

Kentucky Power Company
KPSC Case No. 2025-00036
Commission Staff's First Set of Data Requests
Dated March 6, 2025

DATA REQUEST

KPSC 1_1 Prepare a summary schedule showing the calculation of E(m) and the surcharge factor for the expense months under review. ES Form 1.00 and 1.10 can be used as a model for this summary. Include the two expense months subsequent to each specific review period that are the subject of this proceeding in order to show the over- and under-recovery adjustments for the months included for each of the periods under review. Include a calculation of any additional over- or under-recovery amount Kentucky Power believes needs to be recognized for the six-month reviews. 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 KPCO_R_KPSC_1_1_Attachment1 for the requested information.

Witness: John D. Cullop

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DATA REQUEST

KPSC 1_2 The net gain or loss from sulfur dioxide and nitrogen oxide emission allowance sales is reported on ES Form 3.00, Calculation of Current Period Revenue Requirement, Third Component and Second Component. For each expense month of the specific periods under review, provide an explanation of how the gain or loss reported in the expense month was calculated and describe the transaction(s) that was the source of the gain or loss.

RESPONSE

Please see KPCO_R_KPSC_1_2_Attachment1 for the requested information.

Witness: John D. Cullop

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- KPSC 1_3** Refer to ES Form 3.13 and 3.10, Mitchell Environmental Costs for each of the expense months of the specific periods under review. Explain the reason(s) for any change in the expense levels from month to month if that change is greater than plus or minus 10 percent for each of the following operating and maintenance costs listed:
- a. Line 22 Monthly Disposal (5010000)
 - b. Line 24 Monthly Urea Expense (5020002)
 - c. Line 25 Monthly Trona Expense (5020003)
 - d. Line 26 Monthly Lime Stone Expense (5020004)
 - e. Line 27 Monthly Polymer Expense (5020005)
 - f. Line 28 Monthly Lime Hydrate Expense (5020007)
 - g. Line 29 Monthly WV Air Emission Fee
 - h. Line 35 Monthly FGD Maintenance Expense
 - i. Line 36 Monthly Non-FGD Maintenance Expense

RESPONSE

a. Monthly Disposal. Monthly disposal expense reflects revenues derived from sales of gypsum to the neighboring wallboard plant. The variations during the review period reflect monthly changes in the wallboard plant's demand for gypsum from the Mitchell generating station.

b & d. Urea and Limestone. Usage of urea and limestone at Mitchell varies directionally (but not necessarily directly) with changes in the level of plant operation, including variations resulting from outages and deratings. For example, no net generation occurred at Mitchell Unit 2 in Oct 2023, Mitchell Unit 1 Oct-Nov 2023, Mitchell Unit 1 May 2024, and Mitchell Unit 2 Sep 2024 which reduced urea and limestone expenses during those months.

c, e, & f. Trona, Lime Hydrate, and Polymer. Trona, lime hydrate, and polymer are expensed upon delivery to the plant. The monthly variations in these consumable expenses reflect the monthly variations in the deliveries of those three consumables to the plant.

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g. Air Emission Fees. Kentucky Power receives an invoice for West Virginia Department of Environmental Protection air emission fees once annually and includes 1/12 of the annual total in each monthly filing. The invoices were booked to the general ledger in July of each year.

h & i. Maintenance Expense. The monthly variations in maintenance expense result primarily from variation in maintenance activities at the plant. Plant management makes maintenance decisions to ensure the safe, reliable, and compliant operation of the Mitchell Plant.

More specifically, FGD maintenance events during the review period that led to monthly variability included:

Yr-Mo	FGD Equipment Maintenance	Sum of Act \$
2024 - (10) Oct	ABSORBER RECYCLE PUMP 2E SUCTION VALVE, FGD, AR	\$ 81,491
2024 - (10) Oct	ABS DUCT WORK	\$ 15,125
2024 - (09) Sep	ABSORBER RECYCLE PUMP 2E SUCTION VALVE, FGD, AR	\$ 49,330
2024 - (09) Sep	ABSORBER RECYCLE PUMP 2C, FGD, AR	\$ 29,345
2024 - (09) Sep	ABS WFGD AGITATOR	\$ 26,797
2024 - (07) Jul	VACUUM BELT FILTER A VACUUM PUMP A, FGD	\$ 24,662
2024 - (05) May	FDG WW PIPE/VALV	\$ 19,333
2024 - (05) May	ABS WFGD QUENCH WATER	\$ 15,148
2024 - (04) Apr	ABS DUCT WORK	\$ 39,224
2024 - (04) Apr	DSI PIPE/VALV	\$ 23,907
2024 - (02) Feb	FDG WW PIPE/VALV	\$ 20,594
2023 - (11) Nov	AUX TRANSFORMERS 138 KV PRIMARY FGD	\$ 19,989
2023 - (11) Nov	LIMESTONE RECLAIM TO SILO	\$ 19,891
2023 - (10) Oct	ABS DUCT WORK	\$ 38,904
2023 - (10) Oct	AUX TRANSFORMERS 138 KV PRIMARY FGD	\$ 33,040
2023 - (10) Oct	FAN, ID #2 U2	\$ 31,880
2023 - (10) Oct	ABSORBER RECYCLE PUMP 2C, FGD, AR	\$ 22,050
2023 - (08) Aug	AUX TRANSFORMERS 138 KV PRIMARY FGD	\$ 23,411
2023 - (07) Jul	ABSORBER RECYCLE PUMP 2C, FGD, AR	\$ 24,836
2023 - (07) Jul	BALL MILL A, FGD	\$ 24,835

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Similarly, for non-FGD Maintenance expenses, expenses varied in connection with changes in maintenance activity. Additional maintenance events during the review period that led to monthly variability included:

Year - Month	Non-FGD Equipment Maintenance	Amount (Approx.)
2024 - (10) Oct	PRECIPITATOR BOX NO4 U2	\$ 89,246
2024 - (10) Oct	CEMS	\$ 25,841
2024 - (10) Oct	DFA TRANSPORT-VACUUM	\$ 22,143
2024 - (09) Sep	PRECIPITATOR BOX NO4 U2	\$ 163,605
2024 - (05) May	PRECIPITATOR BOX NO1 U1	\$ 141,222
2024 - (05) May	CEMS	\$ 23,723
2024 - (04) Apr	PRECIPITATOR BOX NO3 U2	\$ 126,423
2024 - (04) Apr	BOTTOM ASH DISPOSAL SYSTEM CONTROLS U1	\$ 55,087
2024 - (04) Apr	BOTTOM ASH DISPOSAL SYSTEM CONTROLS U2	\$ 53,670
2024 - (04) Apr	PRECIPITATOR BOX NO1 U1	\$ 22,139
2024 - (01) Jan	AMMONIA CONVERSION	\$ 28,422
2023 - (11) Nov	PRECIPITATOR BOX NO1 U1	\$ 108,701
2023 - (11) Nov	SCR DUCTS	\$ 53,228
2023 - (11) Nov	PRECIPITATOR BOX NO3 U2	\$ 22,517
2023 - (10) Oct	PRECIPITATOR BOX NO1 U1	\$ 42,242
2023 - (10) Oct	SCR DUCTS	\$ 32,941
2023 - (10) Oct	CEMS OPACITY MONITOR STACK	\$ 22,150
2023 - (09) Sep	BOTTOM ASH PIPE NO2 U1	\$ 44,225
2023 - (09) Sep	PRECIPITATOR BOX NO1 U1	\$ 34,932
2023 - (09) Sep	PRECIPITATOR BOX NO3 U2	\$ 24,503

Witness: John D. Cullop

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DATA REQUEST

- KPSC 1_4** Refer to ES Form 3.11, 3.12, and 3.40 for each expense month covered by the billing periods under review.
- a. For each month in the six-month review periods, provide the calculation that supports the total cost of allowances consumed that is then carried to ES Form 3.13 and 3.10.
 - b. Provide an explanation and the reasons for any fluctuations greater than plus or minus 10 percent in the monthly average cost of allowances determined in 4a.

RESPONSE

- a. Please see KPCO_KPSC_1_4_Attachment1 for the requested information.
- b. Please see the below table for the months when there was a fluctuation greater than plus or minus 10 percent in the monthly average cost of allowances and the reason for the fluctuation.

Additionally, average allowance inventory prices can swing depending on whether market purchases of allowances were needed to supplement EPA allocations. When an allowance purchase occurs, and its value reflected in the inventory, a new average inventory value is established. As allowances are consumed out of inventory at the average price and new year zero cost allocations from EPA flow into the system, the average price will typically drop annually until the next need for a market purchase inflates the average price, repeating the cycle.

Allowance	Month	Avg Unit Cost	Prior Month	Prior Month Avg Unit Cost	% Variance	Reason for Fluctuation
SO2	Oct-23	\$ 43.59	Sep-23	\$ 36.19	20%	Surrender of SO2 allowances to the EPA for AEP Consent Decree
CSAPR SO2	Jan-24	\$ 0.19	Dec-23	\$ 0.22	-11%	Annual closing process which deducts allowances in order to surrender to EPA

Witness: John D. Cullop

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DATA REQUEST

KPSC 1_5 Provide the average residential customer's monthly usage as of October 31, 2024. Based on this usage amount, provide the dollar impact any over- or under-recovery will have on the average residential customer's bill for the recovery periods. Provide the schedule and all supporting calculations and documentation in Excel spreadsheet format with all formulas, columns, and rows unprotected and fully accessible.

RESPONSE

The 12-month average residential customer's monthly usage as of October 31, 2024 was 1,183 kWh.

The Company is not proposing any adjustments to the environmental costs for the review period in this proceeding.

Witness: John D. Cullop

VERIFICATION

The undersigned, John D. Cullop, being duly sworn, deposes and says he is the Regulatory Consultant Senior for Kentucky Power, that he has personal knowledge of the matters set forth in the foregoing responses and the information contained therein is true and correct to the best of his information, knowledge, and belief.

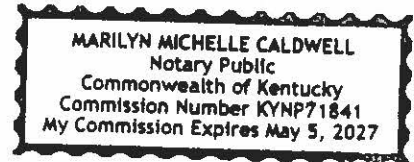

John D. Cullop

Commonwealth of Kentucky)
)
County of Boyd)

Case No. 2025-00036

Subscribed and sworn to before me, a Notary Public in and before said County
and State, by John D. Cullop, on March 25, 2025.

Marilyn Michelle Caldwell
Notary Public

My Commission Expires May 5, 2027

Notary ID Number KYNP71841