## **COMMONWEALTH OF KENTUCKY**

## **BEFORE THE PUBLIC SERVICE COMMISSION**

In the Matter of:

Electronic Application Of Kentucky Power Company	)	
For Approval Of (1) A Certificate Of Public	)	
Convenience And Necessity To Make The Capital	)	
Investments Necessary To Continue Taking Capacity	)	
And Energy From The Mitchell Generating Station	)	Case No. 2025-00175
After December 31, 2028, (2) An Amended	)	
Environmental Compliance Plan, (3) Revised	)	
Environmental Surcharge Tariff Sheets, And (4) All	)	
Other Required Approvals And Relief	)	

## DIRECT TESTIMONY OF

### LERAH M. KAHN

## **ON BEHALF OF KENTUCKY POWER COMPANY**

### DIRECT TESTIMONY OF LERAH M. KAHN ON BEHALF OF KENTUCKY POWER COMPANY BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

#### CASE NO. 2025-00175

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### **EXHIBITS**

<u>Exhibit</u>	Description
Exhibit LMK-1	2025 Environmental Compliance Plan
Exhibit LMK-2	Illustration of the changes to the current Tariff E.S.
Exhibit LMK-3	Revised monthly environmental surcharge forms
Exhibit LMK-4	Estimated annual revenue requirement and monthly impact for both residential and all other rate schedules

## DIRECT TESTIMONY OF LERAH M. KAHN ON BEHALF OF KENTUCKY POWER COMPANY BEFORE THE PUBLIC SERVICE COMMISSION OF KENTUCKY

### CASE NO. 2025-00175

## I. <u>INTRODUCTION</u>

1	Q.	PLEASE STATE YOUR NAME, POSITION AND BUSINESS ADDRESS.
2	A.	My name is Lerah M. Kahn, and my position is Manager of Regulatory Services,
3		Kentucky Power Company ("Kentucky Power" or the "Company"). My business
4		address is 1645 Winchester Avenue, Ashland, Kentucky 41101.
		II. <u>BACKGROUND</u>
5	Q.	PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND
6		BUSINESS EXPERIENCES.
7	A.	In 2009, I earned a Bachelor of Arts degree in History from the University of Guelph
8		in Guelph, Ontario, Canada. Additionally, in 2010, I received a Paralegal diploma from
9		Algonquin Careers Academy in Mississauga, Ontario, Canada.
10		From 2013 through 2018, I worked at Sogefi Group Inc., a global supplier for
11		the automotive industry, as a material planner and accounting specialist. I accepted the
12		position of Regulatory Consultant with Kentucky Power Company in July 2018, and I
13		was promoted to my current position as Manager of Regulatory Services in February
14		2023.

## Q. WHAT ARE YOUR PRINCIPAL AREAS OF RESPONSIBILITY WITH KENTUCKY POWER?

A. As Manager of Regulatory Services, I am responsible for the supervision and direction
 of Kentucky Power's Regulatory Services Department, which has responsibility for all
 rate and regulatory matters involving the Company.

## 6 Q. HAVE YOU PREVIOUSLY TESTIFIED IN ANY REGULATORY 7 PROCEEDINGS?

8 Yes. I have submitted testimony before this Commission in Case No. 2019-00389 A. 9 (application for approval of the Company's 2019 Environmental Compliance Plan 10 ("ECP")), Case No. 2020-00133 (Commission's examination of the Company's 11 environmental surcharge mechanism for the two-year billing period ending June 30, 12 2019), Case No. 2020-00174 (the Company's previous base rate case), Case No. 2021-13 00004 (application for approval of the Company's 2021 ECP), Case No. 2022-00387 14 (application for a special contract), Case No. 2023-00159 (the Company's most recent 15 base rate case), Case No. 2023-00372 (Commission's examination of the Company's environmental surcharge mechanism for the four-year billing period ending June 30, 16 17 2023), Case No. 2024-00136 (Commission's examination of the Company's Fuel 18 Adjustment Clause mechanism for the six-month period ending April 30, 2023), and 19 Case No. 2024-00344 (Application for Advanced Metering Infrastructure).

## III. <u>PURPOSE OF TESTIMONY</u>

1	Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?
2	A.	My testimony supports the Company's application for approval of an updated
3		Environmental Compliance Plan ("2025 Environmental Compliance Plan"), and
4		associated cost recovery and tariff changes. Specifically, my testimony addresses:
5		• Changes to the Company's existing 2021 Environmental Compliance Plan <sup>1</sup>
6		("Current Environmental Compliance Plan") to reflect the addition of Project 23;
7		• Changes to the Company's Environmental Surcharge Tariff ("Tariff E.S.") to
8		reflect the recovery of Project 23;
9		• Changes to the Company's monthly environmental surcharge ("ES") forms 3.10
10		and 3.30;
11		• Provide and support the calculation of the revenue requirement for Project 23;
12		and,
13		• The total retail and residential impact of the 2025 Environmental Compliance
14		Plan.
15	Q.	ARE YOU SPONSORING ANY EXHIBITS?
16	A.	Yes, I am sponsoring the following exhibits:
17		• Exhibit LMK-1 – 2025 Environmental Compliance Plan;
18		• Exhibit LMK-2 – Illustration of the changes to the current Tariff E.S.;
19		• Exhibit LMK-3 – Revised Monthly ES Forms 3.10 and 3.30; and

<sup>&</sup>lt;sup>1</sup> The Company's 2021 Environmental Compliance Plan was updated in Case No. 2023-00159 to remove Rockport related projects.

1		• Exhibit LMK-4 – Estimated annual revenue requirement and estimated monthly
2		impact of the environmental surcharge for both residential and all other rate
3		schedules.
4	Q.	WERE THESE EXHIBITS PREPARED BY YOU OR UNDER YOUR
5		DIRECTION?
6	A.	Yes.
	IV.	KENTUCKY POWER'S 2025 ENVIRONMENTAL COMPLIANCE PLAN
7	Q.	HOW IS THE COMPANY AMENDING ITS CURRENT PLAN?
8	A.	The 2025 Environmental Compliance Plan adds Project 23 to Kentucky Power's
9		Current Environmental Compliance Plan. Project 23 is described in the 2025
10		Environmental Compliance Plan as "Costs associated with EGL compliance at the
11		Mitchell Plant." No other changes to the Current Environmental Compliance Plan are
12		proposed in the 2025 Environmental Compliance Plan. The Commission approved
13		Kentucky Power's Current Environmental Compliance Plan in Case No. 2021-00004
14		(inclusion of Project 22, CCR) and 2023-00159 (removal of Rockport-related projects)
15		by Orders dated July 15, 2021, and January 19, 2024, respectively. A copy of the
16		proposed 2025 Environmental Compliance Plan is included as Exhibit LMK-1.
17	Q.	PLEASE EXPLAIN GENERALLY HOW KENTUCKY POWER RECOVERS
18		APPROVED ENVIRONMENTAL COMPLIANCE COSTS THROUGH THE
19		ENVIRONMENTAL SURCHARGE.
20	A.	Kentucky Power recovers the costs of authorized environmental projects included in
21		its ECP through a combination of base rates and the environmental surcharge. The

22 authorized projects included in the Company's ECP are those projects necessary for

1 the Company to comply with Federal Clean Air Act and federal, state, and local 2 requirements applicable to coal combustion wastes and by-products from coal-fired 3 generation facilities ("Environmental Requirements"), as provided in KRS 278.183. 4 Each month, the Company calculates total costs associated with the approved 5 environmental projects in its ECP. The monthly total cost includes expenses and 6 credits related to the operation of approved projects, a return on environmental rate 7 base including construction work in progress ("CWIP"), a return on the Company's 8 allowance inventory, emission allowance expenses, costs associated with the 9 consumption of consumables, depreciation, and property taxes for the Mitchell Plant. 10 The Company then compares the total environmental costs to the amount of 11 environmental costs included in its base rates. If the total monthly environmental costs 12 exceed the monthly base rate amount, customers are charged the difference through the 13 environmental surcharge. If the total monthly environmental costs are less than the monthly base rate amount, customers are credited the difference through the 14 15 environmental surcharge.

#### V. <u>MITCHELL EFFLUENT LIMITATIONS GUIDELINES ("ELG") PROJECT</u> THAT COMPRISES PROJECT 23

16 Q. PLEASE DESCRIBE THE ELG PROJECT (PROJECT 23).

A. The ELG Project allows the Mitchell Plant to operate in compliance with the Steam
Electric Effluent Limitations Guidelines Rule (the "ELG Rule"). Company Witness
Snodgrass discusses the ELG Project at the Mitchell Plant in more detail.

1

## Q. DOES KENTUCKY POWER OWN THE MITCHELL PLANT?

A. Kentucky Power owns an undivided 50% interest in the Mitchell Plant. The other
undivided 50% interest is owned by Wheeling Power Company.

# 4 Q. HAS KENTUCKY POWER PAID FOR ANY PORTION OF THE ELG 5 PROJECT?

6 Yes, Kentucky Power has paid for a small portion of the ELG Project. The A. 7 Commission's May 3, 2022 Order in Case No. 2021-00004 found that \$1.5 million of 8 ELG Project costs incurred in developing and evaluating ELG compliance options were 9 prudently incurred in pursuit of a certificate of public convenience and necessity, and 10 it authorized the Company to record a regulatory asset for those costs. That order further determined that the regulatory asset should be amortized and recovered through 11 12 the Tariff E.S. over two years. That regulatory asset has been fully recovered as of the 13 The revenue requirement presented in this case; therefore, date of this filing. 14 appropriately excludes those costs to prevent duplicate recovery.

#### VI. <u>COST RECOVERY</u>

#### 15 Q. WHAT IS KENTUCKY POWER'S SHARE OF THE ELG PROJECT?

A. As discussed by Company Witness Wolffram, the estimated investment necessary to
reflect a 50% share of the ELG Project is \$77.9 million. This number consists of two
elements: a) \$20.1 million which represents 50% of the costs charged to West Virginia
customers through December 2025; and b) \$57.8 million which represents 50% of the

20 ELG Project-related plant balance estimated as of December 2025.

## Q. PLEASE EXPLAIN THE TREATMENT OF THESE TWO ELEMENTS IN EXHIBIT LMK-4.

A. These two items are being treated similarly in that both calculate recovery of: a) a return
on; and b) a return of their costs. The recovery for the return on for both components
is presented in columns F through V in the "ELG Rev Req" tab of Exhibit LMK-4.

As Company Witness Wolffram explains, the Company proposes to create a
regulatory asset and amortize the approximately \$20.1 million for 72 months from
January 2026 through December 2031. Column AD in the "ELG Rev Req" tab of
Exhibit LMK-4 presents these costs consistent with the Company's proposal.

10 The \$57.8 million plant balance for the ELG Project estimated as of December 11 2025 is proposed to be treated as rate base like all other plant in-service within the 12 environmental surcharge and recovered through 2040.

# 13 Q. WHAT IS THE ESTIMATED FIRST YEAR ANNUAL REVENUE 14 REQUIREMENT FOR PROJECT 23?

A. The estimated annual revenue requirement for Project 23 in year one is \$13.1 million.
Please see Exhibit LMK-4 for a full breakdown of the revenue requirement through
2040.

## 18 Q. WHAT DEPRECIATION RATE WAS USED IN THE REVENUE 19 REQUIREMENT?

A. Company Witness Wolffram proposes and supports the use of an annual depreciation
 rate for the \$57.8 million that is similar to applying a 6.67% (or 1/15 years) depreciation
 rate. This rate is used to determine the depreciation expense amount found in Column

- Z on the "ELG Rev Req" tab of Exhibit LMK-4. The actual depreciation rate will be
   dependent on the exact plant balance amounts transferred to Kentucky Power.
  - VII. PROCESS FOR DETERMINING THE REVENUE REQUIREMENT
  - 4 **REVENUE REQUIREMENT FOR THE ENVIRONMENTAL SURCHARGE.**

PLEASE DESCRIBE THE PROCESS USED TO CALCULATE THE

3

Q.

- 5 A. The revenue requirement and its derivation are provided in Exhibit LMK-4. The
  6 revenue requirement is calculated in a step-wise fashion as described below.
- 7 First, the rate base is calculated by taking the sum of the monthly depreciation 8 amount and the monthly accumulated deferred federal income tax from the original 9 cost. Then, the monthly return on rate base is calculated by multiplying the calculated environmental rate base by the Commission-approved weighted average cost of 10 capital.<sup>2</sup> The calculated monthly return on environmental rate base next is added to the 11 12 monthly O&M expenses (provided by Company Witness Snodgrass), monthly 13 depreciation expense, monthly property tax, and lastly the amortization expense for 14 costs incurred prior to Commission approval in this case (assumed through December 15 2025 as discussed above), to produce a total monthly revenue requirement. Finally, the 16 12-months ending May 2025 average retail allocation factor was applied to calculate 17 the monthly retail revenue requirement.

<sup>&</sup>lt;sup>2</sup> As supported by Company Witness Wolffram and approved by Order dated January 19, 2024 in Case No. 2023-00159.

## VIII. <u>RETAIL IMPACT</u>

1	Q.	WHAT IS THE ESTIMATED MONTHLY EFFECT OF PROJECT 23 ON
2		THE AVERAGE RESIDENTIAL CUSTOMER'S BILL?
3	A.	For the average residential customer using 1,189 kWh per month, the monthly increase
4		in the customer's total bill is expected to be \$3.68 (or 2.02%). <sup>3</sup> Exhibit LMK-4, tab
5		"Retail Impact" provides detailed calculations of the estimated monthly impact of the
6		environmental surcharge for both residential and all other rate classes.
7	Q.	WHEN WOULD CUSTOMERS BEGIN SEEING THE COSTS REFLECTED
8		IN KENTUCKY POWER'S ENVIRONMENTAL SURCHARGE?
9	A.	The Company's environmental surcharge will reflect and begin recovering these costs
10		in the first billing month practicable following the Commission's final order in this
11		proceeding.
		IX. <u>CHANGES TO TARIFF E.S.</u>
12	Q.	HAS THE COMPANY REVISED TARIFF E.S. (ENVIRONMENTAL
13		SURCHARGE) TO REFLECT THE CHANGES PROPOSED FOR THE 2025
14		ENVIRONMENTAL COMPLIANCE PLAN?
15	А.	Yes. A copy of the Company's proposed Tariff E.S., with markups indicating changes
16		from the current Tariff E.S., is included as Exhibit LMK-2.

<sup>&</sup>lt;sup>3</sup> The monthly bill impacts were calculated based on the average customer bills for the twelve months ended May 2025.

## Q. WHAT CHANGES TO THE COMPANY'S TARIFF E.S. ARE BEING PROPOSED?

The Company is proposing three changes to Tariff E.S. in this proceeding. First, the 3 A. 4 Company is updating references to its ECP on tariff sheet 32-2 to refer to the 2025 5 Environmental Compliance Plan, which includes Project 23. Second, the Company is updating the list of environmental costs for total company provided on tariff sheet 32-6 7 4 to add costs associated with the Project 23 and to remove the previous amortization 8 of prudently incurred ELG costs described above from Case No. 2021-00004. Third, 9 the Company is updating the list of environmental equipment at the Mitchell Plant on 10 tariff sheet 32-4 to include Project 23.

## 11 Q. HAS THE COMPANY ALSO REVISED THE ENVIRONMENTAL

12 SURCHARGE FORMS USED FOR ITS MONTHLY FILING?

A. Yes. Exhibit LMK-3 illustrates the modifications necessary to the environmental
 surcharge forms. There are two forms being modified to incorporate Project 23.

First, Form 3.10 is being modified to:

15

- add a new line for the requested ELG regulatory asset (approximately \$20.1
  million) (line 13);
- isolate the depreciation expense specific to the capital plant portion of Project
  23 (\$57.8 million) (line 42); and
- add a new line for the monthly installment of the ELG regulatory asset
  amortization (line 44).
- 22 Second, Form 3.30 is being modified to identify Project 23.

Q. WHAT DATE IS THE COMPANY PROPOSING THAT THE CHANGES TO
 TARIFF E.S. BECOME EFFECTIVE?

3 A. In the normal course of business, the Company's monthly environmental surcharge is 4 applied on a bills-rendered basis for the applicable billing month (as shown on Form 5 1.00). Implementing on a services-rendered basis would create an unnecessary 6 deviation, especially because these costs should be equally applied across the billing 7 cycles. Accordingly, the Company is proposing that the changes associated with 8 Project 23 go into effect for bills rendered beginning with Cycle 1 in the first month 9 practicable following an Order in this case.<sup>4</sup>

## X. <u>CONCLUSION</u>

## 10 Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

11 A. Yes.

<sup>&</sup>lt;sup>4</sup> The Company anticipates an Order to be issued by December 30, 2025, in accordance with KRS 278.183. Upon an Order, the bill to Kentucky Power representing the investments authorized by the Order will need to be processed before the investments can be included within the environmental surcharge mechanism can occur.

#### VERIFICATION

The undersigned, Lerah M. Kahn, being duly sworn, deposes and says she is the Manager of Regulatory Services for Kentucky Power, that she has personal knowledge of the matters set forth in the foregoing testimony and the information contained therein is true and correct to the best of her information, knowledge, and belief after reasonable inquiry.

4 Lahr

Lerah M. Kahn

Commonwealth of Kentucky County of Boyd

Case No. 2025-00175

Subscribed and sworn to before me, a Notary Public in and before said County

and State, by Lerah M. Kahn, on June 25, 2025.

)

)

)

hn Michelle Caldwell

My Commission Expires May 5, 2027

Notary ID Number KYNP71841

MARILYN MICHELLE CALDWELL Notary Public Commonwealth of Kentucky Commission Number KYNP71841 My Commission Expires May 5, 2027

Kentucky Power C	Company's Previously	Approved Environmental Compliance Projects

Project	Plant	Pollutant	Description	In-Service Year
Troject			-	
1	Mitchell	$NO_X$ , $SO_2$ , and $SO_3$	Mitchell Units 1 and 2 Water Injection, Low NO <sub>X</sub> Burners, Low NO <sub>X</sub> Burner Modification, SCR, FGD, Landfill, Coal Blending Facilities and SO <sub>3</sub> Mitigation	1993-1994-2002-2007
2	Mitchell	$\mathrm{SO}_2$ , $\mathrm{NO}_{\mathrm{X}_i}$ and Gypsum	Mitchell Plant Common CEMS, Replace Burner Barrier Valves and Gypsum Material Handling Facilities	1993-2004-2007
3-Obsolete				
4-Obsolete				
5	Mitchell	SO <sub>2</sub> /NO <sub>X</sub> /Particulates/V OC and etc.	Title V Air Emission Fees at the Mitchell Plant	Annual
6	Big Sandy and Mitchell	NO <sub>X</sub>	Costs Associated with Nox Allowances	As-Needed
7	Big Sandy and Mitchell	SO <sub>2</sub>	Costs Associated with SO <sub>2</sub> Allowances	As-Needed
8	Big Sandy and Mitchell	SO <sub>2</sub> / NO <sub>X</sub>	Costs associated with the CSAPR Allowances	As-Needed
9	Mitchell	Particulates	Precipitator Modifications - Mitchell Plant Units 1 and 2	2007-2013
10	Mitchell	Particulates	Bottom Ash and Fly Ash Handling - Mitchell Plant Units 1 and 2	2008 & 2010
11	Mitchell	Mercury	Mercury Monitoring (MATS) - Mitchell Plant Units 1 and 2	2014
12	Mitchell	Selenium	Dry Fly Ash Handling Conversion - Mitchell Plant Units 1 and 2	2015
13	Mitchell	Fly Ash, Bottom Ash, Gypsum, and WWTP Solids	Coal Combustion Waste Landfill - Mitchell Plant Units 1 and 2	2014 & 2015
14	Mitchell	Particulates	Electrostatic Precipitator Upgrade - Mitchell Plant Unit 2	2015
15-Obsolete				
16-Obsolete				
17-Obsolete				
18-Obsolete				
19-Obsolete				
20	Mitchell	Consumables	Costs associated with the use of consumables used in conjunction with approved ECP projects. These costs include the return on inventory of consumables as well as consumption of consumables. These consumables include but are not limited to sodium bicarbonate, activated carbon, anhydrous ammonia, trona, lime hydrate, limestone, polymer, and urea.	As-Needed
21-Obsolete				
22	Mitchell	Bottom Ash and Gypsum	Costs associated with CCR compliance at the Mitchell Plant.	2023
Kentucky Power Company's Proposed Environmental Compliance Projects				
23	Mitchell	Waste Water Discharge	Costs associated with ELG compliance at the Mitchell Plant.	2024

## Tariff E.S. Continued (Environmental Surcharge)

3. Current Period Revenue Requirement, CRR CRR=[((RB <sub>KP(c)</sub>)(ROR <sub>KP(c)</sub>)/12) + OE <sub>KP(c)</sub> - AS]

Where:

RB KP(c)	=	Environmental Compliance Rate Base for Mitchell.
ROR KP(c)	=	Annual Rate of Return on Mitchell Environmental Compliance Rate Base; Annual Rate divided by 12 to restate to a Monthly Rate of Return.
OE KP(c)	=	Monthly Pollution Control Operating Expenses for Mitchell.
AS	=	Net proceeds from the sale of Title IV and CSAPR SO 2 emission allowances, ERCs, and NOx emission allowances, reflected in the month of receipt.

"KP(C)" identifies components from Mitchell Units - Current Period.

The Environmental Compliance Rate Base for Kentucky Power reflects the current cost associated with the 1997 Plan, the 2003 Plan, the 2005 Plan, the 2017 Plan, the 2017 Plan, the 2019 Plan, and the 2021 Plan, and the 2025 Plan. The Environmental Compliance Rate Base for Kentucky Power should also include construction work in progress until assets are placed in service and cash working capital allowance based on the net operations and maintenance expense lead days of 53.92 authorized in Case No. 2023-00159. The Operating Expenses for Kentucky Power reflects the current operating expenses associated with the 1997 Plan, the 2003 Plan, the 2005 Plan, the 2007 Plan, the 2015 Plan, the 2017 Plan, the 2019 Plan, and the 2021 Plan, and the 2025 Plan.

The Rate of Return for Kentucky Power is 9.65% rate of return on equity as authorized by the Commission in its Order Dated January 19, 2024, Case No. 2023-00159.

Net Proceeds from the sale of emission allowances and ERCs that reflect net gains will be a reduction to the Current Period Revenue Requirement, while net losses will be an increase.

The Current Period Revenue Requirement will reflect the balances and expenses as of the Expense Month of the filing.

Continued on Sheet 32-3

## **Tariff E.S. Continued** (Environmental Surcharge)

6. Environmental costs "E" shall be the Company's costs of compliance with the Clean Air Act and those environmental requirements that apply to coal combustion wastes and by-products, as follows:

Total Company:

- return on Title IV and CSAPR SO<sub>2</sub> allowance inventory
- over/under recovery balances between the actual costs incurred less the amount collected through the environmental surcharge
- costs associated with any Commission's consultant approved by the Commission
- costs associated with the consumption of Title IV and CSAPR SO<sub>2</sub> allowances
- costs associated with the consumption of NO<sub>x</sub> allowances
- return on NO<sub>x</sub> allowance inventory
- costs associated with maintaining approved pollution control equipment including material and contract labor (excluding plant labor)
- costs associated with consumables used in conjunction with approved environmental projects.
- return on inventories of consumables used in conjunction with approved environmental projects.
- \_\_\_return on environmental compliance rate base including construction work in progress.
- return on the ELG regulatory asset for costs borne by Wheeling Power through XXXX XXXX.
- monthly expense to amortize the ELG regulatory asset for costs borne by Wheeling Power over a six year period to begin with XXXX XXXX and conclude with XXXX XXXX billing.
- Monthly expense to amortize the \$1,446,998.35 regulatory asset for prudently incurred ELG (Effluent Limitation Guidelines) project costs over a two-year period to begin with July 2022 billing and conclude with June 2024 billing.

The Company's share of costs associated with the following environmental equipment at the Mitchell Plant:

- Mitchell Unit Nos 1 and 2 Water Injection, Low NO<sub>x</sub> burners, Low NO<sub>x</sub> burner Modification, SCR, FGD, Landfill, Coal Blending Facilities and SO<sub>3</sub> Mitigation
- Mitchell Plant Common CEMS, Replace Burner Barrier Valves and Gypsum Material Handling Facilities
- Air Emission Fees
- Precipitator Modifications and Upgrades
- Coal Combustion Waste Landfill
- Bottom Ash and Fly Ash Handling
- Mercury Monitoring (MATS)
- Dry Fly Ash Handling Conversion
- Wastewater Ponds (for the Mitchell CCR compliance project) with depreciation expense calculated using a 20 percent depreciation rate approved by the Commission's July 15, 2021 and May 3, 2022 Orders in Case No. 2021-00004.
- Water Biological Treatment System with Ultrafiltration (for the ELG compliance project) with an annual depreciation expense that is 1/15th of the net plant transferred to Kentucky Power. The calculated depreciation rate used by Kentucky Power will divide the annual depreciation expense by the original cost of plant transferred.
- 7. The monthly environmental surcharge shall be filed with the Commission ten (10) days before it is scheduled to go into effect, along with all necessary supporting data to justify the amount of the adjustments which shall include data and information as may be required by the Commission.

#### KENTUCKY POWER COMPANY Environmental Surcharge Form 3.10 - Mitchell Environmental Costs SAMPLE ONLY

Ln.				
No.				
	Cost Component	Non-FGD Costs	FGD Costs	Total Costs
1	Utility Plant at Original Cost	Х	X	X
2	Less Accumulated Depreciation	X	X	X
3	Less Accumulated Deferred Income Tax	X	X	X X
4	Net Utility Plant	X	X	
5	*SO2 Emission Allowance Inventory	X X	X X	X X
6	*CSAPR S02 Emission Allowance Inventory	X	X	X X
7 8	*CSAPR NOx Emission Allowance Inventory (Seasonal) *CSAPR AN Emission Allowance Inventory (Annual)	X X	X X	X X
9	Limestone Inventory (1540006)	X	X	X
10	Urea Inventory (1540012)	X	X	X
11	Limestone In-Transit Inventory (1540022)	X	X	X
12	Urea In-Transit Inventory (1540023)	X	X	X
13	ELG Regulatory Asset Balance	X	X	X
14	Construction Work in Progress (CWIP)	X	X	X
15	Cash Working Capital Allowance	X	X	X
16	Non-FGD Rate Base as of XXXX	Х		
17	Additional Non-FGD Rate Base Post XXXX	Х		
18	Total Rate Base	X	X	X
19	***WACC for Non-FGD Rate Base as of XXXX X	Х		Х
20	***WACC for FGD and Non-FGD Additions to XXXX Rate Base X	Х	Х	Х
21	Monthly Return for Non-FGD Rate Base as of XXXX	Х		Х
22	Monthly Return for FGD and Non-FGD Additions to XXXX Rate Base	Х	Х	Х
23	Monthly Disposal (5010000)	Х	Х	Х
24	Monthly Fly Ash Sales (5010012)	X	Х	Х
25	Monthly Urea Expense (5020002)	X	X	X
26	Monthly Trona Expense (5020003)	Х	X	X
27	Monthly Lime Stone Expense (5020004)	X	X	X
28 29	Monthly Polymer Expense (5020005)	X X	X X	X X
29 30	Monthly Lime Hydrate Expense (5020007)	X	X	X X
31	Monthly WV Air Emission Fee ** SO2 Consumption	X	X	X
32	** CSAPR S02 Consumption	X	X	X
33	CSAPR Annual NOx Consumption	X	X	X
34	CSAPR Seasonal NOx consumption	X	X	X
35	Total Monthly Operation Costs	X	X	X
36	Monthly FGD Maintenance Expense	X	X	X
37	Monthly Non-FGD Maintenance Expense	X	X	X
38	Total Monthly Maintenance Expense	X	X	X
39	Monthly Depreciation Expense	Х	Х	Х
40	Monthly Catalyst Amortization Expense	Х	Х	Х
41	**** Monthly CCR Depreciation Expense	Х	Х	Х
42	Monthly ELG Depreciation Expense	Х	Х	Х
43	Monthly Legacy CCR-ELG Rules - ARO Depreciation and Accretion Expense	Х	Х	Х
44	Monthly Installment of ELG Regulatory Asset Amortization	Х	Х	Х
45	Monthly Property Tax	X	X	X
46	Total Monthly Other Expenses	X	X	X
47	Total Monthly Operation, Maintenance, and Other Expenses	X	X	X
48	O&M for corresponding month of test year	X	X	X
49 50	Difference in Test Year Month O&M & Current Month O&M Gross-up for Uncollectible Expense & KPSC Maint Fee X.XXXX	X X	X X	X X
50	• •	<u> </u>	<u> </u>	X
51	Total Revenue Requirement	Λ	Λ	Λ

\* Inventory Includes Total Kentucky Power allowances inventory.

\*\* Includes Consumption for Mitchell only.

\*\*\* In accordance with the Commission's January 19, 2024 Order in Case No. 2023-00159 Mitchell Non-FGD rate base as of 3/31/2023 is to utilize an ROE of 9.75 percent and the return on additional Mitchell Non-FGD plant an ROE of 9.65 percent.

\*\*\*\* In accordance with the Commission's July 15, 2021 and May 3, 2022 Orders in Case No. 2021-00004.

#### KENTUCKY POWER COMPANY Environmental Surcharge Form 3.30 - Mitchell Plant Original Plant and Accumulated Depreciation SAMPLE ONLY

	Plant Description		Accumulated Depreciation	
Mitchell	FGD	Х	Х	
Mitchell	Mitchell Units 1 and 2 Water Injection	Х	Х	
Mitchell	Low NOX Burners	Х	Х	
Mitchell	Low NOX Burner Modification	Х	Х	
Mitchell	SCR	Х	Х	
Mitchell	Landfill	Х	Х	
Mitchell	Coal Blending Facilities	Х	Х	
Mitchell	SO3 Mitigation	Х	Х	
Mitchell	Mitchell Plant Common CEMS	Х	Х	
Mitchell	Replace Burner Barrier Valves	Х	Х	
Mitchell	Gypsum Material Handling Facilities	Х	Х	
Mitchell	Precipitator Modifications - Mitchell Plant Units 1 and 2	Х	Х	
Mitchell	Bottom Ash and Fly Ash Handling - Mitchell Plant Units 1 and 2	Х	Х	
Mitchell	Mercury Monitoring (MATS) - Mitchell Plant Units 1 and 2	Х	Х	
Mitchell	Dry Fly Ash Handling Conversion - Mitchell Plant Units 1 and 2	Х	Х	
Mitchell	Coal Combustion Waste Landfill - Mitchell Plant Units 1 and 2	Х	Х	
Mitchell	Electrostatic Precipitator Upgrade - Mitchell Plant Unit 2	Х	Х	
Mitchell	Wastewater Ponds (CCR)	Х	Х	
Mitchell	Water Biological Treatment System with Ultrafiltration (ELG)	Х	Х	
Mitchell	Non-FGD Total	Х	Х	