VERIFICATION

The undersigned, Amy J. Elliott, being duly sworn, deposes and says she is a Regulatory Consultant Sr. in Regulatory Services for Kentucky Power, that she has personal knowledge of the matters set forth in the forgoing testimony and that the information contained therein is true and correct to the best of her information, knowledge, and belief

	Amy J. Elliott
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COMMONWEALTH OF KENTUCKY) Case No. 2016-00336
COUNTY OF FRANKLIN	j

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Amy J. Elliott, this 277 day of October, 2016

My Commission Expires. January 23, 2017

VERIFICATION

The undersigned, Jeffrey B. Bartsch, being duly sworn, deposes and says he is the Director, Tax Accounting and Regulatory Support for American Electric Power Service Corporation and that he has personal knowledge of the matters set forth in the forgoing responses for which he is identified as the witness and the information contained therein is true and correct to the best of his information, knowledge and belief.

Jeffrey B. Bartsch

STATE OF OHIO

Case No. 2016-00336

COUNTY OF FRANKLIN

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Jeffrey B. Bartsch, this the 3th day of October 2016.

Notary Public

PAULINE A LUTZ NOTARY PUBLIC - OHIO MY COMM. EXP. 9-12-21 KPSC Case No. 2016-00336 Commission Staff's First Set of Data Requests Order Dated October 11, 2016 Item No. 1 Page 1 of 1

Kentucky Power Company

REQUEST

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 sixmonth 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_PSC_1_1_Attachment1.xls for a summary schedule showing the calculation of E(m). This attachment reflects an over-recovery.

The supporting calculations for the over-recovery are included in KPCO_R_PSC_1_1_Attachment2.xls. The over-recovery is described in the testimony of Company witness Elliott at pages 4 through 6.

Please also refer KPCO_R_PSC_1_1_Attachment3.xls and the testimony of Company witness Elliott at pages 6 through 10 for a proposed adjustment to allocation that is limited to allocation and does not impact the revenue requirement.

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Kentucky Power Company

REQUEST

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_PSC_1_2_Attachment1.xls.

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Kentucky Power Company

REQUEST

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_PSC_1_3_Attachment1.xls. There are two steps to the calculation. The first step determines the average weighted cost per allowance for the total inventory for the Company. The second step, as demonstrated on the "allocation" tab of Attachment 1, allocates allowance consumption by plant based on emitted tons.

This calculation methodology is consistent with the calculation methodology used in prior review cases.

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Kentucky Power Company

REQUEST

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

Please refer to KPCO_R_PSC_1_4_Attachment 1.xls for the variation analysis and information concerning the level of the plant's operation.

- a. Monthly Disposal includes sales of gypsum to the neighboring wallboard plant. The variations reflect monthly changes in the wallboard plant's demand for gypsum from the Mitchell generating station.
- b & d. Consumable usage generally varies directionally (but not necessarily directly in order of magnitude) with changes in the level of plant operation, including variations resulting from outages and deratings. For example, a planned outage at Mitchell Unit 1, coinciding with maintenance outages at Mitchell Unit 2 during October, resulted in reduced generation during October (20,630 MWh) and the corresponding relative increase in trona and limestone consumption during November when generation increased to 486,310 MWh.

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- c & f. Trona and lime hydrate are expensed upon delivery to the plant. The variations in trona and lime hydrate expense thus reflect deliveries of those two consumables to the plant. These deliveries vary over time.
- e. There was a less than 10% variance in polymer expenses for the period from November 2015 through January 2016. Beginning in February 2016, polymer expenses were misclassified to a 512 account. A one-time correcting entry will be made to the 5020005 account in either October or November and thus the requested analysis and explanation cannot be provided.
- g. Not applicable. There was no variance.
- h&i. The monthly variations in maintenance expense result primarily from maintenance decisions plant management makes to ensure the safe, reliable, and compliant operation of the Mitchell Plant.

More specifically, elevated FGD maintenance expense during January and February and consequent variances in the preceding and trailing months, primarily resulted from replacement of the chloride purge stream tank liner and maintenance to the Unit 2 FGD ID fan, respectively.

Elevated Non-FGD maintenance expense in January and March, and consequent variances from the preceding and trailing months, primarily resulted from repairs to the Unit 1 precipitator and the SCR cable tray, respectively.

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Kentucky Power Company

REQUEST

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

Please refer to KPCO_R_PSC_1_5_Attachment1.xls for the variation analysis and information concerning the level of the plant's operation.

- a&b. Consumable usage generally varies directionally (but not necessarily directly in order of magnitude) with changes in the level of plant operation, including variations resulting from outages and deratings. Relative to the previous month, generation was down in November 2015, February 2016, and March 2016. Conversely, relative to the previous month, generation was up in December 2015, January 2016, and April 2016. The consumable variation greater than plus or minus 10% follows this generation profile. Reduced generation in November 2015 can be attributed to a planned outage on Rockport Unit 2 for boiler maintenance. In February 2016 reduced generation is attributable in part to a maintenance outage on Rockport Unit 1 necessitated by the new SCR construction as well as a maintenance outage on Rockport Unit 2 to troubleshoot control valves on the high pressure turbine strainers. Increased generation was a result of the units being called upon in the PJM market.
- c. Not applicable. There was no variance.

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d. The monthly variation of maintenance expense principally reflects maintenance decisions that plant management made to ensure the safe, reliable, and compliant operation of Rockport Plant.

More specifically, the elevated February maintenance and consequent variances in the preceding and trailing months, primarily resulted from worked performed on heavy machinery at the Plant's on-site ash landfill and at the Rockport Unit 1 fly ash silo to clear a plugged pin mixer. Lastly, in April repairs were made to an air compressor on the Unit 1 DSI system.

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Kentucky Power Company

REQUEST

Provide the 12-month average residential customer's monthly usage as of April 30, 2016. 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 average 12-month residential customer's monthly usage as of April 30, 2016 was 1,258 kWh.

Based on this usage, using the June 2016 (April 2016 expense month) surcharge factors as an example, and assuming that the credit of \$118,185 and the first of the six months of reallocation of \$149,733 had been included during the month of April 2016, there would be a \$1.69 decrease as compared to a current June 2016 residential bill.

The bill calculation includes adjustments both the over-recovery during the review period and the allocation adjustment between residential and non-residential classes.

Please refer to KPCO_R_PSC_1_6_Attachment1.xls for the supporting calculations with formulas intact.

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Kentucky Power Company

REQUEST

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 non-associated utilities resulting from the adjustments proposed in Item 1.

RESPONSE

The proposed adjustment to reflect on a monthly basis the retirement of environmental compliance equipment, discussed at pages 4 through 6 of the testimony of Company Witness Elliott, affects the calculation of environmental costs assigned to non-associated utilities under the System Sales Clause. Please see KPCO_R_PSC_1_1_Attachment2.xls for the requested detailed analysis.

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Kentucky Power Company

REQUEST

Refer to the application in Case No. 2014-00396, Section V, Exhibit 1, Workpaper S-2, page 2 of 3, "Computation of Gross Revenue Conversion Factor" and Section V, Exhibit 3, SIT Schedule. Explain why the apportionment factors used to calculate the effective state income tax rate do not sum to 100 percent.

RESPONSE

State apportionment factors commonly do **not** equal 100% when there are multiple states involved due to the different methods that individual states use to determine their individual apportionment factors. Kentucky and West Virginia employ a three factor formula using Property, Payroll and Sales (which are double weighted). Illinois and Michigan use only a Sales factor in determining their apportionment factors.

WITNESS: Jeffrey B Bartsch

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¹ Case No. 2014-00396, Application of Kentucky Power Company for: (1) A General Adjustment of Its Rates for Electric Service; (2) An Order Approving Its 2014 Environmental Compliance Plan; (3) An Order Approving Its Tariffs and Riders; and (4) An Order Granting All Other Required Approvals and Relief (Ky. PSC June 22, 2015).