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

MAY 08 2015

PUBLIC SERVICE COMMISSION

In the Matter of:

| AN EXAMINATION OF THE APPLICATION OF     | )                     |
|--|-----------------------|
| THE FUEL ADJUSTMENT CLAUSE OF BIG RIVERS | ) CASE NO. 2014-00230 |
| ELECTRIC CORPORATION FROM NOVEMBER 1,    | )                     |
| 2013 THROUGH APRIL 30, 2014              | )                     |

-and-

AN EXAMINATION OF THE APPLICATION OF ) THE FUEL ADJUSTMENT CLAUSE OF BIG RIVERS ) CASE NO. 2014-00455 ELECTRIC CORPORATION FROM NOVEMBER 1, ) 2012 THROUGH OCTOBER 31, 2014 )

## ATTORNEY GENERAL'S RESPONSES TO DISCOVERY REQUESTS OF BIG RIVERS ELECTRIC CORPORATION, INC.

Comes now the Attorney General of the Commonwealth of Kentucky, by and

through his Office of Rate Intervention, and attaches hereto his responses to the data

requests of Big Rivers Electric Corporation.

Respectfully submitted, JACK CONWAY ATTORNEY GENERAL

JEŃNIFER BLACK HANS LAWRENCE W. COOK ANGELA M. GOAD ASSISTANT ATTORNEYS GENERAL 1024 CAPITAL CENTER DRIVE, SUITE 200 FRANKFORT KY 40601-8204 (502) 696-5453 FAX: (502) 573-1005

#### Certificate of Service and Filing

Counsel certifies that an original and ten photocopies of the foregoing were served and filed by hand delivery to Jeff Derouen, Executive Director, Public Service Commission, 211 Sower Boulevard, Frankfort, Kentucky 40601; counsel further states that true and accurate copies of the foregoing were mailed via First Class U.S. Mail, postage pre-paid, to:

Hon. James M. Miller Sullivan, Mountjoy, Stainback & Miller, PSC P.O. Box 727 Owensboro, KY 42302-0727

Roger Hickman Regulatory Affairs Manager Big Rivers Electric Corporation 201 Third Street P. O. Box 24 Henderson, KY 42420

Hon. Michael L. Kurtz Boehm, Kurtz & Lowry 36 E. 7th St. Ste. 1510 Cincinnati, Ohio 45202

this 8th day of May, 2015

Assistant Attorney General

In the Matter of: An Examination of the Application of the Fuel Adjustment Clause of Big Rivers Electric Corporation from November 1, 2012 through October 31, 2014 Case No. 2014-00455 Attorney General's Responses to Data Requests of Big Rivers Electric Corporation

#### WITNESS/RESPONDENT RESPONSIBLE: COUNSEL

QUESTION No. 1 Page 1 of 1

Please provide a copy of all correspondence and other documents sent by or to the AG related to this case or to the operation of Big Rivers' FAC during the review period, except for correspondence with Big Rivers.

Response:

Objection. This request seeks information that is covered by the Lawyer-Client Rule of Privilege as provided in KRE 503(b)(3). As the Attorney General and KIUC share a common interest in this matter, communications between them regarding this case are privileged. Without waiving this privilege, the only other correspondence the Attorney General has had in this matter was with Big Rivers (which Big Rivers already possesses), and communications from Commission staff which were provided to all parties.

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## WITNESS/RESPONDENT RESPONSIBLE: COUNSEL

QUESTION No. 2 Page 1 of 1

Please produce all documents, including without limitation correspondence and calculations, in the possession, custody, or control of the AG related to the AG's or Mr. Kollen's analysis regarding this case or to the operation of Big Rivers' FAC during the review period.

Response:

Objection. The information sought is subject to the work-product privilege.

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#### WITNESS/RESPONDENT RESPONSIBLE: LANE KOLLEN

QUESTION No. 3 Page 1 of 1

Refer to the Direct Testimony of Lane Kollen at page 3, lines 20-22.

a. Please explain in detail the "East Kentucky Power Cooperative ('EKPC')/Duke Energy Kentucky ('Duke') methodology." Please provide all documents relied upon for your response.

b. Please explain in detail any differences between EKPC's FAC and Duke's FAC and any differences between the operation of EKPC's FAC and Duke's FAC. Please provide all documents relied upon for your response.

Response:

a. It is Mr. Kollen's understanding that East Kentucky Power Cooperative ('EKPC') and Duke Energy Kentucky ('Duke') use a methodology to allocate fuel costs on an hourly basis. EKPC and Duke calculate the total fuel cost per MWh for each unit during the hour and allocate the most expensive generation off system. Specifically, under EKPC's fuel cost allocation approach, "[f]uel is allocated between native-load sales and off-system sales on a stacked cost basis. EKPC considers each hour of operation, determines if a sale was made from its system during that hour and then allocates the highest cost resource(s) to that sale for FAC purposes."

Duke Energy Kentucky, Inc. ("Duke") described its fuel cost allocation process as follows: "After the generating unit is dispatched, the actual energy costs consumed in a generating unit is allocated as either native or non-native based on a stacking process, allocating the lowest cost resources to native load first."

Mr. Kollen relied on EKPC's data response to Staff 1-29 in PSC Case No. 2014-00226 for his understanding of EKPC's fuel allocation methodology. Similarly, he relied on Duke Energy Kentucky's data response to Staff 1-29 in PSC Case No. 2014-00229 for his understanding of Duke's fuel allocation methodology.

b. To the best of the AG's knowledge, the EKPC and Duke methodologies are the same.

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## WITNESS/RESPONDENT RESPONSIBLE: LANE KOLLEN / COUNSEL

QUESTION No. 4 Page 1 of 1

Refer to the Direct Testimony of Lane Kollen at page 4, line 14. Please provide the source for the \$11.77 million value. Please provide all workpapers, assumptions, calculations, and documents used in the derivation of this value. Please provide all spreadsheets in electronic format with formulas intact.

Response:

Please see the file provided in response to Staff Request 1-1 entitled "KIUC\_AG\_response\_to\_Staff 1-1 (Attachment A).xlsx" (tab: "Re-Allocation Calculation" cell D206).

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WITNESS/RESPONDENT RESPONSIBLE LANE KOLLEN

QUESTION No 5 Page 1 of 1

Refer to the Direct Testimony of Lane Kollen at page 4, lines 17-18

a Please provide the amount used as Big Rivers' weighted cost of debt Please provide the source of this amount and all workpapers, assumptions, calculations, and documents used in the derivation of this value Please provide all spreadsheets in electronic format with formulas intact

b Please provide the source for the \$157 million value Please provide all workpapers, assumptions, calculations, and documents used in the derivation of this value Please provide all spreadsheets in electronic format with formulas intact

Response

a The reference to "cost of debt" should be corrected to read "cost of capital" Mr Kollen obtained the Company's cost of capital from its 2013 Annual Report as shown on the "Financial Highlights Table" on page 2 The 2013 Annual Report can be accessed via the following weblink

http://192.163.229.126/~bigrivers/wpcontent/uploads/2014/07/2013\_BigRivers\_AR.pdf

b Please see the file provided in response to Staff Request 1-1 entitled "KIUC\_AG\_response\_to\_Staff 1-1 (Attachment A) xlsx" (tab "Re-Allocation Sum and Interest" cell X47)

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#### WITNESS/RESPONDENT RESPONSIBLE: LANE KOLLEN

QUESTION No. 6 Page 1 of 1

Refer to the chart on page 8 of the Direct Testimony of Lane Kollen.

a. Please provide the source for the values in the chart.

b. How was the stated "Reserve Margin" calculated?

#### Response:

a. Please see response to Staff Request 1-1, including Attachment "KIUC\_AG\_response\_to\_Staff 1-1 (Attachment C).xlsx"

b. The Reserve margin was calculated using the data provided in Big Rivers' Response to KIUC Request 8. Please refer to the attachment provided for specific calculations.

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# WITNESS/RESPONDENT RESPONSIBLE: LANE KOLLEN

QUESTION No. 7 Page 1 of 1

Refer to the chart on page 9 of the Direct Testimony of Lane Kollen. Please provide the source for the values in the chart.

Response:

Please see response to Staff Request 1, including Attachment "KIUC\_AG\_response\_to\_Staff 1-1 (Attachment B).xlsx" (tab: "CH2" and tab: "NatLD vs OSS")

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#### WITNESS/RESPONDENT RESPONSIBLE: LANE KOLLEN

QUESTION No. 8 Page 1 of 1

Refer to the chart on page 10 of the Direct Testimony of Lane Kollen. Please provide the source for the values in the chart.

Response:

Please see response to Staff Request 1, including Attachment "KIUC\_AG\_response\_to\_Staff 1-1 (Attachment B).xlsx" (tab: "CH3 NatLd vs OSS" and tab: "NatLD vs OSS").

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#### WITNESS/RESPONDENT RESPONSIBLE: LANE KOLLEN

QUESTION No. 9 Page 1 of 1

Refer to the Direct Testimony of Lane Kollen at page 11, line 3. Please explain the basis for Mr. Kollen's claim that "[t]he Coleman unit fuel costs were among the Company's lowest."

Response:

In review of the Company's Fuel costs and generation provided in KIUC 1-2, Reid, Gas Turbine, HMPL 1 and HMPL 2 had a higher 2 year average \$/MWh than Coleman 3, and the other Coleman units are far lower in cost than the Reid coal and combustion turbine units.

Please see response to Staff Request 1, including Attachment "KIUC\_AG\_response\_to\_Staff 1-1 (Attachment A).xlsx" (tab: "Re-Allocation Calculation" column AE).

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WITNESS/RESPONDENT RESPONSIBLE: LANE KOLLEN/COUNSEL

QUESTION No. 10 Page 1 of 1

Refer to the Direct Testimony of Lane Kollen at page 11, line 18. Please provide the source for the \$22.85/MWh value. If this value is the result of a calculation not performed by Big Rivers, please provide all workpapers, assumptions, calculations, and documents used in the derivation of this value. Please provide all spreadsheets in electronic format with formulas intact.

Response:

Please see response to Staff Request 1, including Attachment "KIUC\_AG\_response\_to\_Staff 1-1 (Attachment A).xlsx" (tab: "KIUC 1-2 Unit Summary 2" cell O105).

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WITNESS/RESPONDENT RESPONSIBLE: LANE KOLLEN

QUESTION No. 11 Page 1 of 1

Refer to the Direct Testimony of Lane Kollen at pages 14-15.

a. Does the AG advocate that the Commission require Big Rivers to use an incremental cost methodology?

b. Please explain whether the AG believes the EKPC/Duke methodology is an incremental cost methodology.

c. Please explain whether Mr. Kollen believes the EKPC/Duke methodology is an incremental cost methodology.

Response:

a. Yes. The allocation of fuel costs between native load customers and off-system sales requires an after the fact reconstruction. The EKPC/Duke after the fact reconstruction method does not replicate the actual dispatch process, but rather assigns the lowest cost generation to native load and the highest cost generation to off-system sales each hour. This is an appropriate incremental cost allocation methodology.

b. Yes. Mr. Kollen and KIUC / AG believe that the EKPC/Duke methodology is an incremental cost allocation methodology. The method is an incremental approach on a unit basis as each of the units are stacked incrementally from lowest to highest cost.

c. Please refer to the responses to parts (a) and (b) of this question.

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#### WITNESS/RESPONDENT RESPONSIBLE: LANE KOLLEN

QUESTION No. 12 Page 1 of 1

Please explain in detail how Mr. Kollen allocated start-up and no load fuel costs.

Response:

Mr. Kollen calculated an all in fuel cost value based on the monthly fuel costs provided by the Company in response to KIUC 1-2. In the excel spreadsheet provided by the Company, tabs 6 – 31 contained the cost of fuel burned by each unit. Mr. Kollen assumed that the start- up and no load fuel costs were included in the monthly fuel costs provided by the Company.

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#### WITNESS/RESPONDENT RESPONSIBLE: LANE KOLLEN

QUESTION No. 13 Page 1 of 1

Refer to the Direct Testimony of Lane Kollen at page 19, line 9. Please provide Mr. Kollen's "restacking analysis" and describe in detail all data sources, assumptions, and calculations. Please provide all work-papers, with all spreadsheets and models in electronic format with formulas intact.

Response:

Mr. Kollen relied upon the information provided by the Company in response to KIUC 1-2 and KIUC 1-4. Mr. Kollen assumed that generation and purchases would be available to serve native load and native load's share of losses. He determined the least cost allocation order of the available generation and purchases on a \$/MWh basis, and allocated the least expensive units or purchases to native load up until native load was see response met. Please to Staff Request 1, including Attachment "KIUC AG response to Staff 1-1 (Attachment A).xlsx"