## 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 MAY 1, 2015 ) 2016-00005 THROUGH OCTOBER 31, 2015 )

## COMMISSION STAFF'S THIRD REQUEST FOR INFORMATION TO DUKE ENERGY KENTUCKY, INC.

Duke Energy Kentucky, Inc. ("Duke Kentucky"), pursuant to 807 KAR 5:001, is to file with the Commission an original in paper medium and an electronic version of the following information. The information requested herein is due within ten days of the date of this request. Responses to requests for information shall be appropriately bound, tabbed and indexed. Each response shall include the name of the witness responsible for responding to questions related to the information provided.

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.

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

Careful attention shall be given to copied material to ensure that it is legible. When the requested information has been previously provided in this proceeding in the requested format, reference may be made to the specific location of that information in responding to this request. When applicable, the requested information shall be separately provided for total company operations and jurisdictional operations. When filing a paper containing personal information, Duke Kentucky shall, in accordance with 807 KAR 5:001, Section 4(10), encrypt or redact the paper so that personal information cannot be read.

1. In its monthly fuel adjustment clause ("FAC") backup files, Duke Kentucky provides an analysis of coal purchases that includes a state and coal district number for the source of the coal.

a. Confirm that Duke Kentucky is using District No. 8 (for eastern Kentucky) and District No. 9 (for western Kentucky) when identifying Kentucky coal districts in its FAC backup filings.

b. State whether the state and coal district numbers are those utilized by the Mine Safety and Health Administration. If not, state the entity that designates the coal district numbers utilized by Duke Kentucky in its FAC backup filings.

c. For the entity identified in part b. above, provide a map showing the current coal districts.

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d. Provide the date of the last change made by the entity identified in part b. above to the coal district numbering. If Duke Kentucky did not begin using the new coal district numbering when the change was made, explain why.

e. Explain the input and review process for the state and coal district numbers provided in the monthly analysis of coal purchase schedule and how Duke Kentucky ensures that the information is accurate.

2. Refer to Duke Kentucky's response to the Commission's February 5, 2016 Request for Information, Item 25. The question should have asked whether all fuel contracts related to commodity and/or transportation had been filed with the Commission instead of specifying long-term contracts. State whether all contracts have been filed.

3. Refer to Duke Kentucky's response to Commission Staff's Second Request for Information ("Staff's Second Request"), Item 2.a.

a. Duke Kentucky cites the following language from previous Commission FAC-related Orders:

We interpret Administrative Regulation 807 KAR 5:056 as permitting an electric utility to recover through its FAC only the lower of the actual energy cost of the non-economy purchased energy or the fuel cost of its highest cost generating unit available to be dispatched to serve native load during the reporting expense month.

Duke Kentucky states on pages 2–3 of the response that its Woodsdale units are capable of dispatch at minimum load and that using some other assumption about the generating unit load would be contrary to the Commission language noted above.

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(1) Explain why Duke Kentucky concluded, regardless of the unit's actual load during the month, that the Commission intended that the highest-cost unit's most inefficient level of load operation should be used in the calculation rather than its most efficient level, or its actual level of load operation.

(2) Explain how using a load other than the most inefficient level is contrary to the Commission's language cited above.

b. Duke Kentucky, on page 2 of the response, states, "PJM does dispatch Woodsdale CTs at minimum load when they are both available and needed." Explain whether this statement means that PJM Interconnection, LLC ("PJM") directs the Woodsdale units to be started and to operate at 5 MW. If not, explain the meaning of the statement. If so, provide the following:

- (1) The frequency of the requests; and
- (2) The reasons PJM makes the requests.

c. The response, on pages 2–3, also states, "Thus, they are typically the highest cost units available to be dispatched to serve native load in any reporting expense month." Explain the use of the term "typically" in this sentence.

d. Confirm that on a month-to-month basis, regardless of load, Duke Kentucky's combustion turbines will have a higher dispatch cost than its coal-fired generation.

4. Refer to Duke Kentucky's response to Staff's Second Request, Item 2.c. The response, on page 5, states, "The Company bases the prices paid for actual delivered natural gas upon observed gas prices on the Intercontinental Exchange (ICE), or independent market quotes for bilateral natural gas delivered to Woodsdale Station."

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State whether this sentence is meant to provide the basis for the natural gas prices Duke Kentucky uses in bidding the Woodsdale units into the PJM market. If not, explain the meaning of the sentence.

5. Refer to Duke Kentucky's response to Staff's Second Request, Item 2.e.

a. For each month of the review period that Duke Kentucky indicated that one or more Woodsdale units were operated at minimum load (May, June, July, and October), provide the following:

(1) The length of time each unit was operated at the minimum load;

(2) The \$/MWh generation cost of operating the units using the natural gas price actually paid (not the maximum natural gas price) to operate the unit at minimum load; and

(3) The reasons the units were operated at the minimum load.

b. For each month of the review period that Duke Kentucky indicated that one or more Woodsdale units were operated at a load higher than minimum load (August and September), provide the following:

(1) The length of time each unit was operated at the load indicated;

(2) The highest \$/MWh generation cost of operating the units using the natural gas price actually paid (not the maximum natural gas price) to operate the unit at the load indicated; and

(3) The reasons the units were operated at the indicated load.

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c. The second sentence of the partial paragraph at the bottom of page 8 of the response reads, "Using actual MWs generated by Duke Energy Kentucky's assets to determine the average heat rate does not correlate with generation MWs potentially avoided." For each month of the review period, provide the generation MWs avoided as a result of power purchases and the related avoided cost. Show how the avoided MWs were determined and the calculations of the related avoided cost. Include a narrative description of how the avoided generation and related avoided cost were derived.

Refer to Duke Kentucky's response to the Staff's Second Request, Item
2.f.

a. Page 8 of the response states, "Using actual MWs generated by Duke Energy Kentucky's assets to determine the average heat rate does not correlate with generation MWs potentially avoided." Explain this statement.

b. Page 9 of the response states, "Calculating the threshold for recoverability of purchased power expense at something other than the minimum load creates a perverse situation where the utility is penalized for purchasing a MW of power at a lower \$/MWh than what the Company could generate that same MW." Confirm that this statement assumes that the "same MW" was generated at the most inefficient levels of operation of which the generating unit is capable.

c. Page 10 of the response states that setting the threshold for disallowing purchased power at a load level other than minimum load "is establishing a new threshold standard that is no longer reflective of the Company's actual costs. . . ." The response also states, "Such a determination is artificially establishing a much

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lower threshold for excluding economy purchased power that is not tied in any way to the Company's true costs of operating its owned generation on a monthly basis. . . ." Explain how using the minimum load, regardless of the level of operation of the unit, and the maximum gas price, is reflective of Duke Kentucky's true costs of operating its owned generation.

7. Refer to Duke Kentucky's response to Staff's Second Request, Item 2.g., Staff-DR-02-002(g) B CONF Attachment. State whether the natural gas price used for this attachment was the natural gas price actually paid (not the maximum natural gas price) to operate the unit at the load specified. If not, provide a revised attachment using the natural gas price actually paid.

8. Provide the MW capacity of each of the Woodsdale units.

D. Shundle

James W. Gardner Acting Executive Director Public Service Commission P.O. Box 615 Frankfort, Kentucky 40601

DATED MAR 1 8 2016

cc: Parties of Record

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