### 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\_1\_Attachment1.xls for the requested information. The Company is not proposing any additional over-recovery or under-recovery amounts for the six-month review period.

### 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**

a & b. 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 reflects revenues derived from sales of gypsum to the neighboring wallboard plant. The variations during the review period, except for April 2018, reflect monthly changes in the wallboard plant's demand for gypsum from the Mitchell generating station. There were no sales of gypsum in April, when both Mitchell units were in outages.

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, outages at Mitchell Unit 1 during the February-April 2018 time period, plus outages at Mitchell Unit 2 during March-April 2018 time period, reduced urea and limestone expenses during those months.

c, e, & 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. Air Emission Fees. 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. There were no variations to this expense during this time period.

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)
January 2018	Dewatering hydrocyclone feed pumps	\$26,500
February 2018	Pump, various Dewatering hydrocyclone feed pumps	\$19,000 \$18,000
March 2018	Urea solution storage tank	\$63,000
April 2018	Absorber recycle pump gear box Urea solution storage tank	\$135,000 \$20,500

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:

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Expense Month	Non-FGD Maintenance Activity	Amount (approx)
November 2017	CEMS monitoring equipment	\$6,000
December 2017	Precipitator	\$15,500
January 2018	CEMS monitoring equipment	\$33,000
February 2018	Precipitator CEMS monitoring equipment	\$21,500 \$14,000
March 2018	Precipitator	\$334,000
April 2018	Precipitator CEMS monitoring equipment	\$52,500 \$11,500

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### **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 November 2017, February 2018, and April 2018. The months of the review period with the highest generation, and likewise the highest consumable expense, were December 2017 and January 2018. 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:

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Expense Month	Maintenance Activity	Amount (approx.)
December	Precipitator Repair & Maintenance	\$78,000
February	Precipitator Repair & Maintenance	\$49,000
March	Precipitator Repair & Maintenance	\$54,000

### DATA REQUEST

1-006 Provide the 12-month average residential customer's monthly usage as of April 30, 2018. 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 April 30, 2018 was 1,281 kWh. The Company is not proposing any over- or under-recovery adjustment 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, Matthew A. Horeled, being duly sworn, deposes and says he is the Director of Regulatory Services 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.

Matthew A. Horeled

Commonwealth of Kentucky )

County of Boyd

Case No. 2018-00307

Subscribed and sworn before me, a Notary Public, by Matthew A. Horeled this day of October, 2018.

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M. Joing Blum Notary Public

My Commission Expires 3 - 18 - 19

