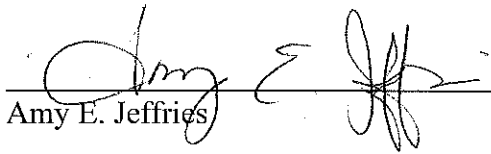


**VERIFICATION**

The undersigned, Amy E Jeffries being duly sworn, deposes and says she is Natural Gas Manager for American Electric Power Service Corporation, that she has personal knowledge of the matters set forth in the forgoing data response for which she is identified as the witness and that the information contained therein is true and correct to the best of her information, knowledge and belief

  
\_\_\_\_\_  
Amy E. Jeffries

STATE OF OHIO

)

) Case No. 2017-00001

COUNTY OF FRANKLIN

)

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Amy E. Jeffries, this the 17<sup>th</sup> day of February 2017.

  
\_\_\_\_\_  
Notary Public

My Commission Expires: 12/14/20

**VERIFICATION**

The undersigned, David L. Mell being duly sworn, deposes and says he is the Energy Production Superintendent- Big Sandy for Kentucky Power Company, that he has personal knowledge of the matters set forth in the forgoing responses for which he is the identified witness and that the information contained therein is true and correct to the best of his information, knowledge and belief



\_\_\_\_\_  
David L. Mell

COMMONWEALTH OF KENTUCKY    )  
  ) Case No. 2017-00001  
COUNTY OF BOYD                        )

Subscribed and sworn to before me, a Notary Public in and before said County and State, by David L. Mell, this the 15<sup>th</sup> day of February 2017.



\_\_\_\_\_  
Notary Public

My Commission Expires: 03-21-2017





**VERIFICATION**

The undersigned, Charles F. West, being duly sworn, deposes and says he is the Manager, Coal Procurement, for American Electric Power Service Corporation, that he has personal knowledge of the matters set forth in the forgoing data response for which he is identified as the witness and that the information contained therein is true and correct to the best of his information, knowledge and belief



Charles F. West

STATE OF OHIO

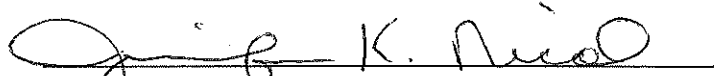
)

) Case No. 2017-00001

COUNTY OF FRANKLIN

)

Subscribed and sworn to before me, a Notary Public in and before said County and State, by Charles F. West, this the 17<sup>th</sup> day of February 2017.

  
Notary Public

My Commission Expires: 12/14/20

**Case No. KPCO 2017-00001**

**Item No. 1**

**Page 1 of 2**

**Witness: John A. Rogness**

**Q - 1** If a change in the base fuel cost is proposed, state the month to be used as the base period (b). If the base period results in a fuel cost other than one representative of current costs as prescribed by 807 KAR 5:056, Section 1 (2), explain why this base period was selected. If no change is proposed, include an explanation of the reason(s) Kentucky Power believes the current base period fuel cost should remain unchanged.

**A - 1** No change is proposed in the base fuel rate.

In examining whether to propose a change to its base fuel rate Kentucky Power reviewed both its monthly fuel costs during the two-year review period and its forecasts for fuel costs for 2017 and 2018. The average fuel rate for the two-year review period was 2.799 cents per kWh or 0.074 cents greater than the current base fuel rate. During the two-year review period the cost of fuel fluctuated between a high of 3.288 cents per kWh (February 2015) to a low of 2.436 (December 2015). Since the current base fuel rate of 2.725 cents per kWh was established beginning with the October 2015 expense month, the average monthly difference between the Company's actual fuel cost and the current base fuel rate was 0.014 cents per kWh.

During the period November 2014 through October 2015 Big Sandy Unit 1 operated and burned higher cost low-sulfur fuel. Beginning November 2015 Big Sandy Unit 1 ceased operating as a coal-fired unit and the higher cost low-sulfur fuel is no longer being acquired for the unit. In addition, beginning with the October 2015 expense month, the methodology used by Kentucky Power to calculate its fuel costs was modified in accordance with the settlement agreement approved by the Commission in Case No. 2014-00396. Finally, beginning with the June 2016 expense month Kentucky Power's fuel supply was modified to include natural gas when Big Sandy Unit returned to service.

For the five month period since Big Sandy Unit 1 returned to service as a gas-fired unit the average actual fuel cost was 2.997 cents per kWh or, on

average, 0.272 cents above the current base fuel rate.

Balanced against these recent higher fuel costs is the Company's fuel cost forecast for 2017 (2.496 cents per kWh) and 2018 (2.525 cents per kWh) which are below Kentucky Power's current base fuel rate. The current base fuel rate of 2.725 cents per kWh lies between both the Company's fuel costs for the final five months of the review period (2.997 cents per kWh) since Big Sandy Unit 1 returned to service in June 2016 as gas-fueled unit, and the projected average 2017-2018 fuel cost of 2.511 cent. In fact, the current base fuel rate is almost equidistant between the forecast average 2017-2018 fuel cost (0.214 cents per kWh) and the average fuel cost (-0.272 cents per kWh) since Big Sandy Unit 1 returned to service.

Maintaining the current base fuel rate of 2.725 cents per kWh will minimize the magnitude of the difference between the base fuel rate and the cost of fuel as fuel costs decline as projected. Lowering the base fuel rate to reflect the average 2017-2018 forecasted rate will lead to larger fuel adjustment clause charges than otherwise would be the case during the first part of the period fuel costs move toward the forecasted average cost.

**Case No. KPCO 2017-00001**

**Item No. 2**

**Page 1 of 1**

**Witness: John A. Rogness**

**Q - 2** Provide a calculation of the fossil fuel costs F(b) that Kentucky Power proposes to use to calculate the base period fuel cost. This calculation shall show each component of F(b) as defined by 807 KAR 5:056. Explain why the fuel cost in the selected base period is representative of the level of fuel cost currently being experienced by Kentucky Power

**A - 2** The Company is proposing to leave the base fuel rate (which was established in the previous two year investigation Case No. 2014-00450), unchanged. In that case, October 2014 was chosen as the representative month. KPCO\_R\_KPSC\_1\_2\_Attachment1.pdf provides the requested information concerning the October 2014 fuel cost.



**Case No. KPCO 2017-00001**

**Item No. 3**

**Page 1 of 1**

**Witness: John A. Rogness**

**Q - 3** Provide a schedule showing each component of sales as defined by 807 KAR 5:056 in the selected base period (b). Explain why Kentucky Power believes that the sales in the selected base period (b) are representative of the level of kWh sales that Kentucky Power will derive from the level of fuel cost incurred during the selected base period (b).

**A - 3** KPCO\_R\_KPSC 1\_3\_Attachment1.pdf provides the requested information concerning the Company's October 2014 sales which is the representative fuel month used to establish the proposed base fuel rate of \$0.02725/ kWh. Although both fuel costs and sales are projected to be lower in 2017 and 2018 than in October 2014, the resulting cents/kWh cost reasonably approximates that fuel rate produced by the Company's October 2014 sales and costs.

**Case No. KPCO 2017-00001**  
**Item No. 4**  
**Page 1 of 1**  
**Witness: John A. Rogness**

**Q - 4** Provide a schedule showing the calculation of Kentucky Power's proposed increase or decrease in its base fuel cost per kWh to be incorporated into its base rate.

**A - 4** The Company is proposing to leave the current base fuel cost of \$0.02725 / kWh unchanged. The proposed base fuel cost per kWh is calculated below.

$$\text{Dollars / kWh} = \frac{\text{Fuel (b) October 2014} = \$12,504,307}{\text{Sales ( b) October 2014 } 458,919,000 \text{ kWh}} = \$0.02725$$

**Case No. KPCO 2017-00001**

**Item No. 5**

**Page 1 of 1**

**Witness: John A. Rogness**

**Q - 5** Provide Kentucky Power's most recent projected fuel requirements for the years 2017 and 2018 in tons for coal, MMBtu for natural gas, and dollars.

**A - 5** Please see KPCO\_R\_KPSC\_1\_5\_Attachment1.pdf for the requested information.

**Case No. KPCO 2017-00001**

**Item No. 6**

**Page 1 of 1**

**Witness: John A. Rogness**

**Q - 6** Provide Kentucky Power's most recent sales projections for the years 2017 and 2018 in kWh and dollars.

**A - 6** KPCO\_R\_KPSC\_1\_6\_Attachment1\_Redacted.pdf provides projected energy sales and revenues by sector for Kentucky Power Company for 2017 and 2018.

**Case No. KPCO 2017-00001**

**Item No. 7**

**Page 1 of 1**

**Witness: John A. Rogness**

**Q - 7** Provide separately the amounts of power purchases used in the calculation of sales provided in response to Item 3.

**A - 7** Please see the response to KPSC 1-3 and KPCO\_R\_KPSC\_1\_3\_Attachment1.pdf.

**Case No. KPCO 2017-00001**  
**Item No. 8**  
**Page 1 of 1**  
**Witness: John A. Rogness**

**Q - 8** Provide separately the amounts of intersystem power sales used in the calculation of sales provided in response to Item 3.

**A - 8** Please see the response to KPSC 1-3 and KPCO\_R\_KPSC\_1\_3\_Attachment1.pdf.

**Case No. KPCO 2017-00001**

**Item No. 9**

**Page 1 of 1**

**Witness: David L. Mell**

**Witness: Daniel L. Moyer**

**Q - 9** Provide the planned maintenance schedule for each of Kentucky Power's generating units for the years 2017 and 2018.

**A - 9** Please see KPCO\_R\_KPSC\_1\_9\_Attachment1\_Confidential.xls for the answer to this response.

**Case No. KPCO 2017-00001**

**Item No. 10**

**Page 1 of 1**

**Witness: John A. Rogness**

**Q - 10** For the years ending October 31, 2015, and October 31, 2016, provide: a. Maximum annual system demand; and b. Average annual demand.

**A - 10** KPCO\_R\_KPSC\_1\_10\_Attachment1 provides the Company's monthly peak demands, maximum peak demand and average monthly peak demand for the years ending October 31, 2015 and October 31, 2016.



**Case No. KPCO 2017-00001**

**Item No. 11**

**Page 1 of 1**

**Witness: John A. Rogness**

**Q - 11** List all firm power commitments for Kentucky Power from May 1, 2016, through October 31, 2016, and for the years 2017 and 2018 for (a) purchases and (b) sales. This list shall identify the other party (buyer or seller), the amount of commitment in MW, and the purpose of the commitment (e.g., peaking, emergency).

**A - 11** (a) Kentucky Power is committed to purchase 30% of AEG's 50% share of each Rockport unit, which aggregates to 393 MW for Kentucky Power.

(b) Firm power sales: Commitments for Kentucky Power Company, other than retail jurisdictional customers, are the Cities of Olive Hill and Vanceburg, Kentucky. Please

see [KPCO\\_R\\_KPSC\\_1\\_11\\_Attachment1\\_Confidential.pdf](#) for the requested information. The cities use the power for load-following service to their citizens.

**Case No. KPCO 2017-00001**

**Item No. 12**

**Page 1 of 1**

**Witness: John A. Rogness**

**Q - 12** Provide a monthly billing summary for all sales to all electric utilities for the period May 1, 2016, through October 31, 2016.

**A - 12** Please see KPCO\_R\_KPSC\_1\_12\_Attachment1.xls for this response.

**Case No. KPCO 2017-00001**

**Item No. 13**

**Page 1 of 1**

**Witness: John A. Rogness**

**Q - 13** a. Provide a schedule of the calculation of the 12-month average line loss by month for November 2014 through October 2016.

b. Describe the actions that Kentucky Power has taken to reduce line loss during this period

**A - 13** a. Please see KPCO\_R\_KPSC\_1\_13\_Attachment1.pdf

b. The Company works to reduce line losses by increasing conductor size, installing more efficient transformers, employing a reactive corrective program, and increasing the operating voltage levels of transmission and distribution lines. These actions reduce losses at constant load and help limit losses for additional load.

**Case No. KPCO 2017-00001**

**Item No. 14**

**Page 1 of 1**

**Witness: David L. Mell**

**Witness: Daniel L. Moyer**

**Q - 14** List Kentucky Power's scheduled, actual, and forced outages between May 1, 2016, and October 31, 2016.

**A - 14** Please see KPCO\_R\_KPSC\_1\_14\_Attachment 1.pdf for the list of outages.

**Case No. KPCO 2017-00001**  
**Item No. 15**  
**Page 1 of 1**  
**Witness: Charles F. West**

- Q - 15** For each existing fuel contract categorized as long-term (i.e., one year or more in length), provide:
- a. Supplier's name and address;
  - b. Name and location of production facility;
  - c. Date when contract was executed;
  - d. Duration of contract;
  - e. Date(s) of each contract revision, modification, or amendment;
  - f. Annual tonnage requirements;
  - g. Actual annual tonnage received since the contract's inception;
  - h. Percentage of annual requirements received during the contract's term;
  - i. Base price in dollars per ton;
  - j. Total amount of price escalations to date in dollars per ton; and
  - k. Current price paid for coal under the contract in dollars per ton (i +j).

**A - 15** Please see attachment KPCo\_R\_PSC 1-15 Attachment 1.pdf

**Case No. KPCO 2017-00001**  
**Item No. 16**  
**Page 1 of 1**  
**Witness: John A. Rogness**

**Q - 16** Provide a schedule of the present and proposed rates that Kentucky Power seeks to change pursuant to 807 KAR 5:056, shown in comparative form.

**A - 16** Kentucky Power is not proposing any changes in rates.

**Case No. KPCO 2017-00001**

**Item No. 17**

**Page 1 of 1**

**Witness: John A. Rogness**

**Q - 17** Provide a copy of the current tariff showing by cross-outs and inserts all proposed changes in rates.

**A - 17** Kentucky Power is not proposing any changes in rates.

**Case No. KPCO 2017-00001**  
**Item No. 18**  
**Page 1 of 2**  
**Witness: Charles F. West**

**Q - 18** a. State whether Kentucky Power regularly compares the price of its coal purchases with those paid by other electric utilities.

b. If yes, state

(1) How Kentucky Power's prices compare with those of other utilities. If the comparison includes months outside of the review period, a comparison limited to the review period should be provided separately. Provide a copy of the source documents and calculations used to support the amounts used in the comparison and include all prices used in the comparison in cents per MMBtu; and

(2) The utilities that are included in this comparison and their locations.

**A - 18** a. The Company performs a comparison of its coal purchases at least twice per year. Additionally, all purchase decisions are evaluated against the market at the time of the purchase to ensure the competitiveness of the purchase.

b. (1) and (2): KPCo\_R\_PSC 1-18 Attachment 1.pdf and KPCo\_R\_PSC 1-18 Attachment 2.pdf contain comparisons of Kentucky Power's total fuel prices of the Mitchell and Big Sandy Plants to fuel prices of other utilities that are consistent with what has been presented in previous filings. The fuel cost data was obtained from Velocity Suite. Velocity Suite is a search engine that, in this case, used monthly fuel cost information from the U.S. Energy Information Agency Form 923 for the period of November 1, 2014 through October 31, 2016.

KPCo\_R\_PSC 1-18 Attachment 1.pdf compares fuel costs for seven utilities in the eastern half of the United States having similar coal quality (heat content and SO<sub>2</sub>) as the cost of Kentucky Power, as in previous filings. For the companies included in the comparison, Kentucky Power had fuel costs lower than four of the companies and higher than two of the



**Case No. KPCO 2017-00001**  
**Item No. 18**  
**Page 2 of 2**  
**Witness: Charles F. West**

companies for the review period on a calculated cents per million British Thermal Units (MMBtu) basis. KPCo\_R\_PSC 1-18 Attachment 2.pdf compares fuel costs for seven utilities in the Kentucky region having similar coal quality (heat content and SO<sub>2</sub>) as Kentucky Power, as in previous filings. For the companies included in this comparison, Kentucky Power had fuel costs lower than four of the companies and higher than two of the companies for the review period on a calculated cents per million British Thermal Units (MMBtu) basis.

Please see KPCo\_R\_PSC 1-18 Attachment 3.xls for the data from the U.S. Energy Information Agency (EIA) Form 923 for the period of November 1, 2014 through October 31, 2016. This data was obtained via Velocity Suite, which is a search engine that gathers publicly available information. The averages and totals presented in Attachment 3 are a function of pivot tables applied to the Velocity Suite data.

**Case No. KPCO 2017-00001**  
**Item No. 19**  
**Page 1 of 1**  
**Witness: Charles F. West**

**Q - 19** For the period under review by generating station, list the percentages of Kentucky Power's coal delivered by:

- a. Rail;
- b. Truck;
- c. Barge; and
- d. Other (specify)

**A - 19** From November 1, 2014 through November 13, 2015 (the last day of operation as a coal-fired unit), the approximate percentages of Kentucky Power's coal delivery method at the Big Sandy Plant are as follows:

- a. Rail. 16%
- b. Truck:84%
- c. Barge:0%

From November 1, 2014 through October 31, 2016, the approximate percentages of Kentucky Power's coal delivery method at the Mitchell Plant are as follows:

- a. Rail: 0%
- b. Truck: 0%
- c. Barge: 53%
- d. Belt.47%

**Case No. KPCO 2017-00001**

**Item No. 20**

**Page 1 of 1**

**Witness: David L. Mell**

**Witness: Daniel L. Moyer**

**Q - 20** For each generating station, state the methods of coal delivery currently available.

**A - 20** The Mitchell Plant can currently receive coal delivered via barge or conveyor belt.

**Case No. KPCO 2017-00001**  
**Item No. 21**  
**Page 1 of 2**  
**Witness: Charles F. West**

- Q - 21**
- a. State Kentucky Power's coal inventory level in tons and in number of days' supply as of October 31, 2016. Provide this information by generating station and in the aggregate.
  - b. Describe the criteria used to determine the number of days' supply.
  - c. Compare Kentucky Power's coal inventory as of October 31, 2016, to its inventory target for that date for each plant and for total inventory.
  - d. If actual coal inventory exceeds inventory target by ten days' supply, state the reasons for the excessive inventory.
  - e. (1) State whether Kentucky Power expects any significant changes in its current coal inventory target within the next 12 months.

(2) If yes, state the expected change and the reasons for this change.

- A - 21**
- a. As of October 31, 2016 Kentucky Power's actual coal inventory levels were as follows:

Mitchell High Sulfur: 441,960 tons, or 58 days of supply, and

Mitchell Low Sulfur: 266,700 tons, or 35 days of supply.

b. Days' supply is determined by dividing the tons of coal in storage by the full load burn rate (tons per day).

For Mitchell High Sulfur,  $\frac{441,960 \text{ tons as of } 10/31/2016}{7,620 \text{ (full load burn rate - tons/day)}} = 58 \text{ days}$

For Mitchell Low Sulfur,  $\frac{266,700 \text{ tons as of } 10/31/2016}{7,620 \text{ (full load burn rate - tons/day)}} = 35 \text{ days}$

c. As of October 31, 2016, Kentucky Power's total coal inventory was 29 days over its target.

Mitchell High Sulfur: Target Inventory Days = 15 days, Actual Inventory Days = 58 days

(43 days over target)

Mitchell Low Sulfur: Target Inventory Days = 30 days, Actual Inventory Days = 32 days

(5 days over target)

d. High sulfur coal inventory exceeds inventory because of the need to adhere to shipping schedules of the long term supply contract.

e. (1) No.

(2) Kentucky Power does not expect any significant changes in the coal inventory targets for the Mitchell plant within the next 12 months.

**Case No. KPCO 2017-00001**  
**Item No. 22**  
**Page 1 of 1**  
**Witness: Charles F. West**

- Q - 22**
- a. State whether Kentucky Power has audited any of its coal contracts during the period from May 1, 2016, to October 31, 2016.
  - b. If the response is yes, for each audited contract :
    - (1) Identify the contract;
    - (2) Identify the auditor;
    - (3) State the results of the audit; and
    - (4) Describe the actions that Kentucky Power took as a result of the audit.

- A - 22**
- Kentucky Power did not audit any of its coal contracts during the review period from May 1, 2016 to October 31, 2016.
- b. N/A.

**Case No. KPCO 2017-00001**

**Item No. 23**

**Page 1 of 1**

**Witness: John A. Rogness**

**Q - 23** a. State whether Kentucky Power has received any customer complaints regarding its FAC during the period from May 1, 2016, to October 31, 2016.

b. If the response is yes, for each complaint, state:

(1) The nature of the complaint; and

(2) Kentucky Power's response.

**A - 23** Kentucky Power did not receive any customer complaints regarding the Company's Fuel Adjustment Clause during the period from May 1, 2016 to October 31, 2016.

**Case No. KPCO 2017-00001**  
**Item No. 24**  
**Page 1 of 1**  
**Witness: Charles F. West**

- Q - 24**
- a. State whether Kentucky Power is currently involved in any litigation with its current or former coal suppliers.
  - b. If the response is yes, for each litigation:
    - (1) Identify the coal supplier,
    - (2) Identify the coal contract involved:
    - (3) State the potential liability or recovery to Kentucky Power;
    - (4) List the issues presented and
    - (5) Provide a copy of the complaint or other legal pleading that initiated the litigation and any answers or counterclaims. If a copy has previously been filed with the Commission, provide the date on which it was filed and the case in which it was filed.
  - c. State the current status of all litigation with coal suppliers.
- A - 24**
- a. Kentucky Power is not currently involved in any litigation with its current or former coal suppliers.
  - b. N/A.
  - c. N/A.



**Case No. KPCO 2017-00001**  
**Item No. 25**  
**Page 1 of 1**  
**Witness: Charles F. West**

- Q - 25** List each written coal supply solicitation issued during the period May 1, 2016, to October 31, 2016.
- a. For each solicitation, provide the date of the solicitation (contract or spot), the quantities solicited, a general description of the quality of coal solicited, the time period over which deliveries were requested, and the generating unit(s) for which the coal was intended.
  - b. For each solicitation, state the number of vendors to whom the solicitation was sent, the number of vendors who responded, and the selected vendor(s). Provide the bid tabulation sheet or corresponding document that ranks the proposals. (This document shall identify all vendors who made offers.) State the reasons for each selection. For each lowest-cost bid not selected, explain why the bid was not selected.

**A - 25** (a) and (b)

Please see KPCo\_R\_PSC\_1-25 Attachment 1.pdf for the requested information.

Confidential treatment is being sought for indicated portions of the KPCo\_R\_PSC\_1-25 Attachment 2 CONFIDENTIAL.pdf for the list of offering vendors, analyses, ranked proposals and selected vendor/supplier.

**Case No. KPCO 2017-00001**  
**Item No. 26**  
**Page 1 of 1**  
**Witness: Charles F. West**

- Q - 26** List each oral solicitation for coal supplies issued during the period from May 1, 2016, to October 31, 2016. a. For each solicitation, state why the solicitation was not written, the date(s) of the solicitation, the quantities solicited, a general description of the quality of coal solicited, the time period over which deliveries were requested, and the generating unit(s) for which the coal was intended. b. For each solicitation, identify all vendors solicited and the vendor(s) selected. Provide the bid tabulation sheet or other document that ranks the proposals. (This document shall identify all vendors who made offers.) State the reasons for each selection. For each lowest-cost bid not selected, explain why the bid was not selected.
- A - 26** Kentucky Power did not issue oral coal supply solicitations during the period of May 1, 2016 to October 31, 2016.

**Case No. KPCO 2017-00001**

**Item No. 27**

**Page 1 of 1**

**Witness: Charles F. West**

**Q - 27** For the period from May 1, 2016, to October 31, 2016, list each vendor from whom coal was purchased and the quantity and nature of each purchase (e.g., spot or contract). For the period under review in total, provide the percentage of purchases that were spot versus contract.

**A - 27** A) Please refer to attachment KPCo\_R\_PSC\_1-27\_Attachment 1.xls for the requested information of period of May 1, 2016 to October 31, 2016.

B) Please refer to attachment KPCo\_R\_PSC\_1-27\_Attachment 2.xls for the requested information for the period under review in total.

**Case No. KPCO 2017-00001**

**Item No. 28**

**Page 1 of 1**

**Witness: Amy E. Jeffries**

**Q - 28** For the period from May 1, 2016, to October 31, 2016, list each vendor from whom natural gas was purchased for generation and the quantity and nature of each purchase (e.g., spot or contract). For the period under review in total, provide the percentage of purchases that were spot versus contract.

**A - 28** Please see attachment KPCo\_R\_PSC\_1-28\_Attachment 1.xls

**Case No. KPCO 2017-00001**

**Item No. 29**

**Page 1 of 1**

**Witness: Charles F. West**

**Witness: Amy E. Jeffries**

**Q - 29** State whether Kentucky Power engages in hedging activities for its coal or natural gas purchases used for generation. If the response is yes, describe the hedging activities in detail.

**A - 29** Kentucky Power does not engage in hedging activities for its coal or natural gas purchases used for generation.

**Case No. KPCO 2017-00001**

**Item No. 30**

**Page 1 of 1**

**Witness: Charles F. West**

**Q - 30** For each generating unity for which a separate coal pile is maintained, state for the period from May 1, 2016, to October 31, 2016, the actual amount of coal burned in tons, actual amount of coal deliveries in tons, total kWh generated, and actual capacity factor at which the plant operated.

**A - 30** Please see KPCo\_R\_PSC 1-30\_Attachment 1.xls for this response.

**Case No. KPCO 2017-00001**

**Item No. 31**

**Page 1 of 1**

**Witness: Amy E. Jeffries**

**Q - 31** For each natural gas generating unit, state for the period from May 1, 2016, to October 31, 2016, the actual amount of natural gas burned, total kWh generated, and actual capacity factor at which the plant operated.

**A - 31** Big Sandy 1 began recovering natural gas purchases for Big Sandy Plant Unit 1 through the Fuel Adjustment Clause on June 1, 2016. See attachment KPCo\_R\_PSC\_1-31\_Attachment 1.xls for the requested data from June 1, 2016 to October 31, 2016

**Case No. KPCO 2017-00001**  
**Item No. 32**  
**Page 1 of 1**  
**Witness: Charles F. West**

- Q - 32**
- a. During the period from May 1, 2016, to October 31, 2016, have there been any changes to Kentucky Power's written policies and procedures regarding its fuel procurement?
- b. If yes,
- (1) Describe the changes;
  - (2) State the date(s) the changes were made;
  - (3) Explain why the changes were made; and
  - (4) Provide the written policies and procedures as changed.
- c. If no, provide the date when Kentucky Power's current fuel procurement policies and procedures were last changed, when they were last provided to the Commission, and identify the proceeding in which they were provided.

**A - 32** There were no changes to Kentucky Power's Fuel Procurement Policy manual from May 1, 2016 to October 31, 2016. The Company's current fuel procurement policies and procedures were last updated August 31, 2015 and last provided to the Commission in Case KPCo 2016-00230.



**Case No. KPCO 2017-00001**

**Item No. 33**

**Page 1 of 1**

**Witness: Charles F. West**

**Q - 33** a. State whether Kentucky Power is aware of any violations of its policies and procedures regarding fuel procurement that occurred prior to or during the period from May 1, 2016, to October 31, 2016. b. If the response is yes, for each violation: (1) Describe the violation; (2) Describe the action(s) that Kentucky Power took upon discovering the violation; and (3) Identify the person(s) who committed the violation

**A - 33** a. Kentucky Power is not aware of any violations of its policies and procedures regarding fuel procurement prior to or during the period from May 1, 2016 to October 31, 2016.

b. N/A.

**Case No. KPCO 2017-00001**

**Item No. 34**

**Page 1 of 1**

**Witness: Charles F. West**

**Q - 34** Identify and explain the reasons for all changes in the organizational structure and personnel of the departments or divisions that are responsible for Kentucky Power's fuel procurement activities that occurred during the period from May 1, 2016, to October 31, 2016.

**A - 34** During the period May 1, 2016 through October 31, 2016 there were no changes to the organization structure or personnel of the departments or divisions that are responsible for Kentucky Power's fuel procurement activities.

**Case No. KPCO 2017-00001**

**Item No. 35**

**Page 1 of 1**

**Witness: David L. Mell**

**Witness: Daniel L. Moyer**

**Q - 35** a. Identify all changes that Kentucky Power made during the period from May 1, 2016, to October 31, 2016, to its maintenance and operation practices that affect fuel usage at Kentucky Power's generation facilities.

b. Describe the impact of these changes on Kentucky Power's fuel usage.

**A - 35** There were no maintenance or operations changes that affected fuel usage during the May 1, 2016 to October 31, 2016 review period at the Mitchell Plant.

With the conversion of Big Sandy Unit 1 to natural gas, O&M practices were necessarily changed at the plant to accommodate the differences in fuel handling requirements and hazards presented by natural gas. New operation procedures and control equipment are in place to efficiently manage gas flows and pressures throughout the facility.

**Case No. KPCO 2017-00001**

**Item No. 36**

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**Witness: John A. Rogness**

**Q - 36**

a. List all intersystem sales during the period from May 1, 2016, to October 31, 2016, in which Kentucky Power used a third party's transmission system.

b. For each sale listed above:

(1) Describe the effect on the FAC calculation of line losses related to intersystem sales when using a third party's transmission system; and

(2) State the line-loss factor used for each transaction and describe how such line-loss factor was determined.

**A - 36**

a. & b. Beginning on June 1, 2007, based on FERC Order EL06-055, PJM modified the Locational Marginal Pricing (LMP) pricing approach to calculate transmission line loss costs on a marginal basis. The new LMP calculation reflects the full marginal cost of serving an increment of load at each bus from each resource associated with an eligible energy offer. The LMP price will be the sum of three separate components: System Energy Price, Congestion Price and Loss Price. Therefore, each spot market energy customer pays an energy price that includes the full marginal cost of energy for delivering an increment of energy to the purchaser's location. Market buyers are assessed for their incremental impact on transmission line losses resulting from total load scheduled to be served from the PJM Spot Energy Market in the day-ahead energy market at the same day-ahead loss price applicable at the relevant load bus.

Market sellers are assessed for their incremental impact on transmission line losses resulting from energy scheduled for delivery in the day-ahead market at the day-ahead loss prices applicable to the relevant resource bus.

Transactions are balanced in the real-time market using the same calculation, but are based on deviation at each bus from the day-ahead using the real time loss price.

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**Item No. 37**

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**Witness: John A. Rogness**

**Q - 37** a. Describe the effect on the FAC calculation of line losses related to intersystem sales when not using a third party's transmission system.

b. Describe each change that Kentucky Power made to its methodology for calculating intersystem sales line losses during the period from May 1, 2016, to October 31, 2016.

**A - 37** a. Kentucky Power conducts intersystem sales through its' participation in the PJM wholesale markets. Please refer to the Company's response to KPSC 1-36 for a description of the effect of losses on intersystem sales on the FAC calculation .

b. Kentucky Power did not make any changes to its methodology for calculating intersystem sales line losses during the review period.

**Case No. KPCO 2017-00001**  
**Item No. 38**  
**Page 1 of 1**  
**Witness: Charles F. West**

**Q - 38** State whether Kentucky Power has solicited bids for coal with the restriction that it was not mined through strip mining or mountaintop removal. If the response is yes, explain the reasons for the restriction on the solicitation, the quantity in tons and price per ton of the coal purchased as a result of this solicitation, and the difference between the price of this coal and the price it could have obtained for the coal if the solicitation had not been restricted.

**A - 38** No. Kentucky Power did not solicit bids for coal with the restriction that the coal was not mined through strip mining or mountaintop removal.

**Case No. KPCO 2017-00001**

**Item No. 39**

**Page 1 of 1**

**Witness: David L. Mell**

**Witness: Daniel L. Moyer**

**Q - 39** Provide a detailed discussion of any specific generation efficiency improvements Kentucky Power has undertaken during the period from May 1, 2016, to October 31, 2016.

**A - 39** The Company made no improvements specifically designed to improve efficiency at Big Sandy or Mitchell Plants during the review period.

**Case No. KPCO 2017-00001**

**Item No. 40**

**Page 1 of 1**

**Witness: John A. Rogness**

**Q - 40** State whether all contracts related to commodity and/or transportation have been filed with the Commission. If any contracts have not been filed, explain why they have not been filed and provide a copy.

**A - 40** Kentucky Power has filed all contracts with the Commission.



**Case No. KPCO 2017-00001**

**Item No. 41**

**Page 1 of 1**

**Witness: John A. Rogness**

**Q - 41** Identify any issues that could affect fuel costs for the two-year period that remain unresolved or unsettled. Include in the response any issues related to billings from a regional transmission operator. Consider this a continuing request to inform the Commission if Kentucky Power becomes aware of any issues during the course of this proceeding.

**A - 41** The Company is requesting that it be allowed to recover \$205,322 it under collected for the period November 2014 through April 2015. *See Order, In the Matter of: An Examination Of The Application Of The Fuel Adjustment Clause Of Kentucky Power Company From May 1, 2015 Through October 31, 2015*, Case No. 2016-00001 at 4 (Ky. P.S.C. July 7, 2016).

The Company does not have any issues related to billings from a regional transmission operator.

**Case No. KPCO 2017-00001**

**Item No. 42**

**Page 1 of 1**

**Witness: John A. Rogness**

**Q - 42** Explain in detail how Kentucky Power classifies a generation outage as forced or scheduled.

**A - 42** According to the North American Electric Reliability Corporation (NERC) an unplanned (forced) outage is an outage that requires immediate removal of a unit from service, another outage state, or a reserve shutdown state. This type of outage usually results from immediate mechanical/electrical/hydraulic control system trips and operator-initiated trips in response to unit alarms.

According to 807 KAR 5:056, Section 1(4) forced outages are all nonscheduled losses of generation or transmission which require substitute power for a continuous period in excess of six (6) hours.

**Case No. KPCO 2017-00001**

**Item No. 43**

**Page 1 of 1**

**Witness: John A. Rogness**

**Q - 43** In calculating the peaking unit equivalent, Kentucky Power uses the Columbia Gas Appalachia natural gas prices published in Platts Gas Daily. (Footnote 1 - Case No 2016-00001, July 7, 2016 Order at 3)

Since Kentucky Power currently has a natural gas unit in operation, explain why the Platts Gas Daily price should be used in the calculation rather than the price Kentucky Power pays for natural gas to operate Big Sandy Unit 1.

**A - 43** The Company uses the published price of natural gas in Platts Gas Daily in accordance with the Commission's Order in Case No. 2000-00495-B dated October 3, 2002.

**Case No. KPCO 2017-00001**  
**Item No. 44**  
**Page 1 of 1**  
**Witness: John A. Rogness**

- Q - 44** In Case No. 2016-00001, Kentucky Power stated in response to an information request that it made an error in calculating the amount of power purchases to be excluded for recovery through the FAC during the period November 1, 2014, through April 30, 2015. Kentucky Power stated that, as a result of the error, it under- collected \$205,322. In that case, the Commission found that the \$205,322 under- collection for the period November 1, 2014, through April 30, 2015, fell outside of the then current review period and should be addressed in Kentucky Power's next two-year review proceeding. (Footnote-2 Case 2016-00001 Kentucky Power's response to the Commission's February 5, 2016 Request for Information, Item 26, Page 3 of 3). State whether Kentucky Power requests in this proceeding that it be allowed to collect \$205,322 through the FAC.
- A - 44** Yes. The Company requests that it be authorized to collect through its fuel adjustment clause the under-collected amount of \$205,322 in the first billing cycle following the Commission's order in this case.