

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN EXAMINATION OF THE APPLICATION OF	)	
THE FUEL ADJUSTMENT CLAUSE OF DUKE	)	CASE NO.
ENERGY KENTUCKY, INC. FROM NOVEMBER	)	2014-00229
1, 2013 THROUGH APRIL 30, 2014	)	

ORDER

Pursuant to 807 KAR 5:056, Section 1(11), IT IS HEREBY ORDERED that:

1. Duke Energy Kentucky, Inc. ("Duke Kentucky") shall appear in Hearing Room 1 of the Commission's offices at 211 Sower Boulevard, Frankfort, Kentucky, on November 12, 2014, at 10:00 a.m., Eastern Standard Time, to submit itself to examination on the application of its Fuel Adjustment Clause ("FAC") from November 1, 2013, through April 30, 2014. Neither opening statements nor summaries of pre-filed testimony will be permitted.
2. Not less than seven days and no more than 21 days prior to the scheduled hearing, Duke Kentucky shall publish in a newspaper of general circulation in each area in which it serves notice of the purpose, time, place, and date of the scheduled hearing.
3. Duke Kentucky shall file with the Commission no later than November 7, 2014, proof of publication of its notice for the hearing.
4. The official record of the proceeding shall be by video only.
5. a. The information requested in Appendix A to this Order is due not later than 14 days from the date of this Order. Responses to requests for information

shall be appropriately bound, tabbed and indexed and shall include the name of the witness responsible for responding to the questions related to the information provided.

b. Each response shall be answered under oath or, for representatives of a public or private corporation or a partnership or association or a governmental agency, be accompanied by a signed certification of the preparer or the person supervising the preparation of the response on behalf of the entity that the response is true and accurate to the best of that person's knowledge, information, and belief formed after a reasonable inquiry.

c. A party shall make timely amendment to any prior response if it obtains information which indicates that the response was incorrect when made or, though correct when made, is now incorrect in any material respect.

d. For any request to which a party refuses to furnish all or part of the requested information, that party shall provide a written explanation of the specific grounds for its failure to completely and precisely respond.

6. Any party who wishes to file testimony in this proceeding or to request information from Duke Kentucky may petition the Commission for a procedural schedule.

7. All documents that Duke Kentucky filed with the Commission during the period under review pursuant to 807 KAR 5:056, Section 1(7) and (9), are incorporated by reference into the record of this proceeding.

8. On March 10, 2014, Duke Kentucky filed with the Commission written notification of its election pursuant to 807 KAR 5:001, Section 8, to use the electronic

filing procedures in all future fuel adjustment clause review proceedings.<sup>1</sup> As 807 KAR 5:001, Section 8, permits the Commission to direct the use of electronic filing procedures for proceedings which we initiate on our own motion, we find that electronic filing procedures should be used. As such, Duke Kentucky shall follow the procedures set forth in 807 KAR 5:001, Section 8, when filing any document or paper in this matter. Pursuant to 807 KAR 5:001, Section 8, unless a party granted leave to intervene states its objection to the use of electronic filing procedures in a motion for intervention, the party shall be deemed to have consented to the use of electronic filing procedures and the service of all papers, including Orders of the Commission, by electronic means; the party shall file with the Commission, within seven days of the date of an Order of the Commission granting the intervention, a written statement that the party waives any right to service of Commission Orders by United States mail; and that the party, or the party's authorized agent, possesses the facilities to receive electronic transmissions.

9. Any request for intervention must be filed by September 8, 2014.

10. A person who submits a motion to intervene after September 8, 2014, and, upon a showing of good cause, is granted full intervention shall accept and abide by the existing procedural schedule.

11. Unless otherwise ordered by the Commission, the procedures set forth in 807 KAR 5:001, Section 8, shall be followed when filing papers in this proceeding.

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<sup>1</sup> Letter from Rocco D'Ascenzo, Associate General Counsel for Duke Kentucky, to Jeff Derouen, Executive Director, Public Service Commission (Mar. 10, 2014).

By the Commission

ENTERED  
AUG 13 2014  
KENTUCKY PUBLIC  
SERVICE COMMISSION

ATTEST:

  
\_\_\_\_\_  
Executive Director

Case No. 2014-00229

## APPENDIX A

### APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2014-00229 DATED **AUG 13 2014**

1. For the period from November 1, 2013, through April 30, 2014, 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 no, explain why it has not been filed.

2. For the period from November 1, 2013, through April 30, 2014, 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 no, explain why it has not been filed.

3. State whether Duke Kentucky engages in hedging activities for its coal or natural gas purchases used for generation. If yes, describe the hedging activities in detail.

4. For each generating station or unit for which a separate coal pile is maintained, state, for the period from November 1, 2013, through April 30, 2014, 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.

5. List all firm power commitments for Duke Kentucky from November 1, 2013, through April 30, 2014, 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).

6. Provide a monthly billing summary of sales to all electric utilities for the period November 1, 2013, through April 30, 2014.

7. List Duke Kentucky's scheduled, actual, and forced outages from November 1, 2013, through April 30, 2014.

8. 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).

9. a. State whether Duke Kentucky regularly compares the price of its coal purchases to those paid by other electric utilities.

b. If yes, state:

(1) How Duke Kentucky's prices compare with those of other utilities for the review period. Include all prices used in the comparison in cents per MMbtu.

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

10. State the percentage of Duke Kentucky's coal, as of the date of this Order, that is delivered by:

a. Rail;

b. Truck; or

c. Barge.

11. a. State Duke Kentucky's coal inventory level in tons and in number of days' supply as of April 30, 2014. Provide this information by generating station and in the aggregate.

b. Describe the criteria used to determine number of days' supply.

c. Compare Duke Kentucky's coal inventory as of April 30, 2014, 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 Duke Kentucky 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.

12. a. State whether Duke Kentucky has audited any of its coal contracts during the period from November 1, 2013, through April 30, 2014.

b. If 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.

13. a. State whether Duke Kentucky has received any customer complaints regarding its FAC during the period from November 1, 2013, through April 30, 2014.

b. If yes, for each complaint, state:

- (1) The nature of the complaint; and
- (2) Duke Kentucky's response.

14. a. State whether Duke Kentucky is currently involved in any litigation with its current or former coal suppliers.

b. If 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.

15. a. During the period from November 1, 2013, through April 30, 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) 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 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.

16. 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 from November 1, 2013, through April 30, 2014.

b. If yes, for each violation:

(1) Describe the violation;

(2) Describe the action(s) that Duke Kentucky took upon discovering the violation; and

(3) Identify the person(s) who committed the violation.

17. 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 November 1, 2013, through April 30, 2014.

18. a. Identify all changes that Duke Kentucky has made during the period under review to its maintenance and operation practices that also affect fuel usage at Duke Kentucky's generation facilities.

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

19. List each written coal-supply solicitation issued during the period from November 1, 2013, through April 30, 2014.

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.

20. List each oral coal-supply solicitation issued during the period from November 1, 2013, through April 30, 2014.

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.

21. a. List all intersystem sales during the period under review in which Duke Kentucky used a third party's transmission system.

b. For each sale listed above:

(1) Describe 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

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

22. Describe each change that Duke Kentucky made to its methodology for calculating intersystem sales line losses during the period under review.

23. State whether, during the period under review, Duke Kentucky has solicited bids for coal with the restriction that it was not mined through strip mining or mountaintop removal. If 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.

24. Provide a detailed discussion of any specific generation efficiency improvements Duke Kentucky has undertaken during the period under review.

25. State whether any PJM Interconnection, LLC costs were included in Duke Kentucky's monthly FAC filings during the period under review. If yes, provide the amount of the costs by month and by type of cost.

26. Refer to the FAC supplemental schedules filed on March 26, 2014, by Duke Kentucky, the schedule titled "Explanation Associated with Schedule 2 of the March 2014 FAC rates-January 2014 expense month" (attached as Appendix B to this Order).

a. The schedule states:

Previously, the Company was using the Day Ahead/Real Time blended locational marginal price (LMP) for its generation modeling (non-native sales) but mistakenly only used the Real Time LMP for its load modeling (purchased power). The Company will use Day Ahead/Real Time blended locational marginal price (LMP) for both generation (non-native sales) and load modeling (purchased power) for the expense month of January 2014 and going forward.

By month, for the period November 2012 through April 2014, provide the effect it would have had on the FAC calculation if the Day-Ahead/Real-Time blended LMP had been used for both generation and load modeling.

b. The schedule also states that "Duke Energy Kentucky purchases energy from PJM to make-up the difference when the real-time native load is greater than the available real-time generation not committed in the day-ahead energy market to non-native."

(1) State whether it is a common occurrence for the real-time native load to be greater than the available real-time generation not committed in the day-ahead energy market to non-native sales.

(2) Explain the reason(s) the situation occurs.

(3) State whether native-load customers are assigned higher fuel costs in these situations. If yes, explain why Duke Kentucky is unable to allocate the higher purchase power costs to non-native sales and the lower generation costs (although committed in the day-ahead market to non-native sales) to native-load sales.

27. Explain how purchase power costs are accounted for in the calculation of the FAC when Duke Kentucky experiences a planned generation outage and purchases power to meet load (i.e., is the entire amount of the purchase power recorded in the calculation, or is there a limit as to the amount recorded?). If there is a limit, explain the basis for the limitation and how it is calculated. If there is no limit, explain the basis for including 100 percent of the purchase power costs.

28. Explain how purchase power costs are accounted for in the calculation of the FAC when Duke Kentucky is not experiencing a generation outage but must purchase power in order to meet demand (i.e., is the entire amount of the purchase power recorded in the calculation, or is there a limit as to the amount recorded?). If there is a limit, explain the basis for the limitation and how it is calculated. If there is no limit, explain the basis for including 100 percent of the purchase power costs.

29. If Duke Kentucky is familiar with the term “no load costs,” provide a definition of the term and responses to the following:

a. If all or a portion of these costs are recovered through the FAC, explain how these costs are calculated and allocated between native-load sales and off-system sales each hour.

b. By month and generating unit, provide the amount of “no load costs” that have been allocated each to native-load customers and off-system sales from November 1, 2012, through April 30, 2014.

30. State whether Duke Kentucky outsources coal handling or whether coal handling is performed by Duke Kentucky employees and explain how coal-handling costs are accounted for in the calculation of the FAC.

31. State whether all long-term fuel transportation contracts have been filed with the Commission. If any contracts have not been filed, provide a copy.

32. For each generating station:

a. State how often coal-pile surveys are undertaken;

b. Explain how any resulting adjustment affects fuel costs in the calculation of the FAC;

c. Provide the costs of performing a coal-pile survey at each of the generating stations and explain how the costs are accounted for; and

d. Provide a copy of all internal accounting policies related to coal-pile survey adjustments and the date the policies were last revised.

APPENDIX B

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE  
COMMISSION IN CASE NO. 2014-00229 DATED **AUG 13 2014**

Explanation Associated with Schedule 2 of the March 2014 FAC rates–January 2014 expense month:

In January 2014, the Company discovered an error in its calculation/modeling methodology in the after the fact generation model for purchased power. The error was noticed, in part, due to the variance and volatility in the day-ahead locational marginal prices (LMP) and the real-time LMPs caused by the extreme weather conditions. Previously, the Company was using the Day Ahead/ Real Time blended locational marginal price (LMP) for its generation modeling (non-native sales) but mistakenly only used the Real Time LMP for its load modeling (purchased power). The Company will use Day Ahead /Real Time blended locational marginal price (LMP) for both generation (non-native sales) and load modeling (purchased power) for the expense month of January 2014 and going forward. This modeling change will better simulate the actual PJM settlement process.

In the discussion below relating to the After-the-Fact Generation Model Process, the error occurred in the pricing of the purchased power. Duke Energy Kentucky purchases energy from PJM to make-up the difference when the real-time native load is greater than the available real-time generation not committed in the day-ahead energy market to non-native.

The purchased power costs are included for recovery in the FAC and the non-native sales are included in Profit Sharing Mechanism (PSM) Rider to share with the ratepayer.

**After-the-Fact Generation Model Process:**

The fuel cost is allocated between native and non-native by using an after-the-fact generation model. The model is used to economically dispatch on an hourly basis the demand (load) with available supply resources (*i.e.* generation or purchases) which are economically stacked. The production costs are generally prioritized based on production costs, lowest cost to highest cost. Consequently, the model economically allocates the production costs for servicing native load such that native load is allocated the lowest cost supply resource.

The fuel allocation is performed by stacking the day-ahead energy market generation awards from PJM against the day-ahead load cleared by PJM, providing Duke Energy Kentucky native customers first call on the lowest cost generation in the day-ahead market. Generation that clears day-ahead in excess of day-ahead load is committed to day-ahead non-native sales. Then, utilizing the actual real-time generation and load, everything is restacked, and Duke Energy Kentucky native customers are assigned the lowest cost generation that did not clear for non-native in the day-ahead, but was dispatched in the real-time energy market. If Duke Energy Kentucky's real-time native load is greater than the available real-time generation not committed in the day-ahead energy market to non-native, then Duke Energy Kentucky will purchase energy from PJM to make-up the difference. If Duke Energy Kentucky's real-time native load is less than the available real-time generation not committed in the day-ahead market to non-native, then any excess generation is considered as a real-time non-native energy market sale. All costs associated with generators that clear day-ahead for non-native energy market sales or in real-time for non-native energy market sales are assigned to a non-native cost allocation. Duke Energy Kentucky native customers will only pay for fuel charges associated with the units that are assigned to them.

The PJM Balancing & Day Ahead Operating Reserve Credit is allocated on a daily basis on how the hourly fuel was allocated for that day. This is on a daily basis because PJM doesn't provide hourly data for balancing & day-ahead operating reserve credit.

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