### **STAFF-DR-01-018**

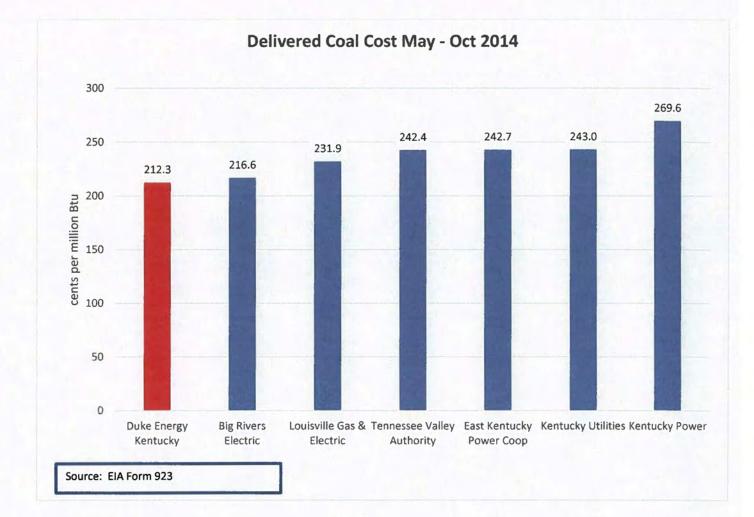
### **REQUEST:**

- a. State whether Duke Kentucky regularly compares the price of its coal purchases with those paid by other electric utilities.
- b. If the response is yes, state:
  - 1. The utilities that are included in this comparison and their locations; and
  - How Duke Kentucky's prices compare with those of the other utilities for the review period. Include all prices used in the comparison in cents per MMbtu.

### **RESPONSE:**

- a. Duke Energy Kentucky compares its delivered coal prices to those paid by other major Kentucky electric utilities for their plants located in Kentucky as noted in Case Nos. 2013-00265, 2013-00448, and 2014-00229. Please see Staff-DR-01-018 Attachment, derived from EIA 923 data for this review period.
- b. See STAFF-DR-01-018 Attachment.

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### STAFF-DR-01-019

# **REQUEST:**

For the period under review by generating station, list the percentages of Duke Kentucky's coal delivered by:

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

## **RESPONSE:**

Please reference Duke Energy Kentucky Case Nos. 2013-00265, 2013-00448, and 2014-00229 for the dates of November 1, 2012 – April 30, 2014. For this review period of May 1, 2014 – October 31, 2014, below are the percentages based on delivery methods to Duke Energy Kentucky.

|              | Rail % | Truck % | Barge % |
|--------------|--------|---------|---------|
|              | (a)    | (b)     | (c)     |
| East Bend    | 0      | 0       | 100     |
| Miami Fort 6 | 0      | 0       | 100     |

### STAFF-DR-01-020

### **REQUEST:**

For each generating station, state the methods of coal delivery currently available.

### **RESPONSE:**

Please reference Duke Energy Kentucky Case Nos. 2013-00265, 2013-00448, and 2014-00229 for the dates of November 1, 2012 – April 30, 2014. For this review period of May 1, 2014 – October 31, 2014, the current methods available for delivery to East Bend and Miami Fort 6 are by barge and on limited basis truck delivery.

### STAFF-DR-01-021

### **REQUEST:**

- a. State Duke Kentucky's coal inventory level in tons and in number of days' supply as of October 31, 2014. Provide this information by generating station and in the aggregate.
- b. Describe the criteria used to determine the number of days' supply.
- c. Compare Duke Kentucky's coal inventory as of October 31, 2014 to its inventory target for that date for each plant and for total inventory.
- d. If actual coal inventory exceeds inventory target by 10 days' supply, state the reasons for the additional inventory.
- e. (1) State whether Duke Kentucky expects any significant changes in its current coal inventory target within the next 12 months.

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

### **RESPONSE:**

Duke Energy Kentucky's total aggregate inventory across the system as of October 31, 2014 was 331,796 tons, or 41.47 days.

### EAST BEND:

- As of October 31, 2014, total station inventory at East Bend was 276,169 tons or 42.49 days.
- b. The number of days supply is computed by dividing an ending daily coal inventory figure stated in tons by the Full Load Burn per day figure of 6,500 tons.
- c. Inventory target is approximately 40 days compared to actual days inventory on October 31, 2014 of 42.49 days.
- d. N/A
- e. 1. No
  - 2. N/A

## **MIAMI FORT #6:**

- As of October 31, 2014, total Station inventory at Miami Fort #6 was 55,627 tons or 37.08 days.
- b. The number of days supply is computed by dividing an ending daily coal inventory figure stated in tons by the Full Load Burn per day figure of 1,500 tons.
- c. Inventory target is approximately 40 days compared to the 37.08 days inventory the station had as of October 31, 2014.
- d. N/A
- e. 1. Yes.

2. Duke Energy Kentucky expects inventories to reach a zero balance within the next twelve months as Miami Fort Unit 6 will be retiring.

### STAFF-DR-01-022

### **REQUEST:**

- a. State whether Duke Kentucky has audited any of its coal contracts during the period from May 1, 2014 to October 31, 2014.
- 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 Duke Kentucky took as a result of the audit.

## **RESPONSE:**

### East Bend:

a. Duke Energy Kentucky has not audited any of its contracts during the period from

May 1, 2014 through October 31, 2014.

b. N/A

### Miami Fort #6

a. Duke Energy Kentucky has not audited any of its contracts during the period from

May 1, 2014 through October 31, 2014.

b. N/A

### STAFF-DR-01-023

### **REQUEST:**

- a. State whether Duke Kentucky has received any customer complaints regarding its FAC during the period from May 1, 2014 to October 31, 2014.
- b. If the response is yes, for each complaint, state:
  - 1. The nature of the complaint; and
  - 2. Duke Kentucky's response.

## **RESPONSE:**

Duke Energy Kentucky has not received any customer complaints regarding its FAC

during the period from May 1, 2014 through October 31, 2014.

PERSON RESPONSIBLE: Lisa Steinkuhl

#### STAFF-DR-01-024

## **REQUEST:**

- a. State whether Duke Kentucky 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 Duke Kentucky;
  - 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.

### **RESPONSE:**

### East Bend and Miami Fort 6:

Please reference Duke Energy Kentucky Case Nos. 2013-00265, 2013-00448, and 2014-00229 for the dates of November 1, 2012 – April 30, 2014. For this review period of May 1, 2014 – October 31, 2014, Duke Energy Kentucky is not currently involved in any litigation with its current or former suppliers.

### STAFF-DR-01-025 PUBLIC

### **REQUEST:**

List each written coal supply solicitation issued during the period May 1, 2014 to October 31, 2014.

- 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. 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.

### **RESPONSE:**

## CONFIDENTIAL PROPRIETARY TRADE SECRET (As to Attachment Only)

This response has been filed with the Commission under a Petition for Confidential Treatment.

- a. Duke Energy Kentucky sent out a written coal RFP on September 8, 2014. This was the only coal RFP during the review period. See STAFF-DR-01-025 Confidential Attachment (a) for guidelines and specification related to the RFP, filed with the Commission under a Petition for Confidentail Treatment.
- b. The RFP was sent to over 75 coal producers and sellers. See STAFF-DR-01-025 Confidential Attachment (b and c) for a summary of all offers for the period 2014 -

2016, filed with the Commission under a Petition for Confidentail Treatment. The only coal purchased from the RFP was for coal in 2016 and is under contract development. The Company expects to complete the contract within the next few months.

# PERSON RESPONSIBLE: N/A

### STAFF-DR-01-026 PUBLIC

#### **REQUEST:**

List each oral solicitation for coal supplies issued during the period May 1, 2014 to October 31, 2014.

- a. For each solicitation, state why the solicitation was not written, the dates(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 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.

#### **RESPONSE:**

#### CONFIDENTIAL PROPRIETARY TRADE SECRET

This response is submitted under a petition for confidential treatment.

#### Miami Fort #6:

a. From May 1, 2014 to October 31, 2014, Duke Energy Kentucky, Inc. solicited oral bids for coal in July 2014 by engaging

The reason these companies were contacted was due to them being past suppliers for Miami Fort #6. The offer received from

The solicitation was not written due to the short term need for spot purchases for inventory replenishment.

As outlined in Staff-DR-01-026 Confidential Attachment, submitted under a petition for confidential treatment, bids were evaluated and selected based on economics, location, term, and supply requirements. Additionally, attached documents include coal quality and deliverable time periods.

 b. See Staff-DR-01-026 Confidential Attachment, submitted under a petition for confidential treatment.

PERSON RESPONSIBLE: N/A

### STAFF-DR-01-027

## **REQUEST:**

For the period from May 1, 2014, to October 31, 2014, 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. For contract purchases, state whether the contract has been filed with Commission. If the response is no, explain why it has not been filed.

## **RESPONSE:**

Please see Staff-DR-01-027 Attachment.

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# **Duke Energy Kentucky**

| VENDOR                    | PURCHASE<br>TONNAGE | PURCHASE<br>TYPE | Contract<br># | Filed with<br>Commission | lf no,<br>Explain why |
|---------------------------|---------------------|------------------|---------------|--------------------------|-----------------------|
| American Coal Co C        | 146,738             | Spot             |               |                          | *                     |
| Foresight Coal Sales, LLC | 100,745             | Contract         | 28584         | 10/11/2013               |                       |
| River View                | 280,146             | Contract         | 28376         | 1/2/2013                 |                       |
| River View                | 340,386             | Spot             |               |                          | *                     |
| Vitol, Inc.               | 57,645              | Spot             |               |                          | •                     |
|                           | 925,660             |                  |               |                          |                       |
|                           | 41.15%              | Contract         |               |                          |                       |
|                           | 58.85%              | Spot             |               |                          |                       |

\* Spot Contracts are not filed with the Commission

#### STAFF-DR-01-028

### **REQUEST:**

For the period from May 1, 2014, to October 31, 2014, 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. For contract purchases, state whether the contract has been filed with the Commission. If the response is no, explain why it has not been filed.

#### **RESPONSE:**

For the period from May 1, 2014, to October 31, 2014, there were no Duke Energy Kentucky gas purchases.

#### STAFF-DR-01-029

### **REQUEST:**

State whether Duke Kentucky 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.

#### **RESPONSE:**

#### Coal:

Duke Energy Kentucky does not engage in hedging transactions with respect to coal purchases. Duke Energy Kentucky contracts for physical deliveries of coal through fixed term coal transactions within a balanced portfolio of purchases. The Company also maintains a portfolio with multiple suppliers to mitigate potential supply interruption risk.

### **Natural Gas:**

To date, Duke Energy Kentucky has not engaged in any forward natural gas price hedging activities. Duke Energy Kentucky engages in the physical procurement of physical natural gas to support its gas generation.

### STAFF-DR-01-030

## **REQUEST:**

For each generating station or unit for which a separate coal pile is maintained, state for the period from May 1, 2014, to October 31, 2014 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.

## **RESPONSE:**

| Plant        | Coal Burn<br>(Tons) <sup>(1)</sup> | Coal<br>Receipts<br>(Tons) <sup>(2)</sup> | Net<br>MWH | Capacity Factor<br>(Net MWH) /<br>period hrs x<br>MW rating) |  |  |
|--------------|------------------------------------|---|------------|--|--|--|
| East Bend    | 469,504                            | 721,277                                   | 973,157    | 53.2%  |  |  |
| Miami Fort 6 | 202,995                            | 313,818                                   | 448,656    | 62.3%  |  |  |

<sup>(1)</sup> Duke Energy Kentucky's ownership share.

(2) 100% of coal received at the station.

## PERSON RESPONSIBLE: Lisa Steinkuhl

### STAFF-DR-01-031

## **REQUEST:**

a. During the period from May 1, 2014, to October 31, 2014, have there been any changes to Duke Kentucky'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 Duke Kentucky'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.

### **RESPONSE:**

### Coal

- a. Duke Energy Kentucky fuel procurement policies or procedures have not been changed during the period from May 1, 2014 through October 31, 2014.
- b. N/A

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c. The procurement policy was last updated on 12/01/10. The updated fuel policy was provided to the Commission in Case No. 2011-249 in September 2011 in Staff-DR-01-015.

## Natural Gas

- a. Duke Energy Kentucky fuel procurement policies or procedures have not been changed during the period from May 1, 2014 through October 31, 2014.
- b. N/A
- c. The procurement policy was last updated February 2012. The updated fuel policy was provided to the Commission in Case No. 2011-486 in February 2012.

### STAFF-DR-01-032

## **REQUEST:**

- a. State whether Duke Kentucky is aware of any violations of its policies and procedures regarding fuel procurement that occurred prior to or during the period of May 1, 2014, to October 31, 2014.
- b. If the response is yes, for each violation:
  - 1. Describe the violation;
  - Describe the action(s) that Duke Kentucky took upon discovering the violation; and
  - 3. Identify the person(s) who committed the violation.

### **RESPONSE:**

### **EAST BEND:**

- Duke Energy Kentucky is not aware of any violations of its policies and procedures.
- b. N/A

### **MIAMI FORT #6:**

- a. Duke Energy Kentucky is not aware of any violations of its policies and procedures.
- b. N/A

#### STAFF-DR-01-033

### **REQUEST:**

Identify and explain the reasons for all changes in the organizational structure and personnel of the departments or divisions that are responsible for Duke Kentucky's fuel procurement activities that occurred during the period from May 1, 2014, to October 31, 2014.

### **RESPONSE:**

Please reference Duke Energy Kentucky Case Nos. 2013-00265, 2013-00448, and 2014-00229 for the dates of November 1, 2012 – April 30, 2014. For this review period of May 1, 2014 – October 31, 2014, the Vice President of Fuel and System Optimization, Sasha Weintraub, was promoted to another role within Duke Energy. His replacement is Senior Vice President of Fuel and System Optimization Swati Daji. There were no additional changes in the organizational structure.

### STAFF-DR-01-034

#### **REQUEST:**

- a. Identify all changes that Duke Kentucky made during the period from May 1, 2014, to October 31, 2014 to its maintenance and operation practices that affect fuel usage at Duke Kentucky's generation facilities.
- b. Describe the impact of these changes on Duke Kentucky's fuel usage.

### **RESPONSE:**

a. Starting in the summer of 2014, an analysis was completed and the decision was made to operate Miami Fort 6 at a reduced main steam pressure. Due to the unit approaching the end of its useful life, it was experiencing frequent boiler wall tube leaks when operating at full pressure operation. Once reduced pressure operation began, a significant reduction in boiler tube leaks occurred. The reduced pressure operation has resulted in the unit operating with an approximate 27 MW planned derate. However, the unit's EFOR has dropped from 20%+ to near 0%. Consequently, the reduction in pressure has actually allowed more energy to be generated, reduced maintenance expenses for repairs to critical boiler components, reduced unit downtime, and improved cyclic operation of equipment. The Company's strategy has had the overall effect of a more predictable base load operation.

b. The major impact on this change is to the unit's capability. The impact to the unit's individual heat rate is minimal.

PERSON RESPONSIBLE: John Swez

### STAFF-DR-01-035

### **REQUEST:**

- a. List all intersystem sales during the period from May 1, 2014, to October 31,
  2014 in which Duke Kentucky used a third party's transmission system.
- b. For each sale listed above:
  - Described how Duke Kentucky addressed, for FAC reporting purposes, the cost of fuel expended to cover any line losses incurred to transmit its power across the third party's transmission system; and
  - State the line-loss factor used for each transaction and describe how such line-loss factor was determined.

#### **RESPONSE:**

a. Duke Energy Kentucky sells 100% of its generation to PJM Interconnection,
 L.L.C. These sales are made at the generating station; consequently, no third party transmission was used.

b. N/A

### PERSON RESPONSIBLE: Lisa Steinkuhl

## STAFF-DR-01-036

# **REQUEST:**

Describe each change that Duke Kentucky made to its methodology for calculating intersystem sales line losses during the period from May 1, 2014, to October 31, 2014.

## **RESPONSE:**

N/A. See response to Staff-DR-01-035.

PERSON RESPONSIBLE: Lisa Steinkuhl

### STAFF-DR-01-037

### **REQUEST:**

State whether Duke Kentucky has solicited bids for coal with the restriction that it was not mined through strip mining or mountain top 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.

#### **RESPONSE:**

### EAST BEND & MIAMI FORT #6:

Please reference Duke Energy Kentucky Case Nos. 2013-00265, 2013-00448, and 2014-00229 for the dates of November 1, 2012 – April 30, 2014. For this review period of May 1, 2014 – October 31, 2014, Duke Energy Kentucky did not solicit bids with a restriction to exclude bids mined through strip mining or mountain top removal.

## STAFF-DR-01-038

# **REQUEST:**

By month, provide the specific PJM Interconnection, Inc. codes and amounts for each code that were included in Duke Kentucky's monthly FAC filings during the period from November 1, 2012, to October 31, 2014.

## **RESPONSE:**

| Month/Year<br>(1) | Energy Costs<br>(2) | PJM Codes 2370 &<br>2375<br>Total Balancing<br>and Day Ahead<br>Operating Reserve<br>Credit<br>(3) | PJM Codes 2370<br>& 2375<br>Non-Native<br>Balancing and<br>Day Ahead<br>Operating<br>Reserve Credit<br>(4) | PJM Codes 2370<br>& 2375<br>Native Balancing<br>and Day Ahead<br>Operating<br>Reserve Credit<br>(3) - (4) = (5) | Total PJM Costs<br>in FAC Filings<br>(2) - (5) |
|-------------------|---------------------|--|--|---|--|
| November 2012     | \$1,881,944         | \$0  | \$0  | \$0   | \$1,881,944                                    |
| December 2012     | \$2,004,844         | \$21,513   | \$0  | \$21,513  | \$1,983,331                                    |
| January 2013      | \$1,871,033         | \$0  | \$0  | \$0   | \$1,871,033                                    |
| February 2013     | \$2,475,513         | \$0  | \$0  | \$0   | \$2,475,513                                    |
| March 2013        | \$1,381,109         | \$48,698   | \$19,982   | \$28,716  | \$1,352,393                                    |
| April 2013        | \$6,069,286         | \$34,901   | \$943  | \$33,958  | \$6,035,328                                    |
| May 2013          | \$1,717,059         | \$34,502   | \$0  | \$34,502  | \$1,682,557                                    |
| June 2013         | \$4,023,905         | \$0  | \$0  | \$0   | \$4,023,905                                    |
| July 2013         | \$6,016,477         | \$349,972  | \$105,697  | \$244,275   | \$5,772,202                                    |
| August 2013       | \$2,927,144         | \$157  | \$0  | \$157   | \$2,926,987                                    |
| September 2013    | \$1,585,380         | \$185,588  | \$5,072  | \$180,516   | \$1,404,864                                    |
| October 2013      | \$452,876           | \$0  | \$0  | \$0   | \$452,876                                      |
| November 2013     | \$1,489,374         | \$13,248   | \$13,248   | \$0   | \$1,489,374                                    |
| December 2013     | \$3,238,365         | \$253,237  | \$281  | \$252,956   | \$2,985,409                                    |
| January 2014      | \$13,292,404        | \$1,039,244  | \$94,101   | \$945,143   | \$12,347,261                                   |

| February 2014  | \$5,078,063             | \$203,027   | \$79,466              | \$123,561   | \$4,954,502   |  |
|----------------|-------------------------|-------------|-----------------------|-------------|---------------|--|
| March 2014     | Narch 2014 \$12,709,481 |             | \$0                   | \$79,852    | \$12,629,629  |  |
| April 2014     | \$8,000,068             | \$0         | \$0                   | \$0         | \$8,000,068   |  |
| May 2014       | \$12,796,465            | \$13,232    |                       |             | \$12,783,233  |  |
| June 2014      | \$11,815,701            | \$85,790    | \$0                   | \$85,790    | \$11,729,911  |  |
| July 2014      | \$2,545,003             | \$15,904    | \$0                   | \$15,904    | \$2,529,099   |  |
| August 2014    | \$3,952,574             | \$0         | \$0                   | \$0         | \$3,952,574   |  |
| September 2014 | \$4,559,479             | \$0         | \$0                   | \$0         | \$4,559,479   |  |
| October 2014   | \$258,324               | \$15,587    | \$15,587 \$0 \$15,587 |             | \$242,737     |  |
| Total          | \$112,141,871           | \$2,394,452 | \$318,790             | \$2,075,662 | \$110,066,209 |  |

The energy costs are purchases made from PJM on a security constrained economic dispatch basis. It is based on a calculation from the after-the-fact generation model used to economically dispatch on an hourly basis the demand (load) with available supply resources (i.e. generation or purchased power) which are economically stacked.

Based on the calculation, the PJM costs which correlate to this process are:

1200 / 1400 – Day-ahead Spot Market Energy - Day-ahead energy market net hourly PJM Interchange MWh are calculated for cleared day-ahead generation and increment offers, demand, decrement and load response bids and day-ahead energy transactions.

1205 – Balancing Spot Market Energy - Real-time energy market net hourly PJM Interchange MWh are calculated for cleared real-time energy transactions, load (without losses), generation, and metered tie flows, as applicable.

1210 / 1410 / 2210 - Day-ahead Transmission Congestion - The change in energy costs due to redispatch in the day-ahead market during hours when PJM

transmission system is constrained are assessed to mark participants based on the congestion price component of LMPs.

1215 – Balancing Transmission Congestion - The change in energy costs due to redispatch in the balancing market during hours when PJM transmission system is constrained are assessed to mark participants based on the congestion price component of LMPs.

1220 / 1420 / 2220 /2420 – Day-ahead Transmission Losses - The change of energy costs due to transmission losses in the day-ahead market represented in the PJM network model are assessed to market participants based on the loss component of LMPs.

1225 – Balancing Transmission Losses - The change in costs of energy due to transmission losses in the balancing market represented in the PJM network model are assessed to market participants based on the loss component of LMPs.

The only PJM costs/credits taken directly from the invoice and included in the fuel adjustment clause calculation are the native portion of 2370 - Day-Ahead Operating Reserve Credit and 2375 - Balancing Operating Reserve Credit. Pool-scheduled generation and demand resources that operate as requested by PJM are guaranteed to fully recover their daily offer amounts. The credits are the portion of the company's offer amounts in excess of their scheduled MWh times LMP. They are being credited to fuel costs because of the nexus between receiving the payment from PJM and incurring fuel costs to run the plants.

PERSON RESPONSIBLE: Lisa Steinkuhl / Scott Burnside

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### STAFF-DR-01-039 PUBLIC

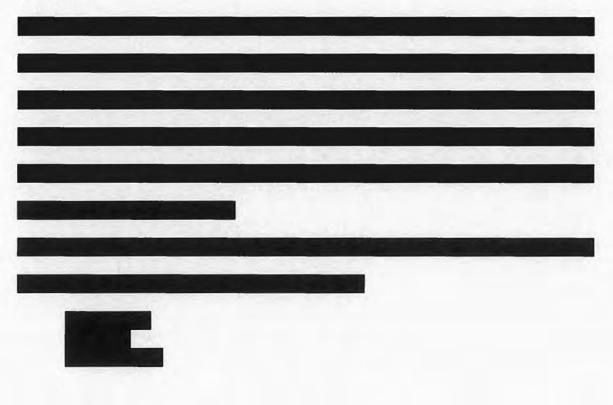
### **REQUEST:**

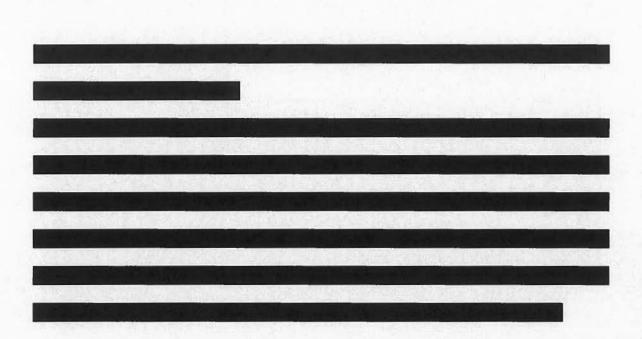
List Duke Kentucky's generating units in economic dispatch order. State whether Duke Kentucky's generating units were operated in economic dispatch order during the period under review. If the response is no, explain.

## **RESPONSE:**

### CONFIDENTIAL PROPRIETARY TRADE SECRET

This response has been filed with the Commission under a Petition for Confidential Treatment.





PERSON RESPONSIBLE: N/A

### STAFF-DR-01-040

#### **REQUEST:**

By month, provide the \$/MWh of fuel costs allocated each to native load and off-system sales for November 2012 through the most recent month available. Include in the response the calculations supporting the \$/MWh amounts.

## **RESPONSE:**

Please see STAFF-DR-01-040 Attachment.

The Company has shown the calculation of native \$/MWh of fuel costs in components consistent with 807 KAR 5:056. The first calculation (Column E) is based on the fossil fuel consumed; the second calculation (Column H) includes fossil fuel consumed and purchased power expense; the third calculation (Column K) includes the fossil fuel consumed, purchased power expense, and disallowance for forced outages which equals the total fuel expense recovered in the FAC.

The comparable \$/MWh calculations between native and non-native are Column E and Column N because purchased power and the forced outage elimination are not related to non-native sales.

PERSON RESPONSIBLE: Scott Burnside / Lisa Steinkuhl

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Juke Energy Kentucky

|        |            |    |                            |      |                         |     |                                 |     |           | -  | Native        | _     |   |    |               |    |                                    |    |                                   | -    |              |           | Non-Native  | -     |         |
|--------|------------|----|----------------------------|------|-------------------------|-----|---------------------------------|-----|-----------|----|---------------|-------|---|----|---------------|----|------------------------------------|----|-----------------------------------|------|--------------|-----------|---|-------|---------|
|        | [A]        |    | (B)                        |      | [C]                     | 1   | (D) = [B]+[C]                   | (E) | = [D]/[A] | 1  | [F]           |       | [G] = [D]+[F]                           |    | [H] = [G]/[A] | 1  | (i) r                              |    | J) = [G]+[I]                      |      | K] = [J]/[A] | (L)       | [M]   | [N] = | = [M] / |
|        |            |    |                            |      |                         | Na  | ative Fossil Fuel<br>Bal Opr Rs |     |           |    |               | Na    | tive Fossil Fuel Co<br>Rsrv Crd plus Pu |    |               |    |                                    |    | Native Fuel C                     | Cost | per FAC      |           | Off-System Sales  |       |         |
| Month  | Native MWh | 1  | Native Fossil<br>Fuel Cost | -    | PJM Bal Opr<br>Rsrv Crd |     | Amount (\$)                     |     | \$/MWh    | Pu | rchased Power |       | Amount (\$)                             |    | \$/MWh        |    | Disallowance for<br>Forced Outages |    | ount (\$) (Line<br>of FAC filing) |      | \$/MWh       |           | Non-Native Sales<br>Iel Costs (Line C<br>of FAC filing)   |       | 5/MWh   |
| Nov-12 | 322,983    | \$ | 7,434,657                  | \$   |                         | \$  | 7,434,657                       | \$  | 23.02     | \$ | 1,884,344     | s     | 9,319,001                               | \$ | 28.85         | s  | (578,161)                          | \$ | 8,740,840                         | \$   | 27.06        | 50,366 \$ | 1,353,202   | s     | 26.87   |
| Dec-12 | 351,482    | S  | 6,269,970                  | S    | (21,513)                | Ś   | 6,248,457                       | s   | 17.78     | S  | 2,007,244     | S     | 8,255,701                               |    | 23.49         |    | (213,824)                          | ÷  | 8,041,877                         |      | 22.88        | 22,575 \$ |   | -     | 22.80   |
| Jan-13 | 377,967    | \$ | 8,545,586                  | \$   |                         | \$  | 8,545,586                       | \$  | 22.61     | \$ | 1,873,440     | \$    | 10,419,026                              | \$ | 27.57         | \$ | (311,179)                          |    | 10,107,847                        | \$   | 26.74        | 9,066 \$  | 253,520   | \$    | 27.9    |
| Feb-13 | 339,725    | S  | 7,086,114                  | \$   | -                       | \$  | 7,086,114                       | \$  | 20.86     | \$ | 2,477,921     | \$    | 9,564,035                               |    | 28.15         | \$ | (294,817)                          |    | 9,269,219                         | \$   | 27.28        | 15,211 \$ | 412,459   | \$    | 27.12   |
| Mar-13 | 359,118    | \$ | 8,256,090                  | S    | (28,717)                | \$  | 8,227,373                       | \$  | 22.91     | \$ | 1,383,509     | \$    | 9,610,882                               | \$ | 26.76         | \$ | (335,489)                          |    | 9,275,393                         | \$   | 25.83        | 26,204 \$ |   |       | 26.18   |
| Apr-13 | 306,469    | \$ | 3,928,368                  | \$   | (33,958)                |     | 3,894,409                       | \$  | 12.71     | \$ | 6,066,933     | \$    | 9,961,342                               | s  | 32.50         | S  | (317,573)                          |    | 9,643,770                         | \$   | 31.47        | 7,055 \$  | 184,993   | \$    | 26.2    |
| May-13 | 339,722    | S  | 7,783,249                  |      | (34,502)                | 100 | 7,748,746                       |     | 22.81     |    | 1,720,659     |       | 9,469,406                               |    | 27.87         |    | (377,218)                          |    | 9,092,188                         | \$   | 26.76        | 37,437 \$ | 972,972   | \$    | 25.99   |
| Jun-13 | 380,628    | \$ | 7,079,330                  |      |                         | \$  | 7,079,330                       | \$  | 18.60     | \$ | 4,024,387     | \$    | 11,103,716                              |    | 29.17         | \$ | (597,681)                          |    | 10,506,035                        | \$   | 27.60        | 8,108 \$  | 215,727   | \$    | 26.61   |
| Jul-13 | 417,935    | \$ | 7,262,240                  | \$   | (244,275)               | \$  | 7,017,965                       | \$  | 16.79     | \$ | 6,018,857     |       | 13,036,822                              |    | 31.19         | \$ | (516,810)                          |    | 12,520,012                        | \$   | 29.96        | 9,201 \$  | 172,477   | \$    | 18.75   |
| Aug-13 | 421,723    | 5  | 8,349,756                  | \$   | (157)                   |     | 8,349,599                       | \$  | 19.80     | \$ | 2,929,328     | \$    | 11,278,928                              |    | 26.74         | \$ | (137,545)                          | \$ | 11,141,383                        | \$   | 26.42        | 7,682 \$  | 201,111   | \$    | 26.18   |
| Sep-13 | 363,796    | \$ | 8,180,075                  | \$   | (180,516)               | \$  | 7,999,559                       | \$  | 21.99     | \$ | 1,580,106     | \$    | 9,579,665                               | \$ | 26.33         | \$ | (75,458)                           | \$ | 9,504,207                         | \$   | 26.13        | 22,358 \$ | 586,114   | \$    | 26.21   |
| Oct-13 | 334,969    | S  | 7,892,601                  | S    |                         | \$  | 7,892,601                       | \$  | 23.56     | s  | 455,274       | \$    | 8,347,876                               | \$ | 24.92         | \$ | (136,571)                          | \$ | 8,211,305                         | \$   | 24.51        | 67,347 \$ | 1,675,347   | \$    | 24.88   |
| Nov-13 | 339,423    | \$ | 7,469,286                  | \$   |                         | \$  | 7,469,286                       | \$  | 22.01     | s  | 1,491,756     | \$    | 8,961,042                               | \$ | 26.40         | \$ | (379,855)                          | \$ | 8,581,187                         | \$   | 25.28        | 31,399 \$ | 782,406   | \$    | 24.92   |
| Dec-13 | 382,938    | \$ | 7,518,608                  | \$   | (252,956)               | \$  | 7,265,652                       | \$  | 18.97     | \$ | 3,248,435     | \$    | 10,514,087                              | \$ | 27.46         | \$ | (197,665)                          | \$ | 10,316,422                        | \$   | 26.94        | 16,323 \$ | 491,236   | \$    | 30.05   |
| Jan-14 | 439,807    | \$ | 9,956,141                  | \$   | (945,143)               | \$  | 9,010,998                       | \$  | 20.49     | \$ | 13,294,766    | \$    | 22,305,764                              | \$ | 50.72         | \$ | (6,174,444)                        | \$ | 16,131,320                        | \$   | 36.68        | 15,384 \$ | 890,590   | \$    | 57.8    |
| Feb-14 | 372,791    | \$ | 7,373,149                  | \$   | (123,763)               | \$  | 7,249,386                       | \$  | 19.45     | \$ | 5,037,316     | \$    | 12,286,702                              | \$ | 32.96         | \$ | (2,035,106)                        | \$ | 10,251,597                        | \$   | 27.50        | 17,023 \$ | 412,544   | \$    | 24.2    |
| Mar-14 | 365,261    | \$ | 3,315,675                  | \$   | (79,852)                | \$  | 3,235,824                       | \$  | 8.86      | \$ | 12,666,034    | \$    | 15,901,858                              | \$ | 43.54         | \$ | (2,143,959)                        | \$ | 13,757,898                        | \$   | 37.67        | 236 \$    | 6,042   | \$    | 25.5    |
| Apr-14 | 309,084    | \$ | 2,297,381                  | \$   |                         | \$  | 2,297,381                       |     | 7.43      | \$ | 7,838,376     | \$    | 10,135,757                              | \$ | 32.79         | \$ | (11)                               | \$ | 10,135,746                        |      | 32.79        | 0 \$      |   | \$    |         |
| May-14 | 351,106    | \$ | 1,809,201                  | \$   | (13,232)                | \$  | 1,795,969                       |     | 5.12      | \$ | 12,816,092    | \$    | 14,612,061                              | \$ | 41.62         |    | (1,366,035)                        | \$ | 13,246,027                        |      | 37.73        | 0\$       |   | \$    | *       |
| Jun-14 | 400,160    | \$ | 3,789,090                  | \$   | (85,790)                | \$  | 3,703,300                       | \$  | 9.25      | \$ | 11,891,259    | \$    | 15,594,559                              | \$ |               |    | (1,478,504)                        |    | 14,116,055                        |      | 35.28        | 98 \$     |   |       | 28.07   |
| Jul-14 | 393,908    | \$ | 8,138,824                  | \$   | (15,904)                | \$  | 8,122,920                       |     | 20.62     |    | 2,715,013     |       | 10,837,933                              |    | 27.51         |    | (396,393)                          |    | 10,441,540                        |      | 26.51        | 6,416 \$  |   |       | 24.47   |
| Aug-14 | 421,788    | \$ | 7,622,644                  |      |                         | \$  | 7,622,644                       |     | 18.07     |    | 3,999,582     |       | 11,622,226                              |    | 27.55         |    | (78,795)                           |    | 11,543,431                        |      | 27.37        | 2,985 \$  |   |       | 29.77   |
| Sep-14 | 352,658    | \$ | 5,817,924                  |      |                         | \$  | 5,817,924                       |     | 16.50     |    | 4,560,098     | 10.00 | 10,378,022                              |    | 29.43         |    | (730,989)                          |    | 9,647,034                         |      | 27.36        | 15,074 \$ | and the second se |       | 25.03   |
| Oct-14 | 321,031    | \$ | 7,453,484                  | - C. |                         | *   | 7,453,484                       |     | 23.22     |    | 256,652       | 1.1   | 7,710,136                               |    | 24.02         |    | (77,796)                           |    | 7,632,339                         |      | 23.77        | 49,463 \$ |   | -     | 23.82   |
| Nov-14 | 349,535    | \$ |                            | 1.1  | (8,881)                 | \$  | 7,906,684                       |     | 22.62     | -  | 311,620       |       | 8,218,305                               |    | 23.51         |    | (2)                                |    | 8,218,302                         |      | 23.51        | 36,609 \$ |   |       | 23.93   |
| Dec-14 | 378,677    | \$ | 7,170,340                  | \$   |                         | \$  | 7,170,340                       | \$  | 18,94     | \$ | 1,719,350     | \$    | 8,889,690                               | Ş  | 23.48         | Ş  | (47,172)                           | \$ | 8,842,518                         | \$   | 23.35        | 17,360 \$ | 402,248   | \$    | 23.17   |

### STAFF-DR-01-041

### **REQUEST:**

By month, for the period of May 1, 2014, through October 31, 2014, provide the amount of power purchases in excess of Duke Kentucky's highest-cost generating unit available to be dispatched to serve native load during the reporting expense month that was included in Duke Kentucky's FAC calculation.

## **RESPONSE:**

There were no months during the period of May 1, 2014 through October 31, 2014 where the cost of purchased power exceeded the cost of Duke Energy Kentucky's highest-cost generating unit available to be dispatched to serve native load during the reporting expense month that was included in Duke Energy Kentucky's FAC calculation.

|        | Purchased Power<br>Included in FAC | FAC Purchases Using<br>Highest Cost<br>Methodology | Difference |
|--------|------------------------------------|--|------------|
| May-14 | \$ 12,816,092                      | \$ 12,816,092                                      | \$ -       |
| Jun-14 | \$ 11,891,259                      | \$ 11,891,259                                      | \$ -       |
| Jul-14 | \$ 2,715,013                       | \$ 2,715,013                                       | \$ -       |
| Aug-14 | \$ 3,999,582                       | \$ 3,999,582                                       | \$ -       |
| Sep-14 | \$ 4,560,098                       | \$ 4,560,098                                       | \$ -       |
| Oct-14 | \$ 256,652                         | \$ 256,652   | \$ -       |

## PERSON RESPONSIBLE: Scott Burnside