

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

In the Matter of:

AN ELECTRONIC EXAMINATION BY THE	)	
PUBLIC SERVICE COMMISSION OF THE	)	Case No. 2023-00374
ENVIRONMENTAL SURCHARGE MECHANISM	)	
OF DUKE ENERGY KENTUCKY, INC. FOR THE	)	
SIX-MONTH BILLING PERIODS ENDING	)	
NOVEMBER 30, 2020, MAY 31, 2021, NOVEMBER	)	
30, 2021, NOVEMBER 30, 2022, AND MAY 31,	)	
2023, AND THE TWO-YEAR BILLING PERIODS	)	
ENDING MAY 31, 2020, AND MAY 31, 2022	)	

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**DIRECT TESTIMONY OF**

**LIBBIE S. MILLER**

**ON BEHALF OF**

**DUKE ENERGY KENTUCKY, INC.**

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January 31, 2024

**TABLE OF CONTENTS**

	<b><u>PAGE</u></b>
<b>I. INTRODUCTION AND PURPOSE .....</b>	<b>1</b>
<b>II. DISCUSSION .....</b>	<b>3</b>
<b>A. The Company’s Rider ESM.....</b>	<b>3</b>
<b>B. Data Requests Sponsored .....</b>	<b>11</b>
<b>III. CONCLUSION .....</b>	<b>11</b>

**ATTACHMENTS:**

Attachment LSM-1: Clean Tariff

Attachment LSM-2: Redline Tariff

Attachment LSM-3: Redline ES Form 1.10

**I. INTRODUCTION AND PURPOSE**

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

2 A. My name is Libbie S. Miller. My business address is 139 East Fourth Street,  
3 Cincinnati, Ohio 45202.

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

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

10 **Q. PLEASE SUMMARIZE YOUR EDUCATION AND PROFESSIONAL**  
11 **QUALIFICATIONS.**

12 A. I earned a Bachelor of Science in Accounting from Indiana State University, Terre  
13 Haute, Indiana, in 1988. I also am a Certified Public Accountant licensed in Indiana.  
14 I began my career with Public Service Indiana, in 1988, where I held positions in  
15 Fuels Accounting, Corporate Accounting, and Financial Systems. I transferred to  
16 Cincinnati, Ohio, in 1995 with the inception of Cinergy Corp., the parent of Duke  
17 Energy Ohio, where I continued working in Financial Systems and later held  
18 various accounting positions within the generation business. In 2015, I worked in  
19 Program Performance supporting Energy Efficiency and Demand Response  
20 customer programs for Duke Energy Indiana. In January 2018, I became Lead  
21 Analyst, Rates and Regulatory Strategy for Duke Energy Kentucky and Duke

1 Energy Ohio. In 2022, I assumed my current position as Rates and Regulatory  
2 Strategy Manager.

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

5 A. Yes. I have provided testimony in proceedings before the Kentucky Public Service  
6 Commission regarding Duke Energy Kentucky's Fuel Adjustment Clause (FAC).

7 **Q. PLEASE SUMMARIZE YOUR DUTIES AS RATES AND REGULATORY**  
8 **STRATEGY MANAGER.**

9 A. As Rates and Regulatory Strategy Manager, I am responsible for the preparation of  
10 various monthly, quarterly, and annual rate recovery mechanisms. I also prepare  
11 other schedules used in retail rate filings for Duke Energy Kentucky and Duke  
12 Energy Ohio.

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

14 A. The purpose of this proceeding is to review the past operations of Duke Energy  
15 Kentucky's environmental surcharge mechanism tariff (Rider ESM or ESM) during  
16 the six-month billing periods ending November 30, 2020, May 31, 2021, November  
17 30, 2021, November 30, 2022, and May 31, 2023; and the two-year review for  
18 billing periods ending May 31, 2020, and May 31, 2022, to determine whether the  
19 surcharge amounts collected during the periods are just and reasonable, and to the  
20 extent appropriate, incorporate surcharge amounts found just and reasonable into  
21 the existing base rates of the utility.

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

2 A. The purpose of my testimony is to (1) summarize the operation of the Company's  
3 Rider ESM filings during the six-month and two-year review periods, (2)  
4 demonstrate the revenue collected during the period was just and reasonable, and  
5 (3) recommend the cumulative ESM revenue requirement for the twelve-months  
6 ending with the expense month March 2022 be used for purposes of incorporating  
7 the ESM surcharge amount into base rates, and explain the methodology to "roll-  
8 in" the surcharge amount into base rates.

## **II. DISCUSSION**

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

9 **Q. PLEASE DESCRIBE THE OPERATION OF DUKE ENERGY**  
10 **KENTUCKY'S RIDER ESM FOR THE BILLING PERIODS UNDER**  
11 **REVIEW.**

12 A. In each month of the six-month and two-year periods under review in this  
13 proceeding, Duke Energy Kentucky calculated the environmental surcharge factors  
14 in accordance with its Rider ESM Tariff and consistent with the Commission's  
15 Orders in Duke Energy Kentucky's previous applications to implement or amend  
16 its ESM and Environmental Compliance Plan (ECP). Duke Energy Kentucky billed  
17 an environmental surcharge to its customers on a monthly basis from June 2018  
18 through May 2023. The calculations were made in accordance with the  
19 Commission approved monthly forms and were filed with the Commission ten days  
20 before the Company billed the new monthly charge, per KRS 278.183.

1           The billing periods June 2018 through November 2018, December 2018  
2 through May 2019, and June 2019 through May 2020 have been reviewed in Case  
3 Nos. 2019-00147, 2019-00391, and 2020-00142, respectively, and are part of the  
4 two-year review period ending May 31, 2020. The six-month review periods  
5 initiated in this Case ending November 2020, May 2021, November 2021 are part  
6 of the two-year review period ending May 31, 2022. The six-month review periods  
7 initiated in this Case ending November 2022 and May 2023 will be part of the next  
8 two-year review.

9   **Q.   WHAT ARE THE COMPONENTS OF THE ENVIRONMENTAL**  
10 **COMPLIANCE COSTS THAT WERE INCLUDED IN THE**  
11 **CALCULATION OF THE ENVIRONMENTAL SURCHARGE BILLING**  
12 **FACTORS FOR THE BILLING PERIODS UNDER REVIEW?**

13   A.   In each month of the six-month and two-year periods under review in this  
14 proceeding, Duke Energy Kentucky's environmental compliance costs, E(m),  
15 include: (1) a return on environmental compliance rate base, (2) environmental  
16 operating expenses, (3) proceeds from emission allowance sales, (4) prior period  
17 adjustments, and (5) adjustment for over- or under-recovery of previously filed  
18 monthly jurisdictional E(m).

1 **Q. PLEASE DESCRIBE THE COMPONENTS OF ENVIRONMENTAL**  
2 **COMPLIANCE RATE BASE THAT WERE INCLUDED IN THE**  
3 **CALCULATION OF THE ENVIRONMENTAL SURCHARGE BILLING**  
4 **FACTORS FOR THE BILLING PERIODS UNDER REVIEW?**

5 A. Environmental compliance rate base included in the calculation of the  
6 environmental surcharge billing factors for the billing periods under review  
7 includes: (1) eligible environmental compliance plant in-service excluding  
8 AFUDC, (2) eligible environmental compliance construction work in progress  
9 (CWIP) excluding AFUDC, (3) emission allowance inventory, (4) accumulated  
10 depreciation on eligible environmental compliance plant in-service, and (5)  
11 deferred income taxes on eligible environmental compliance plant in-service. The  
12 capital projects that comprise the environmental compliance plant in-service and  
13 CWIP are those approved by the Commission in Case No. 2017-00321 and Case  
14 No. 2018-00156. Capital projects included in the calculation of the Rider ESM  
15 include the following as shown on FORM 2.10 of the monthly Rider ESM filings:

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

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

5 A. The environmental plan operating expenses included in the calculation of the  
6 environmental surcharge billing factors for the billing periods under review are  
7 those approved by the Commission in Case No. 2017-00321, Case No. 2018-00156,  
8 and Case No. 2021-00290. The expenses included in the calculation of Rider ESM  
9 include the following as shown on FORM 2.00 of the monthly Rider ESM filings:

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

10 **Q. WERE THERE ANY PERTINENT CHANGES TO THE**  
11 **ENVIRONMENTAL SURCHARGE DURING THE REVIEW PERIOD?**

12 A. There have been four Commission Orders which have changed Rider ESM during  
13 the review period.

14 First, the Commission Order in Case No. 2018-00156 approved Duke  
15 Energy Kentucky's request to amend its ECP for purposes of recovering the costs  
16 of Cell 2 of the West Landfill project through its ESM.

17 Second, per the Order in Case No. 2019-00271, the Commission approved  
18 a return on equity (ROE) of 9.25 percent and a pre-tax rate of return of 7.905



1 percent. The ESM was updated to incorporate these changes in the June 2020  
2 billing period for the April 2020 expense month.

3 Third, the Order in Case No. 2020-00142 approved Duke Energy  
4 Kentucky's ESM filings for the six-month review period ending November 2019,  
5 with the directive that Duke Energy Kentucky refund the over-recovery arising  
6 from its inclusion of AFUDC in the ESM rate base. The Company refunded the  
7 over-recovery in the October 2020 billing period for the expense month of August  
8 2020.

9 Fourth, per the Order in Case No. 2021-00290, the Commission approved  
10 the Company's request to amend its ECP for the purposes of recovering  
11 unrecovered construction, maintenance, closure, and post-closure maintenance  
12 costs of the East Landfill and unrecovered maintenance costs of the West Landfill  
13 through its ESM at the East Bend Generating Station.

14 **Q. DOES THE COMPANY HAVE CHANGES TO ANY OF THE**  
15 **COMPONENTS OF ITS ENVIRONMENTAL SURCHARGE BILLING**  
16 **FACTORS?**

17 A. The Company does not have any changes or corrections to its filed environmental  
18 surcharge mechanisms during the review period.

19 **Q. WHAT RATE OF RETURN IS THE COMPANY PROPOSING TO USE**  
20 **FOR THE ENVIRONMENTAL SURCHARGE?**

21 A. The Company is proposing to use the pre-tax rate of return approved in its last base  
22 rate case, Case No. 2022-00372, until changed by the Commission in Duke  
23 Kentucky's next base rate case. The approved pre-tax rate of return is 8.822 percent,

1 including a 9.65 percent return on equity, total weighted average cost of capital  
2 (WACC) of 7.14 percent, and a gross revenue conversion factor (GRCF) of  
3 1.3342383.

4 **Q. WHAT IS THE RATIONAL FOR THIS PROPOSAL?**

5 A. This rate was recently established and was supported by a full cost of equity  
6 analysis; therefore, the Company believes it is reasonable to continue using this rate  
7 of return.

8 **Q. SHOULD THE COMMISSION APPROVE INCORPORATING INTO**  
9 **DUKE ENERGY KENTUCKY'S BASE RATES THE ENVIRONMENTAL**  
10 **SURCHARGE AMOUNTS FOR THE TWO-YEAR BILLING PERIOD**  
11 **ENDING MARCH 2022?**

12 A. Yes, the Commission should allow Duke Energy Kentucky to “roll-into” base rates  
13 the surcharge amounts the Commission finds just and reasonable for the two-year  
14 billing period ending May 31, 2022, for the expense month of March 31, 2022. The  
15 Company recommends the environmental surcharge amount equating to an annual  
16 revenue requirement of \$22,535,632 be incorporated into base rates. Duke Energy  
17 Kentucky calculated the roll-in amount of \$22,535,632 by using the environmental  
18 compliance rate base as of March 31, 2022, and the environmental compliance  
19 operating expenses for the twelve-months ending March 31, 2022. The return on  
20 the environmental compliance rate base was calculated using the pre-tax rate of  
21 return approved in Case No. 2022-00372. The total environmental compliance  
22 revenue requirement is then multiplied by the jurisdictional allocation ratio from  
23 the filing for the May 2022 billing period, March 2022 expense month, to determine

1 the Jurisdictional environmental compliance revenue requirement to incorporate  
2 into base rates.

3 **Q. IF THE COMMISSION APPROVES DUKE ENERGY KENTUCKY'S**  
4 **RECOMMENDATION TO INCORPORATE THE ENVIRONMENTAL**  
5 **SURCHARGE AMOUNTS FROM THE ESM RIDER INTO BASE RATES,**  
6 **WHAT IS THE IMPACT ON THE REVENUE REQUIREMENT FOR BASE**  
7 **RATES AND FOR THE FOR THE ESM RIDER?**

8 A. The revenue requirement remains neutral for the customer, as Duke Energy  
9 Kentucky's recommendation is simply moving the revenue requirement amount  
10 from one recovery mechanism to another. Base rates will increase, and two months  
11 later, Rider ESM revenue requirement will decrease by the same amount. Rider  
12 ESM revenue lag occurs since the expenses incurred in one month are recovered in  
13 revenues two months later.

14 **Q. PLEASE EXPLAIN WHY ESM REVENUES WILL NOT DECREASE IN**  
15 **THE SAME MONTH THAT BASE RATES WILL INCREASE.**

16 A. The ESM is billed on a two-month lag, meaning costs incurred in the current  
17 expense month are recovered as revenues two months later through Rider ESM. If  
18 the Commission approves the "roll-in" of ESM costs to base rates, the costs  
19 recoverable through Rider ESM in the expense month will be reduced by the ESM  
20 revenues included in base rates. For example, the total ESM costs for the January  
21 expense month will be collected from customers via base rates in January and via  
22 Rider ESM in March. If base rates increase due to the roll-in of the ESM revenue  
23 requirement in January, the portion of the incurred January ESM costs recovered

1 through base rates will increase, and the resulting decrease in the Rider ESM billing  
2 factor will be applied in March. If the decrease in the Rider ESM billing factor  
3 took effect in January, the same month base rates were increased, Duke Energy  
4 Kentucky would not collect the appropriate amount of ESM revenue associated  
5 with costs incurred two months earlier in November. This is because the January  
6 Rider ESM billing factor is associated with the November expense month and must  
7 be calculated using base rates in effect for November.

8 **Q. HOW SHOULD THE BASE RATE CHANGE BE IMPLEMENTED?**

9 A. The implementation of the change in base rates reflecting the “roll-in” amount  
10 should take effect for bills rendered beginning with the first billing cycle in the  
11 second month following the month in which the Commission issues its Order in  
12 this proceeding to ensure the accurate update and review of the base rate change.  
13 Rider ESM is billed on a billed rendered basis; therefore, to be consistent, the base  
14 rate change should be effective on bills rendered basis also.

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

17 A. Yes. Duke Energy Kentucky is proposing changes to its Environmental Surcharge  
18 Mechanism Rider to incorporate the amounts being “rolled-into” base rates. The  
19 Company is also proposing text changes to the tariff to clarify the calculation of

1 Rider ESM. The proposed ESM tariff is attached to my testimony as Attachment  
2 LSM-1 and a redline version of the ESM tariff is attached as Attachment LSM-2.

3 **Q. IS THE COMPANY PROPOSING TO MAKE ANY CHANGES TO THE**  
4 **MONTHLY ES FORMS**

5 A. Yes. ES Form 1.10 needs to be revised to include the amount recovered in base  
6 rates for the environmental surcharge. The changes to Form 1.10 are provided in a  
7 redline version in Attachment LSM-3. No changes are proposed to any other ES  
8 forms in the monthly Rider ESM filings.

**B. DATA REQUESTS SPONSORED**

9 **Q. PLEASE IDENTIFY THE RESPONSES TO COMMISSION DATA**  
10 **REQUESTS YOU ARE SPONSORING.**

11 A. I sponsor the Company's responses to Staff Data Request Numbers 1 through 3 and  
12 5. These responses were prepared by me and/or under my direction and control and  
13 are true and accurate to the best of my knowledge.

**III. CONCLUSION**

14 **Q. WERE THE ESM BILLING FACTORS CHARGED DURING THE SIX-**  
15 **MONTH AND TWO-YEAR PERIODS UNDER REVIEW CALCULATED**  
16 **IN ACCORDANCE WITH THE RIDER ESM TARIFF AND APPLICABLE**  
17 **COMMISSION ORDERS?**

18 A. Yes, the ESM billing factors charged during the six-month and two-year periods  
19 under review were calculated in accordance with the Rider ESM tariff and  
20 applicable Commission Orders. The environmental surcharge billing factors  
21 charged during the review period were fair, just, and reasonable.

1 **Q. WHAT DOES THE COMPANY RECOMMEND FOR THE COMMISSION**  
2 **IN THIS CASE?**

3 A. The Commission should approve the “roll-in” of a revenue requirement of  
4 \$22,535,632 into base rates following the methodology discussed in the response  
5 to Staff Data Request Number 5. The implementation of the change in base rates  
6 reflecting the roll-in amount should take effect with bills rendered beginning with  
7 the first billing cycle in the second month following the month in which the  
8 Commission issues its Order in this proceeding.

9 The Commission should approve the proposed changes to the Rider ESM  
10 tariff and to the monthly ES Form 1.10. Also, the Commission should approve the  
11 use of an overall rate of return on capital of 8.822 percent after the Commission’s  
12 Order in this proceeding until changed by the Commission in Duke Kentucky’s  
13 next base rate case.

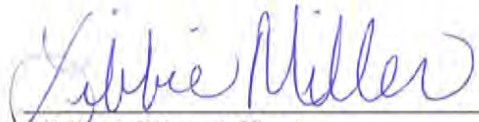
14 **Q. DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?**

15 A. Yes.

**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 testimony and that it is 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 12<sup>th</sup> 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

Duke Energy Kentucky, Inc.  
1262 Cox Road  
Erlanger, Kentucky 41018

KY. P.S.C. Electric No. 2  
Fourth Revised Sheet No. 76  
Cancels and Supersedes  
Third Revised Sheet No. 76  
Page 1 of 2

## ENVIRONMENTAL SURCHARGE MECHANISM RIDER

### APPLICABILITY

This rider is applicable to all retail sales in the Company's electric service area beginning with the billing month June 2018. Rate RTP program participants utilize the applicable portions of the Baseline Charge and Program Charge, as those terms are defined in Rate RTP, for this rider.

Standard electric rate schedules subject to this schedule are:

Residential: Rate Schedules RS and RS-TOU-CPP

Non-Residential: Rate Schedules DS, EH, SP, DP, DT, GSFL, TT, SL, TL, UOLS, NSU, SC, SE, and LED

### RATE

The monthly billing amount under each of the schedules to which this rider is applicable, shall be increased or decreased by a percentage factor according to the following formula:

Environmental Surcharge Billing Factor = Jurisdictional E(m) / R(m)

### DEFINITIONS

For all Plans:

E(m) = RORB + OE – EAS

RORB = (RB/12)\*ROR

RB = the Environmental Compliance Rate Base, defined as electric plant in service for applicable environmental projects adjusted for accumulated depreciation, accumulated deferred taxes, accumulated investment tax credits, CWIP and emission allowance inventory.

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

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

EAS = proceeds from Emission Allowance Sales.

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

Issued:

Effective:

Issued by Amy B. Spiller, President /s/ Amy B. Spiller



Duke Energy Kentucky, Inc.  
1262 Cox Road  
Erlanger, Kentucky 41018

KY. P.S.C. Electric No. 2  
Fourth Revised Sheet No. 76  
Cancels and Supersedes  
Third Revised Sheet No. 76  
Page 2 of 2

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### **DEFINITIONS (Contd.)**

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

- (1) Total E(m), (the environmental compliance plan revenue requirement), is multiplied by the Jurisdictional Allocation Factor. Jurisdictional E(m) is adjusted for any (Over)/Under collection, prior period adjustment, and by the subtraction of the Revenue Collected through Base Rates for the Current Expense month to arrive at Adjusted Net Jurisdictional E(m). Adjusted Net Jurisdictional E(m) is allocated to Residential and Non-Residential on the basis of Revenue as a Percentage of Total Average Revenue for the 12-months ending with the Current Month excluding Environmental Surcharge Revenues.

Prior Period Adjustment is the amount resulting from a directive by the Commission during the six-month and two-year reviews and corrections determined by the Company for prior period filings.

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

- (2) Residential R(m) is the average of total monthly residential revenue for the 12-months ending with the current expense month. Total revenue includes residential revenue, including all riders, but excluding environmental surcharge mechanism revenue.
- (3) Non-Residential R(m) is the average of total monthly non-residential revenue for the 12-months ending with the current expense month. Total revenue includes non-residential revenue, including all riders, but excluding environmental surcharge mechanism revenue, base fuel revenue and FAC revenue.
- (4) The current expense month (m) shall be the second month preceeding the month in which the Environmental Surcharge is billed.

### **SERVICE REGULATIONS, TERMS AND CONDITIONS**

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

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

---

Issued:

Effective:

Issued by Amy B. Spiller, President /s/ Amy B. Spiller

Duke Energy Kentucky, Inc.  
1262 Cox Road  
76  
Erlanger, Kentucky 41018

KY. P.S.C. Electric No. 2  
~~Third-Fourth~~ Revised Sheet No. 76  
Cancels and Supersedes  
~~Second-Third~~ Revised Sheet No.

Page 1 of 2

## ENVIRONMENTAL SURCHARGE MECHANISM RIDER

### APPLICABILITY

This rider is applicable to all retail sales in the Company's electric service area beginning with the billing month June 2018. Rate RTP program participants utilize the applicable portions of the Baseline Charge and Program Charge, as those terms are defined in Rate RTP, for this rider.

Standard electric rate schedules subject to this schedule are:

Residential: Rate Schedules RS and RS-TOU-CPP

Non-Residential: Rate Schedules DS, EH, SP, DP, DT, GSFL, TT, SL, TL, UOLS, NSU, SC, SE, and LED

(N)

### RATE

The monthly billing amount under each of the schedules to which this rider is applicable, shall be increased or decreased by a percentage factor according to the following formula:

Environmental Surcharge Billing Factor = Jurisdictional E(m) / R(m)

### DEFINITIONS

For all Plans:

E(m) = RORB + OE – EAS + ~~Prior Period Adjustment~~ + ~~(Over)Under Recovery~~

(D)

RORB = (RB/12)\*ROR

RB = the Environmental Compliance Rate Base, defined as electric plant in service for applicable environmental projects adjusted for accumulated depreciation, accumulated deferred taxes, accumulated investment tax credits, CWIP and emission allowance inventory.

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

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

EAS = proceeds from Emission Allowance Sales.

Issued by authority of an Order of the Kentucky Public Service  
Commission dated ~~October 12, 2023~~ in Case No. ~~2022-00372~~.

Issued: ~~October 27, 2023~~

Effective: ~~October 13, 2023~~

Issued by Amy B. Spiller, President /s/ Amy B. Spiller

KY. P.S.C. Electric No. 2  
~~Third-Fourth~~ Revised Sheet No. 76  
 Cancels and Supersedes  
~~Second-Third~~ Revised Sheet No.

Duke Energy Kentucky, Inc.  
 1262 Cox Road  
 76  
 Erlanger, Kentucky 41018

Page 2 of 2

## DEFINITIONS (Contd.)

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

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

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

(1) Total E(m), (the environmental compliance plan revenue requirement), is multiplied by the Jurisdictional Allocation Factor. Jurisdictional E(m) is adjusted for any (Over)/Under collection, ~~or~~ prior period adjustment, and by the subtraction of the Revenue Collected through Base Rates for the Current Expense month to arrive at Adjusted Net Jurisdictional E(m). Adjusted Net Jurisdictional E(m) is allocated to Residential and Non-Residential on the basis of Revenue as a Percentage of Total Average Revenue for the 12-months ending with the Current Month excluding Environmental Surcharge Revenues. (T)  
(D)

~~Prior Period Adjustment is the amount resulting from a directive by the Commission during the six-month and two-year reviews and corrections determined by the Company for prior period filings.~~ (T)  
(T)

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

(4)(2) Residential R(m) is the average of total monthly residential revenue for the 12-months ending with the current expense month. Total revenue includes residential revenue, including all riders, but excluding environmental surcharge mechanism revenue. (T)

(2)(3) Non-Residential R(m) is the average of total monthly non-residential revenue for the 12-months ending with the current expense month. Total revenue includes non-residential revenue, including all riders, but excluding environmental surcharge mechanism revenue, base fuel revenue and FAC revenue. (T)

(3)(4) The current expense month (m) shall be the second month ~~pre~~ceding the month in which the Environmental Surcharge is billed. (T)

## SERVICE REGULATIONS, TERMS AND CONDITIONS

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

Issued by authority of an Order of the Kentucky Public Service Commission dated ~~October 12, 2023~~ in Case No. ~~2022-00372~~.

Issued: ~~October 27, 2023~~

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~~Second-Third~~ Revised Sheet No.

Duke Energy Kentucky, Inc.  
1262 Cox Road  
76  
Erlanger, Kentucky 41018

Page 3 of 2

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Public Service Commission of Kentucky.

Issued by authority of an Order of the Kentucky Public Service  
Commission dated ~~October 12, 2023~~ in Case No. ~~2022-00372~~.

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Issued: ~~October 27, 2023~~

Effective: ~~October 13, 2023~~

Issued by Amy B. Spiller, President /s/ Amy B. Spiller

Redline Template Modifications

ES FORM 1.10

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

Calculation of Current Month Environmental Surcharge Factors

For the Expense Month of

Line No.	<b>E(m) = RORB + OE - EAS + Prior Period Adjustment + (Over)/Under Recovery</b>	Source	Environmental Compliance Plans	
1	Environmental Compliance Rate Base (RB)	ES Form 2.00	\$	-
2	RB ÷ 12 months	(1) ÷ 12	\$	-
3	Pretax Rate of Return (ROR)	ES Form 1.20		
4	Return on the Environmental Compliance Rate Base (RORB)	(2) x (3)	\$	-
5	Environmental Operating Expenses (OE)	ES Form 2.00	+ \$	-
6	Less: Proceeds from Emission Allowance Sales (EAS)	ES Form 2.00	- \$	-
7	Sub-Total E(m)	(4) + (5) - (6)	\$	-
8	Jurisdictional Allocation Ratio for Expense Month	Line 19		(T)
9	Jurisdictional E(m)	(7) x (8)	\$	-
10	Prior Period Adjustment	Note A	+ \$	-
11	Adjustment for (Over)/Under Recovery	ES Form 2.00	+	
12	Revenue Collected Through Base Rates		-	(N)
13	Total Adjusted Net Jurisdictional E(m)	(9) + (10) + (11) - (12)	\$	- (T)
14	Jurisdictional E(m) to be Recovered in Rider PSM	(7) - (9)	\$	-

**Calculation of Environmental Surcharge Billing Factors**

			Residential (Total Revenue)	Non-Residential (Net Revenue)	
15	Revenues as a Percentage of 12-Month Average Total Revenues	ES Form 3.00		%	%
16	Adjusted Net Jurisdictional E(m) - Allocated	(13) x (15)	\$	- \$	- (T)
17	<b>R(m)</b> Residential R(m) = Average Total Revenue (Total Revenue excluding ESM Non-Residential R(m) = Average Net Revenue (Total Revenue excluding ESM Revenue, Base Fuel and FAC Revenue)	ES Form 3.00 ES Form 3.00	\$	- \$	- -
18	Adjusted Net Jurisdictional E(m) / R(m)	(16) ÷ (17)		%	% (T)

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

19	Retail Revenue	ES Form 3.00	\$	-	%
20	Sales for Resale	Company Records	\$	-	%
21	Total Revenue	(19) + (20)	\$	-	% (T)

Note: (A) Amounts determined by the Commission during six-month and two-year reviews and corrections determined by the Company for prior period filings. (T)