all supporting schedules in Excel spreadsheet format, with formulas intact and unprotected and all rows and columns fully accessible.

c. Provide the that reflects all environmental surcharge amounts previously incorporated into existing base rates and the amount determined in subpart b. above. Include all supporting calculations, workpapers, and assumptions. Provide all supporting schedules in Excel spreadsheet format, with formulas intact and unprotected and all rows and columns fully accessible.

d. State whether Duke Kentucky believes that there will need to be modifications to either the surcharge mechanism or the monthly surcharge reports, other

than a revision to Base Environmental Surcharge Factor, as a result of incorporating environmental surcharge amounts into Duke Kentucky's existing base rates. If so, provide a detailed explanation of the modifications and provide updated monthly surcharge reports.

RESPONSE:

a. Yes, Duke Energy Kentucky requests to incorporate a surcharge amount into its existing base rates in conjunction with this two-year review based on the billing period ending May 31, 2022, expense month of March 31, 2022, equating to an annual revenue requirement of \$22,535,632.

b. Please see STAFF-DR-01-005(b) Attachment for the surcharge calculation that should be incorporated into base rates. The amount was calculated using the environmental compliance rate base as of the expense month of March 31, 2022 and environmental compliance operating expenses for the twelve-months ending March 31, 2022. The return on the environmental compliance rate base was calculated using the pre-tax rate of return approved in Case No. 2022-00372. The total environmental compliance revenue requirement is then multiplied by the jurisdictional allocation ratio from the filing for the May 2022 billing period, March 31, 2022 expense month to determine the jurisdictional environmental compliance revenue requirement to incorporate into base rates.

Duke Energy Kentucky is proposing a two-step roll-in methodology to roll the jurisdictional environmental compliance revenue requirement into base rates. First the jurisdictional environmental compliance revenue requirement will be allocated to residential and non-residential customers based on the percentage of each group's total base revenue excluding base environmental surcharge revenue to the Company's total base

revenues excluding base environmental surcharge revenue. Then, the residential amount will be allocated to the different residential rates based on each residential rate base revenues excluding base environmental surcharge revenues to the total residential base revenues excluding base environmental surcharge revenues. The non-residential amount will be allocated to the different non-residential rates based on each non-residential non-fuel base revenues excluding base environmental surcharge revenues to the total non-residential non-fuel base revenues excluding base environmental surcharge revenues.

c. Duke Energy Kentucky has not incorporated any environmental surcharge amounts into existing base rates since the inception of its surcharge mechanism.

d. Yes, there will need to be changes to the surcharge mechanism and the monthly surcharge reports. Please see Attachment LSM-2 to the Direct Testimony of Libbie S. Miller for a redline version of tariff for Environmental Surcharge Mechanism Rider. Please see Attachment LSM-3 of same testimony for a redline version of ES Form 1.10 in the monthly surcharge reports. Both of these needed to be updated to show the reduction of the Rider ESM included in base rates.

PERSON RESPONSIBLE: Libbie S. Miller

DUKE ENERGY KENTUCKY, INC.
 Calculation of ESM Roll-Into Base Rates At March 2022

Line No.	E(m) = RORB + OE - EAS + Prior Period Adjustment + (Over)/Under Recovery	Source	Environmental Compliance Plans
1	Eligible Environmental Compliance Plant (Gross Plant) Excluding AFUDC	ES Form 2.00, March 2022	\$ 67,432,275
2	Eligible Environmental Compliance CWIP Excluding AFUDC	ES Form 2.00, March 2022	-
3	Subtotal		\$ 67,432,275
4	<u>Additions:</u>		
5	Inventory - Emission Allowances	ES Form 2.00, March 2022	\$ 18,935
6	Subtotal		\$ 18,935
7	<u>Deductions:</u>		
8	Accumulated Depreciation on Eligible Environmental Compliance Plant	ES Form 2.00, March 2022	\$ 4,480,372
9	Accumulated Deferred Income Taxes on Eligible Environmental Compliance Plant	ES Form 2.00, March 2022	4,584,733
10	Accumulated Deferred Investment Tax Credits (ITC) on Eligible Environmental Compliance Plant	ES Form 2.00, March 2022	-
11	Subtotal		\$ 9,065,105
12	Environmental Compliance Rate Base (RB)	ES Form 2.00, March 2022	\$ 58,386,105
13	Pretax Rate of Return (ROR)	See Supporting Schedule A, line 4	8.822%
14	Return on the Environmental Compliance Rate Base (RORB)	(12) x (13)	\$ 5,150,822
15	<u>Determination of Environmental Compliance Operating Expenses (OE)</u>		
16	Annual Depreciation Expense	See Supporting Schedule A, line 17	\$ 1,665,492
17	Annual Taxes Other Than Income Taxes	See Supporting Schedule A, line 17	\$ 855,261
18	Annual Amortization Expense	See Supporting Schedule A, line 17	\$ 3,749,774
19	Annual Emission Allowance Expense	See Supporting Schedule A, line 17	\$ 663
20	Annual Environmental Reagent Expense	See Supporting Schedule A, line 17	\$ 11,618,201
21	Total Environmental Compliance Operating Expense	(16) +(17) + (18) + (19) + (20)	\$ 17,889,391
22	Less: Annual Proceeds from Emission Allowance Sales (EAS)	See Supporting Schedule A, line 30	\$ -
23	Sub-Total E(m)	(14) + (21) - (22)	\$ 23,040,213
24	Jurisdictional Allocation Ratio for Expense Month	Line 32	97.81%
25	Total Jurisdictional E(m)	(23) x (24)	\$ 22,535,632
26	Jurisdictional E(m) to be Recovered in Rider PSM	(23) - (25)	\$ 504,581
27	Jurisdictional Environmental Surcharge Gross Revenue Requirement -- Gross Roll In Amount	(25)	\$ 22,535,632
28	Less Jurisdictional Environmental Revenue Previously Rolled In		-
29	Jurisdictional Environmental Surcharge Gross Revenue Requirement -- Net Roll In Amount	(27) - (28)	\$ 22,535,632

Calculation of Jurisdictional Allocation Ratio - 12 Month Average

30	Retail Revenue	ES Form 3.00, March 2022	\$ 30,814,215	97.81%
31	Sales for Resale	ES Form 3.00, March 2022	\$ 689,648	2.19%
32	Total Revenue	(30) + (31)	\$ 31,503,863	100.00%

Supporting Schedule A

DUKE ENERGY KENTUCKY, INC.
 Calculation of ESM Roll-Into Base Rates At March 2022

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	3.780%	4.739%	0.179%		0.179%
2	Long-term Debt	44.075%	4.377%	1.929%		1.929%
3	Common Equity	52.145%	9.650%	5.032%	1.3342383	6.714%
4	Total	100.000%		7.140%		8.822%

Note: Capital structure, cost of debt and tax rate gross-up factor as approved in Case No. 2022-00372. These rates are to remain constant until the Commission sets base rates in Duke Kentucky's next base rate case proceeding.

12 Month Balances for Selected Compliance Operating Expenses

Line No.	Expense Month	Depreciation	Taxes Other than Income Taxes	Amortization	Emission Allowance Expense	Environmental Reagent Expense	Total
5	Apr-21	\$ 138,791	\$ 72,125	\$ 292,989	\$ 55	\$ 1,131,739	\$ 1,635,699
6	May-21	138,791	71,969	411,307	82	1,161,542	1,783,691
7	Jun-21	138,791	71,814	447,503	110	1,477,213	2,135,431
8	Jul-21	138,791	71,658	304,756	112	1,540,269	2,055,586
9	Aug-21	138,791	71,502	202,486	99	1,204,099	1,616,977
10	Sep-21	138,791	71,349	202,486	99	461,369	874,094
11	Oct-21	138,791	71,193	202,486	(73)	24,898	437,295
12	Nov-21	138,791	71,037	202,486	3	-	412,317
13	Dec-21	138,791	70,886	202,486	12	234,642	646,817
14	Jan-22	138,791	70,731	202,486	-	934,403	1,346,411
15	Feb-22	138,791	70,576	525,501	115	1,938,853	2,673,836
16	Mar-22	138,791	70,421	552,802	49	1,509,174	2,271,237
17	Totals	\$ 1,665,492	\$ 855,261	\$ 3,749,774	\$ 663	\$ 11,618,201	\$ 17,889,391

12 Month Balances for Proceeds of Emission Allowances

Line No.	Expense Month	Emission Allowance Proceeds
18	Apr-21	\$ -
19	May-21	-
20	Jun-21	-
21	Jul-21	-
22	Aug-21	-
23	Sep-21	-
24	Oct-21	-
25	Nov-21	-
26	Dec-21	-
27	Jan-22	-
28	Feb-22	-
29	Mar-22	-
30	Totals	\$ -