

**COMMONWEALTH OF KENTUCKY**  
**BEFORE THE**  
**PUBLIC SERVICE COMMISSION OF KENTUCKY**

**IN THE MATTER OF**

**ELECTRONIC EXAMINATION OF THE )**  
**APPLICATION OF THE FUEL ADJUSTMENT )**  
**CLAUSE OF KENTUCKY POWER COMPANY ) Case No. 2017-00282**  
**FROM NOVEMBER 1, 2016 THROUGH APRIL )**  
**30, 2016 )**

**KENTUCKY POWER COMPANY RESPONSES TO**  
**COMMISSION STAFF'S FIRST SET OF DATA REQUESTS**

**September 13, 2017**



**VERIFICATION**

The undersigned, Thomas R Marosi, being duly sworn, deposes and says he is the Energy Production Superintendent Sr. 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

*Thomas R Marosi*

Thomas R Marosi

STATE OF OHIO

)

) Case No. 2017-00282

COUNTY OF FRANKLIN

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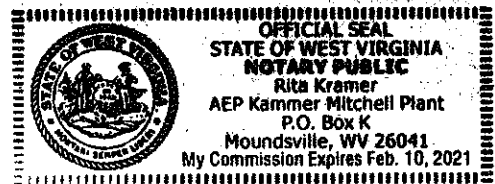
Subscribed and sworn to before me, a Notary Public in and before said County and State, by Thomas R Marosi, this the 11<sup>th</sup> day of September 2017.

*Rita Kramer*

Notary Public

My Commission Expires:

Feb. 10, 2021



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*

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

COMMONWEALTH OF KENTUCKY )

) Case No. 2017-00282

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 7<sup>th</sup> day of September 2017.

*Miana K. Inisher*

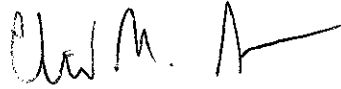
\_\_\_\_\_  
Notary Public

Notary ID: 485843

My Commission Expires: 03-21-21

**VERIFICATION**

The undersigned, Clinton M. Stutler, being duly sworn, deposes and says he is the Fuel Buyer Principal for American Electric Power, 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



\_\_\_\_\_  
Clinton M Stutler

STATE OF OHIO

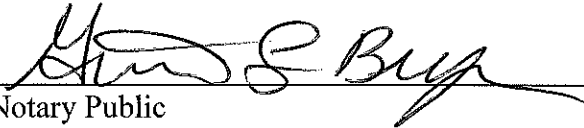
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) Case No. 2017-00282

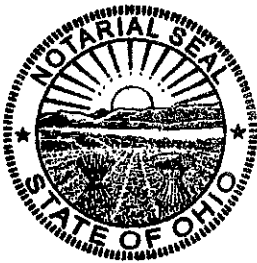
COUNTY OF FRANKLIN

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Subscribed and sworn to before me, a Notary Public in and before said County and State, by Clinton M Stutler, this the 8 day of September 2017.



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



**Gina L. Beyer**  
Notary Public, State of Ohio  
My Commission Expires 07-01-2021

My Commission Expires: 7-1-2021

**Case No. 2017-00282**  
**Item No. 1-001**  
**Page 1 of 1**  
**Witness: Amy J. Elliott**  
**Witness: Clinton M. Stutler**

**Q - 1-001** For the period from November 1, 2016, through April 30, 2017, list each vendor from whom coal was purchased and the quantities and the nature of each purchase (i.e., spot or contract). For the period under review in total, provide the percentage of purchases that were spot versus contract. For contract purchases, state whether the contract has been filed with the Commission. If not, explain why it has not been filed.

**A - 1-001** Please refer to KPCO\_R\_KPSC\_1\_01\_Attachment1.xls for the requested information. For purposes of the Company's monthly fuel adjustment clause back-up filings, Kentucky Power defines a spot purchase as an agreement with a term of one year or less. To permit the Commission to reconcile this response to the Company's fuel adjustment clause back-up filings, the term "spot purchase" is likewise defined for purposes of KPCO\_R\_KPSC\_1\_01\_Attachment1.xls as any purchase with a term of one year or less.

The Company's definition of spot purchase for purposes of this response and Kentucky Power's fuel adjustment clause back-up filings differs slightly from that used in by Staff in KPSC 1-8 (defining spot purchase as less than one year) and the accompanying response by Kentucky Power.

All contracts have been filed with the Commission.

**Case No. 2017-00282**  
**Item No. 1-002**  
**Page 1 of 1**  
**Witness: Amy J. Elliott**  
**Witness: Amy E. Jeffries**

- Q - 1-002** For the period from November 1, 2016, through April 30, 2017, list each vendor from whom natural gas was purchased for generation and the quantities and the nature of each purchase (i.e. , spot or contract). For contract purchases, state whether the contract has been filed with the Commission. If not, explain why it has not been filed.
- A - 1-002** Please see KPCO\_R\_KPSC\_1\_02\_Attachment1.xls for the requested information. The Company purchases natural gas only on the spot market. Kentucky Power enters into NAESB Master Agreements with each vendor for the purchase of natural gas. All NAESB Master Agreements and invoices evidencing individual transactions under the master agreement have been filed with the Commission.

**Case No. 2017-00282**  
**Item No. 1-003**  
**Page 1 of 1**  
**Witness: Clinton M. Stutler**  
**Witness: Amy E. Jeffries**

**Q - 1-003** State whether Kentucky Power engages in hedging activities for its coal or natural gas purchases used for generation. If so, describe the hedging activities in detail.

**A - 1-003** Kentucky Power does not engage in hedging activities for its coal or natural gas purchases used for generation.



**Case No. 2017-00282**  
**Item No. 1-004**  
**Page 1 of 1**  
**Witness: David L. Mell**  
**Witness: Thomas R. Marosi**

- Q - 1-004** For each generating station or unit for which a separate coal pile is maintained, state, for the period from November 1, 2016, through April 30, 2017, the actual amount of coal burned in tons, the actual amount of coal deliveries in tons, the total kWh generated, and the actual capacity factor at which the plant operated.
- A - 1-004** Please refer to KPCO\_R\_KPSC\_1\_04\_Attachment1.xls for the requested information related to Kentucky Power's share of the Mitchell generating station.

**Case No. 2017-00282**

**Item No. 1-005**

**Page 1 of 1**

**Witness: Amy J. Elliott**

**Q - 1-005** List all firm power commitments for Kentucky Power from November 1, 2016, through April 30, 2017, for (a) purchases and (b) sales. This list shall identify the electric utility, the amount of commitment in MW, and the purpose of the commitment (i.e., peaking, emergency).

**A - 1-005** (a) Firm power purchases for Kentucky Power for the period from November 1, 2016 through April 30, 2017:

- Kentucky Power is party to a Unit Power Agreement with AEP Generating Company for 393 MW of base load power from the Rockport Plant.

(b) Firm power sales for Kentucky Power for the period from November 1, 2016 through April 30, 2017:

- Kentucky Power provides firm power sales to two wholesale customers: the Cities of Olive Hill and Vanceburg, Kentucky. The Company's wholesale customers use the power for load-following service to their citizens. During the review period, the peak loads for the two cities were 5.2 MW for Olive Hill and 12.2 MW for Vanceburg.

**Case No. 2017-00282**  
**Item No. 1-006**  
**Page 1 of 1**  
**Witness: Amy J. Elliott**

**Q - 1-006** Provide a monthly billing summary of sales to all electric utilities for the period November 1, 2016, through April 30, 2017.

**A - 1-006** Please refer to KPCO\_R\_KPSC\_1\_6\_Attachment1.xls for the requested information.

**Case No. 2017-00282**  
**Item No. 1-007**  
**Page 1 of 1**  
**Witness: David L. Mell**  
**Witness: Thomas R. Marosi**

**Q - 1-007** List Kentucky Power's scheduled, actual, and forced outages from November 1, 2016, through April 30, 2017.

**A - 1-007** Please refer to KPCO\_R\_KPSC\_1\_7\_Attachment1.xlsx for the requested outage information.

**Case No. 2017-00282**  
**Item No. 1-008**  
**Page 1 of 1**  
**Witness: Clinton M. Stutler**

**Q - 1-008** List all existing fuel contracts categorized as long-term (i.e., one year or more in length). Provide the following information for each contract:

- 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 - 1-008** Please refer to attachment KPCO\_R\_KPSC\_1\_8\_Attachment1.xls for the requested information presented in conformity with the provided definition of “long term” fuel contract.

**Case No. 2017-00282**  
**Item No. 1-009**  
**Page 1 of 2**  
**Witness: Clinton M. Stutler**

**Q - 1-009** a. State whether Kentucky Power regularly compares the price of its coal purchases to those paid by other electric utilities.

b. If so, 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.

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

**A - 1-009** a. Kentucky Power evaluates all purchases against the market at the time of the purchase to ensure the competitiveness of the purchase. The Company also performs a comparison of its coal purchases at least twice per year in connection with its response to this data request.

b. The Mitchell Plant burns an approximate 50/50 mixture of high-sulfur Northern Appalachian Coal ("NAPP") and low-sulfur Central Appalachian Coal ("CAPP"). The NAPP coal is delivered by means of a conveyor belt from an adjacent mine. The CAPP coal is delivered to the plant by barge. The delivered cost of coal blends such as that burned at the Mitchell station, is affected by the proportion of the constituent coals, the mode and distance of transportation, and the chemical and thermal qualities of the coal, including, but not limited to, the sulfur and ash content of the coal as well as its BTU content.

In reviewing coal purchases by other utilities, using data from the U.S. Energy Information Agency (EIA) Form 923 for the period of November 1, 2016 through April 30, 2017, Kentucky Power determined the reported generating stations did not purchase NAPP and CAPP coal in quantities and percentages similar to the Company's purchases for the Mitchell Station. It also appears that differences in the chemical and thermal properties of the reported purchases, as well as differences in transportation modes and differences, make direct comparisons less useful.

**Case No. 2017-00282**  
**Item No. 1-009**  
**Page 2 of 2**  
**Witness: Clinton M. Stutler**

The Company is providing a comparison of Kentucky Power's purchases of NAPP coal for the Mitchell Plant to fuel prices of other utilities making similar purchases of NAPP coal as KPCo\_R\_KPSC\_1\_9\_Attachment1.xls. This comparison does not purport to account for quality or transportation differences that would impact the delivered costs.

Please also refer to KPCo\_R\_KPSC\_1\_9\_Attachment2.xls for the data from the U.S. Energy Information Agency (EIA) Form 923 for the period of November 1, 2016 through April 30, 2017. This data was obtained via ABB's Velocity Suite, which is a search engine that gathers publicly available information. The averages and totals presented in KPCo\_R\_KPSC\_1\_9\_Attachment2.xls are a function of pivot tables applied to the Velocity Suite data.

**Case No. 2017-00282**  
**Item No. 1-010**  
**Page 1 of 1**  
**Witness: Clinton M. Stutler**

**Q - 1-010** State the percentage of Kentucky Power's coal, as of the date of this Order, that is delivered by:

- a. Rail;
- b. Truck; or
- c. Barge.

**A - 1-010** During the review period, the approximate percentages of Kentucky Power's coal delivery method at the Mitchell Plant were as follows:

- a. Rail: 0%
- b. Truck: 0%
- c. Barge: 55%
- d. Belt 45%



**Case No. 2017-00282**  
**Item No. 1-011**  
**Page 1 of 2**  
**Witness: Clinton M. Stutler**

- Q - 1-011**
- a. State Kentucky Power's coal inventory level in tons and in number of days' supply as of April 30, 2017. Provide this information by generating station and in the aggregate.
  - b. Describe the criteria used to determine number of days' supply.
  - c. Compare Kentucky Power's coal inventory as of April 30, 2017, 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 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 so, state the expected change and the reasons for this change.

- A - 1-011**
- a. As of April 30, 2017 Kentucky Power's share of the coal inventory levels at the Mitchell Plant were as follows:
    - High Sulfur: 190,500 tons, or 50 days of supply
    - Low Sulfur: 94,500 tons, or 25 days of supply

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

For High Sulfur,  $\frac{190,500 \text{ tons in storage as of 04/30/2017}}{3,840 \text{ (full load burn rate* - tons/day)}} = 50 \text{ days}$

For Low Sulfur,  $\frac{94,500 \text{ tons in storage as of 04/30/2017}}{3,840 \text{ (full load burn rate* - tons/day)}} = 25 \text{ days}$

\*Company share of full load burn rate.

**Case No. 2017-00282**  
**Item No. 1-011**  
**Page 2 of 2**  
**Witness: Clinton M. Stutler**

c. As of April 30, 2017,

High Sulfur: Target Inventory Days = 15 days, Actual Inventory Days = 50 days (35 days over target)

Low Sulfur: Target Inventory Days = 30 days, Actual Inventory Days = 25 (5 days under target)

d. High sulfur inventory remains above target due to contractual supply commitments.

e. (1) No. Kentucky Power does not expect any significant changes in the coal inventory target for the Mitchell plant within the next 12 months.

(2) Not applicable

**Case No. 2017-00282**  
**Item No. 1-012**  
**Page 1 of 1**  
**Witness: Clinton M. Stutler**

**Q - 1-012** a. State whether Kentucky Power has audited any of its coal contracts during the period from November 1, 2016, through April 30, 2017.

b. If so, 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 - 1-012** Kentucky Power did not audit any coal contracts during the review period.

**Case No. 2017-00282**  
**Item No. 1-013**  
**Page 1 of 1**  
**Witness: Amy J. Elliott**

- Q - 1-013** a. State whether Kentucky Power has received any customer complaints regarding its FAC during the period from November 1, 2016, through April 30, 2017.
- b. If so, for each complaint, state:
- (1) The nature of the complaint; and
  - (2) Kentucky Power's response.
- A - 1-013** Kentucky Power has not received any customer complaints regarding its FAC during the review period.

**Case No. 2017-00282**  
**Item No. 1-014**  
**Page 1 of 1**  
**Witness: Clinton M. Stutler**

- Q - 1-014** a. State whether Kentucky Power is currently involved in any litigation with its current or former coal suppliers.
- b. If so, 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 - 1-014** Kentucky Power is not currently involved in any litigation with current or former coal suppliers.

**Case No. 2017-00282**  
**Item No. 1-015**  
**Page 1 of 1**  
**Witness: Clinton M. Stutler**  
**Witness: Amy E. Jeffries**

**Q - 1-015** a. During the period from November 1, 2016, through April 30, 2017, 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) Provide the written policies and procedures as changed;
- (3) State the date(s) the changes were made; and
- (4) Explain why the changes were made.

c. If no, provide the date 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 - 1-015** There have been no changes during the review period to Kentucky Power's written policies and procedures regarding its fuel procurement. The current fuel procurement policy was last modified on August 31, 2015 and provided to the Commission in Case No. 2016-00230 on August 26, 2016.

**Case No. 2017-00282**  
**Item No. 1-016**  
**Page 1 of 1**  
**Witness: Clinton M. Stutler**  
**Witness: Amy E. Jeffries**

- Q - 1-016** 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 November 1, 2016, through April 30, 2017.
- b. If so, 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 - 1-016** Kentucky Power is not aware of any violations of its policies and procedures regarding fuel procurement that occurred prior to or during the review period.

**Case No. 2017-00282**  
**Item No. 1-017**  
**Page 1 of 1**  
**Witness: Clinton M. Stutler**  
**Witness: Amy E. Jeffries**

- Q - 1-017** 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 November 1, 2016, through April 30, 2017.
- A - 1-017** There were no changes to the organizational structure and personnel of the departments or divisions that are responsible for Kentucky Power's fuel procurement activities that occurred during the review period. Kentucky Power provided its current organization chart on August 26, 2016 in Case No. 2016-00230.



**Case No. 2017-00282**  
**Item No. 1-018**  
**Page 1 of 1**  
**Witness: David L. Mell**  
**Witness: Thomas R. Marosi**

- Q - 1-018** a. Identify all changes that Kentucky Power has made during the period under review to its maintenance and operation practices that also affect fuel usage at Kentucky Power's generation facilities.
- b. Describe the impact of these changes on Kentucky Power's fuel usage.
- A - 1-018** a. and b. Kentucky Power made no maintenance or operation practice changes that affected fuel usage during the review period at either its Mitchell Plant or Big Sandy Plant.

**Case No. 2017-00282**  
**Item No. 1-019**  
**Page 1 of 1**  
**Witness: Clinton M. Stutler**

**Q - 1-019** List each written coal-supply solicitation issued during the period from November 1, 2016, through April 30, 2017. a. For each solicitation, provide the date of the solicitation, the type of 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. Provide the bid tabulation sheet or corresponding document that ranked the proposals. (This document should 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 - 1-019** a. and b. Please refer to [KPCo\\_R\\_KPSC\\_1\\_19\\_Attachment 1.pdf](#) for information concerning the Company's two written coal-supply solicitations.

Please also refer to [KPCo\\_R\\_KPSC\\_1\\_19\\_Attachment2\\_Redacted.pdf](#) and [KPCo\\_R\\_KPSC\\_1\\_19\\_Attachment3\\_Redacted.pdf](#) for information relating to the offering vendors, analyses, and ranked proposals for the two written solicitations.

**Case No. 2017-00282**  
**Item No. 1-020**  
**Page 1 of 1**  
**Witness: Clinton M. Stutler**

- Q - 1-020** List each oral coal-supply solicitation issued during the period from November 1, 2016, through April 30, 2017.
- 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 selected. Provide the tabulation sheet or other document that ranks the proposals. (This document should 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 - 1-020** There were no oral coal-supply solicitations during the review period.

**Case No. 2017-00282**  
**Item No. 1-021**  
**Page 1 of 1**  
**Witness: Amy J. Elliott**

**Q - 1-021** a. List all intersystem sales during the period under review 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 that line-loss factor was determined.

**A - 1-021** a. & b. Beginning on June 1, 2007, based on FERC Order EL06-055, PJM modified the Locational Marginal Pricing (LMP) 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.

**Case No. 2017-00282**  
**Item No. 1-022**  
**Page 1 of 1**  
**Witness: Amy J. Elliott**

- Q - 1-022**
- 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 under review.
- A - 1-022**
- a. Kentucky Power conducts intersystem sales through participation in the PJM wholesale market. Please refer to the Company's response to KPSC 1-21 for a description of the effect on the FAC calculation of line losses related to intersystem sales.
  - b. Kentucky Power has not made any changes to its methodology.

**Case No. 2017-00282**  
**Item No. 1-023**  
**Page 1 of 1**  
**Witness: Clinton M. Stutler**

**Q - 1-023** State whether, during the period under review, Kentucky Power has solicited bids for coal with the restriction that it was not mined through strip mining or mountaintop removal. If so, 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 - 1-023** Kentucky Power has not solicited for coal with the restriction that it was not mined through strip mining or mountain top removal.

**Case No. 2017-00282**  
**Item No. 1-024**  
**Page 1 of 1**  
**Witness: David L. Mell**  
**Witness: Thomas R. Marosi**

**Q - 1-024** Provide a detailed discussion of any specific generation efficiency improvements Kentucky Power has undertaken during the period under review.

**A - 1-024** Kentucky Power did not undertake any specific generation efficiency improvements during the review period at either its Mitchell Plant or Big Sandy Plant.

**Case No. 2017-00282**  
**Item No. 1-025**  
**Page 1 of 1**  
**Witness: Amy J. Elliott**

**Q - 1-025** State whether all fuel 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 - 1-025** All fuel contracts related to commodity and/or transportation have been filed with the Commission.



**Case No. 2017-00282**  
**Item No. 1-026**  
**Page 1 of 1**  
**Witness: Amy J. Elliott**

**Q - 1-026** For each month of the review period, provide Kentucky Power's calculations and supporting data for determining the amount of power purchases in excess of the "peaking unit equivalent" to be excluded from recovery through the FAC.

**A - 1-026** Please refer to KPCO\_R\_KPSC\_1\_26\_Attachment1\_Redacted.xlsx for the requested information.