DATA REQUEST

1-001 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 1.00 as a model for this summary. Include the two expense months subsequent to the billing periods in order to show the over- and under-recovery adjustments for the months included in the billing period under review. Include a calculation of any additional over- or under-recovery amount Kentucky Power believes needs to be recognized for the six-month review. Provide the schedule and all supporting calculations and documentation in Excel spreadsheet format with all cells and formulas intact and unprotected.

RESPONSE

Please refer to KPCO_R_KPSC_1_Attachment1.xls for the requested information. The Company is not proposing any additional over-recovery or under-recovery amounts.

DATA REQUEST

1-002 The net gain or loss from sulfur dioxide and nitrogen oxide emission allowance sales are reported on ES Form 3.00, Calculation of Current Period Revenue Requirement, Third Component. For each expense month covered by the billing period 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/were the source of the gain or loss.

RESPONSE

Please refer to KPCO_R_KPSC_1_2_Attachment1.xlsx for the requested information.

DATA REQUEST

1-003 Reference ES Forms 3.11 A and 3.11 B for each expense month covered by the billing period under review.

a. For each month in the six-month review period, provide the calculation that supports the total cost of allowances consumed that is then carried to ES Form 3.13.

b. Provide an explanation and the reasons for the fluctuations in the monthly average cost of allowances determined in 3.a.

RESPONSE

Please refer to KPCO_R_KPSC_1_3_Attachment1.xlsx for the requested information.

DATA REQUEST

1-004	Refer to ES Form 3.13, Mitchell Environmental Costs for each expense month covered by the billing period 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 14 Monthly Disposal (5010000)
	b. Line 15 Monthly Urea Expense (5020002)
	c. Line 16 Monthly Trona Expense (5020003)
	d. Line 17 Monthly Lime Stone Expense (5020004)
	e. Line 18 Monthly Polymer Expense (5020005)
	f. Line 19 Monthly Lime Hydrate Expense (5020007)
	g. Line 20 Monthly WV Air Emission Fee
	h. Line 26 Monthly FGD Maintenance Expense
	i. Line 27 Monthly Non-FGD Maintenance Expense

RESPONSE

a. <u>Monthly Disposal</u>. Monthly Disposal expense includes 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. <u>Urea and Limestone</u>. 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, a maintenance outage at Mitchell Unit 1 during the April 2017 expense month resulted in reduced urea and limestone expense during April. May 2017 urea and limestone consumption increased when generation increased in May following the conclusion of the maintenance outage.

c, e, and f. <u>Trona, Lime Hydrate, and Polymer</u>. 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.

g. <u>Air Emission Fees</u>. Kentucky Power receives an invoice for West Virginia Department of Environmental Protection air emission fees once annually and typically includes 1/12 of the annual total in each monthly filing. The variations resulted when the Company underestimated its annual air emission fees in its June 2017 calculation and subsequently recovered the difference.

h&i. <u>Maintenance Expense</u>. 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, maintenance events during the review period that led to monthly variability included:

Expense Month	FGD Maintenance Activity	Amount (approx.)
May	Dewatering hydrocyclone feed pumps	\$25,000
August	Slurry Pump Maintenance	\$32,000
October	Dewatering hydrocyclone feed pumps	\$35,000
October	Storage Tank Maintenance	\$22,000

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:

Expense Month	Non-FGD Maintenance Activity	Amount (approx.)
May	Precipitator maintenance	\$50,000
July	WV Air Emission fees that were reversed in October	\$180,000
October	Reversal of Air Emission Fees	\$(180,000)

DATA REQUEST

1-005	Refer to ES Form 3.20, Rockport Environmental Costs for each expense month covered by the billing period 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 10 Monthly Brominated Sodium Bicarbonate (5020028)
	b. Line 11 Monthly Activated Carbon (5020008)
	c. Line 12 Monthly IN Air Emission Fee
	d. Line 15 Monthly Maintenance Expense

RESPONSE

a&b. <u>Consumables</u>. Consumable usage varies directionally (but not necessarily directly) with changes in the level of plant operation, including variations resulting from outages and deratings. The months with the lowest generation during the review period were May, June, and September. The month of the review period with the highest generation, and likewise the highest consumable expense, was July 2017. The consumable variation greater than plus or minus 10% follows this generation profile.

c. <u>Air Emission Fees</u>. There was no variance in monthly air emission fees paid to IDEM during the review period.

d. <u>Maintenance Expense</u>. The monthly variations in maintenance expense resulted primarily from variations in maintenance activities at the plant. Plant management makes maintenance decisions to ensure the safe, reliable, and compliant operation of the Rockport Plant.

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

Expense Month	Maintenance Activity	Amount (approx.)
May	Precipitator Repairs & Maintenance	\$340,000
June	Precipitator Repairs & Maintenance	\$46,000
August	Precipitator Repairs & Maintenance	\$53,000

DATA REQUEST

1-006 Provide the 12-month average residential customer's monthly usage as of October 31, 2017. 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 requested recovery period. Provide all calculations in electronic spreadsheet format with all formulas intact and unprotected and all rows and columns accessible.

RESPONSE

The 12-month average residential customer's monthly usage as of October 31, 2017 was 1,171 kWh. The Company is not proposing any over- or under-recovery adjustments in this proceeding.

DATA REQUEST

1-007 If the response to Item 1 to this request proposes additional adjustments to environmental costs for the review period, explain whether the adjustments impact the environmental costs assigned to non-associated utilities under the System Sales Clause. Provide a detailed analysis of any necessary adjustments to the environmental costs assigned to nonassociated utilities resulting from the adjustments proposed in Item 1.

RESPONSE

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

VERIFICATION

The undersigned, Amy J. Elliott, being duly sworn, deposes and says she is an External Affairs Manager for Kentucky Power Company, that she has personal knowledge of the matters set forth in the forgoing responses and the information contained therein is true and correct to the best of her information, knowledge, and belief.

<u>Amy J. Elliott</u> Amy J. Elliott

Commonwealth of Kentucky)) County of Franklin)

Case No. 2018-00076

Subscribed and sworn before me, a Notary Public, by Amy J. Elliott this 264 day of April, 2018.

Pelivdu A. Stary

Notary Public

My Commission Expires 8-12-18