

**EXHIBIT**

314

**Exhibit No.:**

**Issue(s)**

Depreciation/  
Heat Rate Testing/ FAC

**Witness/Type of Exhibit:**

Robinett/Rebuttal

**Sponsoring Party:**

Public Counsel

**Case No.:**

ER-2016-0285

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Missouri Public  
Service Commission

**REBUTTAL TESTIMONY**

**OF**

**JOHN A. ROBINETT**

Submitted on Behalf of the Office of the Public Counsel

**KANSAS CITY POWER & LIGHT COMPANY**

CASE NO. ER-2016-0285

December 30, 2016

OPC Exhibit No. 314  
Date 2.8.17 Reporter LB  
File No. ER.2016.0285

BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI

In the Matter of Kansas City Power & )  
Light Company's Request for Authority to )  
Implement A General Rate Increase for )  
Electric Service )

Case No. ER-2016-0285

AFFIDAVIT OF JOHN A. ROBINETT


STATE OF MISSOURI )

COUNTY OF COLE )

) ss

John A. Robinett, of lawful age and being first duly sworn, deposes and states:


1. My name is John A. Robinett. I am a Public Utility Engineer for the Office of the Public Counsel.
2. Attached hereto and made a part hereof for all purposes is my rebuttal testimony.
3. I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge and belief.

  
John A. Robinett  
Public Utility Engineer

Subscribed and sworn to me this 30<sup>th</sup> day of December 2016.



JERENE A. BUCKMAN  
My Commission Expires  
August 23, 2017  
Cole County  
Commission #13754037

  
Jerene A. Buckman  
Notary Public

My Commission expires August 23, 2017.

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**REBUTTAL TESTIMONY  
OF  
JOHN A. ROBINETT  
Kansas City Power & Light  
CASE NO. ER-2016-0285**

1 **Introduction**

2 **Q. Please state your name and business address.**

3 A. John A. Robinett, PO Box 2230, Jefferson City, Missouri 65102.

4 **Q. By whom are you employed and in what capacity?**

5 A. I am employed by the Missouri Office of the Public Counsel (“OPC”) as a Utility  
6 Engineering Specialist.

7 **Q. Are you the same John A. Robinett that filed direct testimony on behalf of the Office of  
8 Public Counsel in this proceeding?**

9 A. Yes.

10 **Q. What is the purpose of your direct testimony?**

11 A. The purpose of this testimony is to address the direct testimony of Kansas City Power  
12 and Light (“KCPL”) witness Mr. John J. Spanos and Commission’s Staff (“Staff”)  
13 witness Mr. Keenan B. Patterson pertaining to their depreciation recommendations. In  
14 addition I will address the heat rate testing requirement of the fuel adjustment clause  
15 (“FAC”) responding to the company filing and the portion of Staff’s Cost of Service  
16 Report on the topic. Finally I will address the inclusion of unit train depreciation expense  
17 in the FAC as recommended by KCPL witness Mr. Tim Rush.

1 **Rebuttal to Staff Witness Keenan B. Patterson**

2 **Q. What is Staff's recommendation related to depreciation?**

3 A. Staff recommends current ordered depreciation rates from Case No. ER-2014-0370 be  
4 modified to exclude Montrose unit 1 and include Greenwood Solar Facility in rates.

5 **Q. Did Staff perform a depreciation study in this case?**

6 A. Staff indicates a review of KCPL's depreciation study but is silent on whether it performed  
7 an independent study or relied on KCPL's study and recommendations. No work papers  
8 were provided for Staff depreciation witness Mr. Keenan Patterson that indicate the  
9 performance of an independent depreciation study.

10 **Q. Is Staff's recommendation consistent with prior Staff recommendations on**  
11 **depreciation?**

12 A. No.

13 **Q. What is inconsistent with prior Staff recommendations on depreciation?**

14 A. Staff has essentially modified the current ordered rates for isolated issues without the benefit  
15 of a study. Absent a study there is no indication of changes to historical retirement rates or  
16 historical net salvage costs of the plants for the Commission to consider. Staff does not  
17 provide any analysis on how the retirement of Montrose Unit 1 would affect what Staff  
18 refers to as the recommended "composite depreciation rate". It is inappropriate to  
19 recommend singular isolated adjustments to depreciation without considering and studying  
20 the changes that may have occurred over all of the accounts. Changes in transmission,

1 distribution, or general plant accounts may offset the proposed changes to generation. No  
2 party in this case has updated the historical data beyond the December 31, 2013 date that  
3 was provided in Case No. ER-2014-0370. For this reason, reordering the depreciation rates  
4 from Case No. ER-2014-0370 without alteration is appropriate because it is the only set of  
5 depreciation rates that studied all of the accounts and how the changes interacted and offset  
6 each other.

7 **Q. Is there a need to supplement depreciation rates for solar facilities as Staff**  
8 **recommends?**

9 A. No. KCPL currently has a Commission approved depreciation rate for all of its existing  
10 solar facilities. Furthermore, OPC opposes any inclusion of the Greenwood facility in rates.

11 **Rebuttal to KCPL Witness John J. Spanos**

12 **Q. Was KCPL's depreciation study updated?**

13 A. Yes. However, only select pieces of the study were updated. Specifically on Page 3 lines 6 -  
14 10 of Mr. Spanos' direct testimony he explains that his schedules detail the update for the  
15 electric generating accounts.

16 **Q. Is it appropriate to update a depreciation study?**

17 A. Yes. Depreciation studies are commonly updated. However, the issue with the update in this  
18 case is that the underlying historical data has not been updated.

1 Q. Did Mr. Spanos perform the depreciation study in line with this Commission's  
2 preference for depreciation method?

3 A. Yes. In Case No. ER-2010-0036 the Commission in its Report and Order indicated that it  
4 preferred the life span method of depreciation for generating plant moving away from the  
5 previously accepted mass property approach. Since that case, the Commission has preferred  
6 this method. Mr. Spanos performed the life span procedure similar to the Commission  
7 decision in Case ER-2010-0036. Depreciation rates ordered in Case No. ER-2014-0370  
8 were based on the life span procedure as well.

9 Q. Do you agree with the statements on Page 5 lines 1-7, wherein Mr. Spanos details the  
10 phases of his study?

11 A. No. OPC disagrees that he updated net salvage characteristics for each depreciable group.  
12 On Page 3 beginning at line 1 of Mr. Spanos' testimony he clearly identifies that he only  
13 updated depreciation results for electric generation:

14 *Q. What is the purpose of your testimony?*

15 *A. I am sponsoring Exhibit JJS-1 stating the results of my updated depreciation*  
16 *calculations for KCP&L's electric generating plant as of December 31, 2013 (the*  
17 *"2013 Depreciation Update" or "Depreciation Update").*

18 Furthermore review of Mr. Spanos' study indicates that the historical plant data and net  
19 salvage data were the same as submitted in Case No. ER-2014-0370 which was through  
20 December 31, 2013.

21  
22 Q. Did OPC seek information regarding the updated depreciation study filed by KCPL?

1 A. Yes. OPC Data Request Nos. 8500 through 8518 related to the depreciation study, plant and  
2 reserves accounting questions, and EV charging station.

3 **Q. Was the historical net salvage data for Transmission, Distribution, and General Plant**  
4 **updated as a part of this case?**

5 A. No. As indicated in the response to OPC Data Request No. 8508 the data files used were the  
6 same ones provided last case in Case No. ER-2014-0370 (in response to Staff Data Request  
7 No. 0103).

8 **Q. Were any of the data files supplied in Case No. ER-2014-0370 that were used again in**  
9 **depreciation study updated for this case?**

10 A. No. As shown in the response to OPC Data Request No. 8509 *"The data files used for the*  
11 *depreciation study are same as those provided in Case No. ER-2014-0370."*

12 **Q. Did KCPL provide updated historical net salvage values for each generating unit?**

13 A. No. As shown in the response to OPC Data Request No. 8507 *"The data files for the net*  
14 *salvage analysis were provided in Case No. ER-2014-0370 Staff Data Request # 0103."*

15 **Q. What is "final net salvage" as used by Mr. Spanos on Page 7 Line 11 of direct**  
16 **testimony?**

17 A. It is my understanding that final net salvage is made up of two components. The first  
18 component is the net salvage related to the cost of retiring the plant. The second component  
19 is the dismantlement net salvage.



1 Q. Is there any issue related to the “final” or “terminal” net salvage used by the company  
2 witnesses?

3 A. Yes. It is unclear whether the dismantlement portion of “final” or “terminal” net salvage  
4 was included in Mr. Spanos’ depreciation study update due to conflicting statements in  
5 KCPL witnesses’ testimony. Mr. Spanos’ testimony, at page 7 Line 17 through page 8 line  
6 9, states:

7 *Q. Have you included a dismantlement component into the overall*  
8 *recovery of generating facilities?*

9 *A. Yes. A dismantlement component has been included to the net salvage*  
10 *percentage for steam and other production facilities.*

11 *Q. Can you explain how the dismantlement component is included in the*  
12 *depreciation study?*

13 *A. Yes. The dismantlement component is part of the overall net salvage for*  
14 *each location within the production assets. Based on the Sega, Inc. report,*  
15 *studies for other utilities and the cost estimates of KCP&L, it was*  
16 *determined that the dismantlement or decommissioning costs for steam*  
17 *and other production facilities is best calculated by dividing the*  
18 *dismantlement cost by the surviving plant at final retirement. These*  
19 *amounts at a location basis are added to the interim net salvage*  
20 *percentage of the assets anticipated to be retired on an interim basis to*  
21 *produce the weighted net salvage percentage for each location. The*  
22 *detailed calculation for each location is set forth on pages 6 through 9 of*  
23 *Exhibit JJS-1. This calculation is the same as what was performed in Case*  
24 *No. ER-2014-0370. The only change is the updated dismantlement costs.*

25  
26 Furthermore at page 7 the Q&A on lines 17 -20 in his testimony states:

27 *Q. Have you included a dismantlement component into the overall*  
28 *recovery of generating facilities?*

29 *A. Yes. A dismantlement component has been included to the net salvage*  
30 *percentage for steam and other production facilities.*

31 In his Direct testimony, at page 8 lines 4-10, another KCPL witness Mr. Christopher “Chris”  
32 Robert Rogers discusses how the results of his decommissioning cost study were  
33 incorporated by Mr. Spanos’ in the depreciation study stating:

1                    *It is my understanding that the retirement costs I have identified have been*  
2                    *incorporated into the depreciation study performed for KCP&L by*  
3                    *Company witness, Mr. John Spanos. It is also my understanding that Mr.*  
4                    *Spanos has not included the dismantling costs from my study in his*  
5                    *depreciation study.*

6  
7                    OPC sought clarification of the inclusion of dismantlement cost as a portion of net  
8                    salvage in the depreciation rate. OPC Data Request No. 8501 asked:

9                    *Please confirm that Mr. Spanos has not included the dismantlement*  
10                   *portion of terminal net salvage % in his depreciation study as stated by*  
11                   *Mr. Rogers on page 9 of direct testimony.*

12  
13                   The response prepared by Mr. Spanos, KCPL's depreciation consultant, conflicts with his  
14                   own direct testimony. Mr. Spanos' response to OPC Data Request No. 8501 states:

15                   *Confirmed. The dismantlement amounts shown in Table 1 of witness*  
16                   *Rogers' direct testimony were not included in the depreciation*  
17                   *calculations, with the exception of the scrap value amounts shown for*  
18                   *Spearville.*

19                   KCPL's witnesses appear to not be in agreement with each other (or with their own  
20                   testimony) as to whether the dismantlement portion of terminal net salvage was or was  
21                   not included in the depreciation study. This only confuses an already difficult issue to  
22                   understand and comprehend. To truly know the impact each component of net salvage  
23                   (i.e. interim, retirement, dismantlement) has on the depreciation rate further clarification  
24                   of the company's position is needed. The company has not shown that any change to the  
25                   current ordered depreciation rates is warranted.

26                   **Q. Has KCP&L historically shown a need for dismantlement net salvage costs to be**  
27                   **included into depreciation rates?**

28                   **A.** No. OPC would note that KCPL retired Hawthorn units 1, 2, 3 and 4 in 1984. Those units  
29                   are retired in place and to this date have not been dismantled.

1 Q. Should the Commission approve depreciation rates that are adjusted to include future  
2 unknown and estimated costs that the Company may incur for retirement and  
3 dismantlement portions of terminal net salvage?

4 A. No. This Commission has set rates on the principle that only known and measurable costs  
5 should be included in rates. That is why interim net salvage was built into depreciation rates  
6 because it is based on historical trends of how much cost-of-removal and salvage value  
7 fluctuate when an asset is retired. The historical interim net salvage experienced has been  
8 included into the depreciation rates that were ordered in ER-2014-0370. Only costs that are  
9 known and measurable should be included in depreciation expense.

10 Q. In Case No. ER-2016-0285, has the Company asked for additional funds for the  
11 retirement of Montrose unit 1?

12 A. No. Currently there is no witness in this case that has indicated there was a shortfall in  
13 reserves to retire the unit.

14 Q. Why was there no "shortfall" of reserves related to the retirement of Montrose unit 1?

15 A. It is, in OPC's opinion, directly related to how the Company accounts for depreciation  
16 reserves as indicated in response to OPC Data Request No. 8518. KCPL maintains  
17 depreciation reserve by account and by type of plant (i.e. steam production, nuclear  
18 production, other production, transmission, distribution, and general plant) not by generating  
19 unit as you might think based on analysis in Mr. Spanos depreciation study.

20

1 Q. Does KCPL's historical net salvage data yield different rates for each generating  
2 facility?

3 A. No.

4 Q. Why not?

5 A. As indicated by the Company's response to OPC Data Request No. 8507:

6 *The net salvage data is not maintained for the depreciation study by generation unit.*

7 Also, in Response to OPC Data Request No. 8509 the Company indicated that the data files  
8 used in the depreciation study remained unchanged:

9 *The data files used for the depreciation study are the same as those provided in Case*  
10 *No. ER-2014-0370.*

11 Q. Is Mr. Spanos recommending net salvage components that differ by facility and  
12 account?

13 A. Yes.

14 Q. Why is this improper to do in this case?

15 A. The answer is twofold, first the historical data does not support net salvage values to differ  
16 by facility but only by account. This is indicated by KCPL's response to OPC Data Request  
17 No. 8507 which indicates "*The net salvage data is not maintained for the depreciation study*  
18 *by generation unit.*" Second the only way to arrive at differing net salvage rates for each  
19 facility is the inclusion of future unknown estimated expenditures that may occur. The  
20 inclusion of future unknown and speculative costs is a divergence from current and  
21 historical Commission depreciation and expense inclusion practices.

1 **Heat Rate Testing Review**

2 **Q. What is the heat rate?**

3 A. KCPL provided a definition in its Generating Unit Heat Rate Testing Procedure attached to  
4 Mr. Crawford's direct testimony in Case No. ER-2014-0370 as Schedule BLC-7. Heat rate  
5 is a measure of generating station thermal efficiency, generally expressed in Btu per net  
6 kilowatt-hour. It is computed by dividing the total Btu content of fuel burned for electric  
7 generation by the resulting net kilowatt-hour generation.

8 **Q. What is the importance and reason for heat rate testing?**

9 A. Staff discussed the importance of minimum equipment performance standards in the FAC  
10 rulemaking case, File No. EX-2006-0472.<sup>1</sup>

11 *Concern: Some stakeholders believe that minimum equipment performance*  
12 *standards are needed in these rules.*

13 *Staff Response: Staff agrees that equipment performance standards should be a part*  
14 *of these rules and has included in the proposed rules requirements to develop*  
15 *generating unit efficiency testing and monitoring procedures. Staff will, as a result*  
16 *of receiving this data, have the ability to monitor each electric utilities' power plants*  
17 *in terms of their capability to efficiently convert fuel to electricity. Any observed*  
18 *reductions over time may be an indication of the utility's need to implement*  
19 *programs to improve efficiency. Staff views this as a very important and necessary*  
20 *detail since the efficiency of each electric utility's power plants directly relates to*  
21 *each electric utility's fuel and purchased power costs."*

22 Any intervening party has the ability to monitor the efficiency performance of the plants  
23 over time and can identify changes that may exceed normal wear and tear. Parties can then  
24 discuss root causes and means to address the underlying issues.

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<sup>1</sup> Staff Testimony in Support of and Suggested Changes to 4 CSR 240-3.161 and 4 CSR 240-20.090

1 **Q. What did the Staff Cost of Service Report say about heat rate testing?**

2 A. On page 172 lines 10 through 13 of the report Staff discusses its review of material provided  
3 by KCPL to meet compliance of Commission Rule 4 CSR 240-3.161.

4 *Staff's review of Company Witness Burton L. Crawford's testimony, KCPL's*  
5 *response to Staff Data Request 0189, and KCPL's response to Staff Data Request*  
6 *No.0309 confirms that each generating unit meets the previous 24-month heat rate*  
7 *testing requirement of Commission Rule 4 CSR 240-3.131(3)(Q).*

8 **Q. What is the purpose of the requirement of Commission Rule 4 CSR 240-3.161(3)(Q)**  
9 **that heat rate tests of no more than 24 months prior to the filing of a rate case?**

10 A. Heat rate tests and results are a useful tool in monitoring the generation plant  
11 maintenance practices of a utility. While over their lives generating facilities will become  
12 less efficient, sharp changes in the efficiencies may indicate a change in philosophy in  
13 maintaining a generating facility and should draw inquiry of causes. This information is a  
14 filing requirement so that the parties can evaluate changes in efficiency output.

15 **Q. Why is this important when a utility is granted an FAC?**

16 A. Under traditional ratemaking, the utility would benefit from any efficiency improvements  
17 at the facility that would result in a reduction in fuel costs. This incentive is diminished  
18 when a utility is granted an FAC where costs and savings are passed on to the customers.

19 **Q. Why is the first request for modification or continuance of the FAC important for**  
20 **receiving heat rate test results, reports, and curves?**

1 A. These are the first heat rate tests after the Commission approves the establishment of an  
2 FAC.<sup>2</sup> The results should be used as a baseline to reference and examine the changes in  
3 the efficiencies of the plants over time.

4 Q. Did the Company's initial filing meet the requirement of Commission Rule 4 CSR 240-  
5 3.161(3)(Q)?

6 A. No, it did not. To address heat rate testing, KCPL provides a table attached to Mr.  
7 Crawford's testimony as Schedule BLC-6.<sup>3</sup> The table reports the generating unit, date test  
8 was performed and a single net heat rate. None of the underlying data or reports generated  
9 was provided that were used to arrive at the final reported numbers. The reports generated  
10 and heat rate curves allow for more analysis and conclusions to be drawn by the reviewing  
11 parties. The single number heat rate result filed by KCPL is inadequate and the heat rate test  
12 results in Schedule BLC-6 did not meet the timing requirements of the Commission's rule.

13 Q. What is the timing required by 4 CSR 240-3.161(3)(Q) for the heat rate tests?

14 A. The rule states that the Company needs to file the heat rate or efficiency test for each  
15 facility conducted within the previous twenty-four months.<sup>4</sup>

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<sup>2</sup> Heat rate tests are not required for the general rate case in which the Commission first establishes an FAC for an electric utility.

<sup>3</sup> This table is marked **Highly Confidential** so results will not be discussed in this testimony

<sup>4</sup> 4 CSR 240-3.161 (3). *When an electric utility files a general rate proceeding following the general rate proceeding that established its RAM as described by 4 CSR 240-20.090(2) in which it requests that its RAM be continued or modified, the electric utility shall file with the commission and serve parties, as provided in sections (9) through (11) in this rule the following supporting information as part of, or in addition to, its direct testimony:*

1  
2 **Q. Did KCPL meet this requirement?**

3 A. No, it did not. The Company's direct testimony in this case was filed on July 1, 2016.  
4 Counting back 24 months would require all heat rate tests to have been performed on or  
5 after July 1, 2014 and before filing its initial testimony.

6 Eleven of the 23 generating plants shown on Schedule BLC-6 were outside of the 24 months  
7 prior to the filing of the direct case. The following plants' heat rate tests at the time of direct  
8 filing had not been conducted in the 24 months prior to the Company's direct filing: Iatan 2,  
9 LaCygne 1, LaCygne 2, Montrose 2, Montrose 3, Northeast 13, West Gardner 1, West  
10 Gardner 2, West Gardner 3, West Gardner 4, and Osawatomie 1.

11  
12 **Q. Did the Company seek a waiver in this case from the requirements of Commission**  
13 **Rule 4 CSR 240-3.161(3)(Q) for the timing provision of the heat rate testing?**

14 A. No.

15 **Q. Does Staff agree that the minimum filing requirements were not met in the direct filing**  
16 **of this case?**

17 A. In part. While Staff does not explicitly state that the minimum filing requirements were not  
18 met, it alludes to KCPL not meeting the Commission's heat rate testing requirements on  
19 page 172 of the Staff Cost of Service Report beginning at line 8:

---

*(Q) The results of heat rate tests and/or efficiency tests on all the electric utility's nuclear and non-nuclear steam generators, HRSG, steam turbines and combustion turbines conducted within the previous twenty-four (24) months;*



1                    *Additional information necessary to comply with 4 CSR 240-3.161(3)(Q) is provided*  
2                    *in KCPL's responses to Staff Data Request No. 0189 and Staff Data Request No.*  
3                    *0309."*

4                    However, Staff takes the position that the Company has subsequently provided the  
5                    information required in responses to data requests.

6                    **Q. Does the information provided in response to Staff Data Request No. 0309 satisfy the**  
7                    **requirement of a heat rate test within the previous 24 of the filing date?**

8                    A. No. In fact Staff Data Request No. 0309 asks for heat rate tests performed after the  
9                    Company's direct filing date.

10                  **Q. When did Staff seek additional information regarding heat rate testing?**

11                  A. Staff Data request No. 0189 was sent on September 20, 2016, and KCPL answered on  
12                  October 5, 2016. Staff data Request No. 0309 was sent on November 9, 2016, and KCPL  
13                  responded November 10, 2016.

14                  **Q. What is the significance of the date the data requests were sent to the Company?**

15                  A. This information was sought almost three and four months after the direct filing date (July1,  
16                  20106). The information provided by the company should have been provided in its initial  
17                  filing. In fact, Staff Data Request No. 0309 seeks heat rate tests that occurred after the direct  
18                  filing date of this case. Even though the company provided additional information in  
19                  response to later data requests it is clear the company did not meet the filing requirements  
20                  with its direct filing. By providing this information only in response to data requests the  
21                  Company improperly shifts the burden to other parties to obtain the information before they  
22                  can perform any analysis on heat rate or efficiency. By the time parties received the  
23                  additional information sought by Staff Data Requests No. 0309 there was no longer

1 sufficient time to address additional questions before the filing of the non-utility parties'  
2 direct testimonies.

3 **Q. Has Staff performed any analysis of the Heat Rate test results or heat rate curves to**  
4 **develop baseline metrics to be used in the future?**

5 A. No. Based on Staff's response to Data Request No. 0314, it is evident that Staff only looked  
6 for the date on which a heat rate test was reported to have occurred. This was the extent of  
7 its analysis of the heat rate testing results provided.

8 **Q. Did OPC seek additional clarification about Staff's position on the purpose of the Heat**  
9 **Rate testing requirements?**

10 A. Yes. OPC sent a follow-up Data Request 0314.1 to Staff. Staff's response stated:

11 *The heat rate testing required by 4 CSR 240-3.161(3)(Q) ensures that utilities that*  
12 *request to continue or modify an FAC regularly test the efficiency of all the*  
13 *generating units for which the utility will recover fuel costs. Heat rate test results*  
14 *allow the utility to identify units that may not be operating as expected. Heat rate*  
15 *testing is a good utility management operating practice to help assure any*  
16 *degradation of generating units is identified early and corrections are made in a*  
17 *timely manner when economic to do so.*

18 **Q. Are Staff's responses to Data Request Nos. 0314 and 0314.1 concerning to OPC?**

19 A. Yes. Despite recognizing the purpose of heat rate testing is ensure the company monitors  
20 and maintains the efficiency of its generating units Staff does not appear to substantively  
21 evaluate the information provided. Instead, Staff only checked to see if the information was  
22 provided.

1       The responses to Data Request Nos. 0314 and 0314.1 are attached as Schedule JAR-r-1. The  
2       Response to Data Request No. 0314 indicates that KCPL met the minimum filing  
3       requirements of 4 CSR 240-3.161(3)(Q) even though this information was not provided in  
4       the company's direct filing. Staff has neither recommended nor accepted the heat rates  
5       provided by KCPL as base lines to compare future test results against.

6       **Q.    Have you reviewed the heat rate results provided by the utilities in Case No. ER-2016-**  
7       **0285(KCPL) and Case No. ER-2016-0179 (Ameren Missouri)?**

8       **A.    Yes. I performed a limited review of information provided in both cases.**

9       **Q.    How does the information provided by KCPL differ than the information provided by**  
10       **Ameren Missouri?**

11       **A.    The heat rate testing results differ in the thoroughness provided in each of their witness'**  
12       **testimony. KCPL provides a table attached to Mr. Crawford's testimony as Highly**  
13       **Confidential Schedule BLC-6.<sup>5</sup> The table reports the generating unit, date test was**  
14       **performed and a single net heat rate for each unit. Ameren Missouri on the other hand**  
15       **provides much more detailed results of its heat rate testing for generating units. Ameren**  
16       **Missouri witness Ms. Lynn Barnes testimony provides the heat rates testing results for**  
17       **Ameren Missouri's request of continuation of the FAC attached to her testimony as Highly**  
18       **Confidential Schedule LMB-2 Attachment E HC. As a reference, Ameren Missouri**  
19       **provided eighty-four pages of information relating to heat rate testing. The heat rate testing**  
20       **result information provided by Ameren Missouri allows for more analysis and conclusions**

---

<sup>5</sup> This table is marked Highly Confidential so results will not be discussed in this testimony.

1 that could be drawn by the reviewing parties when compared to the results provided by  
2 KCPL.

3 **Q. Does OPC have a recommendation with regards to the heat rate testing results**  
4 **provided by KCPL in this case?**

5 **A.** While OPC has done a limited analysis on the heat rate test results filed provided by KCPL,  
6 more time and analysis is needed to determine if these results are adequate for baseline heat  
7 rate tests. OPC recommends the parties work together to develop heat rate baselines to be  
8 used for KCPL.

9 In addition OPC recommends that the Commission order KCPL to provide heat rate testing  
10 reports for each of its generating units with the direct filing of its next general rate increase.  
11 The report for each of the generating facilities should provide the heat rate curves and data  
12 used to derive the curves along with documentation on the heat rate testing process used.  
13 KCPL should include information on the testing procedures each generating unit/ facility  
14 location since it indicated in its initial request for the FAC in Case No. ER-2014-0370 that  
15 the testing procedures vary by location and unit. In addition, the reports should also provide  
16 any changes to procedures that may have occurred and the reasoning for making such  
17 changes.

18 **Rebuttal to KCPL Witness Mr. Tim Rush**

19 **Q. Are you aware of a cost that KCPL is asking to include depreciation expense in its**  
20 **FAC?**

1 A. Yes. KCPL has included unit train depreciation expense to the steam FERC account in  
2 an attempt to recover this depreciation expense through the FAC. While it may be  
3 beneficial in the short-run, it opens the door for more depreciation costs to be included in  
4 the FAC and is inappropriate.

5 **Q. What is unit train depreciation expense?**

6 A. It is the annual expense built into rates to recover the original investment of plant in  
7 service over its useful life.

8 **Q. Should unit train depreciation expense be placed into the FAC as an expense?**

9 A. No. Depreciation expense for unit trains was included as an annual expense in the revenue  
10 requirement in Case No. ER-2014-0370. OPC's recommendation to continue current  
11 ordered depreciation rates would again build into the revenue requirement an annual  
12 depreciation expense for unit trains. When considering expenses to include in the FAC the  
13 Commission made it very clear costs which are "known, measurable, and not  
14 unpredictable", are not volatile and so should not be recovered in the FAC.<sup>6</sup> Depreciation  
15 expense for unit trains meets these same criteria. There is no recommended change in unit  
16 train depreciation rate for this case; the measurable criteria is annual depreciation rate times  
17 plant in service for the unit train account.

18 Furthermore, it is improper to account for unit train depreciation expense under both the  
19 FAC and as an annual expense built into revenue requirement. Unit train depreciation is a  
20 capital revenue requirement expense not a transportation cost and should be accounted for in

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<sup>6</sup> Case No. ER-2014-0370 Report and Order page 35

1 the revenue requirement as annual depreciation expense. OPC recommends removal of unit  
2 train depreciation expense from the FAC as they are already accounted for as an annual  
3 depreciation expense in the revenue requirement to avoid double counting.

4 **Recommendations**

5 **Q. What are the OPC recommendations related to Heat Rate Testing?**

6 A. OPC recommends that the Commission order KCPL to provide heat rate testing reports for  
7 each of its generating units with the direct filing of its next general rate increase. The report  
8 for each of the generating facilities should provide the heat rate curves and data used to  
9 derive the curves along with documentation on the heat rate testing process used. KCPL  
10 should include for each generating unit/ facility location since they indicated in its initial  
11 request for the FAC in Case No. ER-2014-0370 that those testing procedures verify by  
12 location and unit. In addition the reports should also provide any changes to procedures that  
13 may have occurred and reasoning for made changes.

14 KCPL should supply the heat rate curves and reports that were used to generate the results  
15 as presented in Mr. Crawford's direct testimony and as supplemented by the company  
16 responses to data requests.

17 **Q. What are OPC's recommendations related to depreciation rates?**

18 A. OPC recommends that the Commission reorder the current approved depreciation rates for  
19 purposes of this case and reject the updates recommended by Staff and KCPL as they are  
20 not supported by a full depreciation study nor a complete update of historical data.

1 | **Q. What are OPC's recommendations related to Unit Train depreciation expense?**

2 | A. OPC recommends removal of unit train depreciation expense from the FAC; it is already  
3 | built into the annual revenue requirement as annual depreciation expense and is otherwise  
4 | inappropriate to include in the FAC to avoid double counting.

5 | **Q. Does this conclude your Rebuttal testimony?**

6 | A. Yes, it does.

## Missouri Public Service Commission

Respond Data Request

<b>Data Request No.</b>	0314
<b>Company Name</b>	MO PSC Staff-(All)
<b>Case/Tracking No.</b>	ER-2016-0285
<b>Date Requested</b>	12/7/2016
<b>Issue</b>	Cost Recovery Mechanism - Fuel Adjustment Clause
<b>Requested From</b>	Nathan William
<b>Requested By</b>	Lena Mantle
<b>Brief Description</b>	Heat Rate Testing
<b>Description</b>	Please provide documentation and workpapers of all analysis conducted by J Luebbert or other Staff on the heat rate testing information provided by KCPL. If no documentation exists, please provide a complete explanation of the analysis conducted.
<b>Response</b>	Commission Rule 4 CSR 240-3.161(3)(Q) requires: (Q) The results of heat rate tests and/or efficiency tests on all the electric utility's nuclear and non-nuclear steam generators, HRSG, steam turbines and combustion turbines conducted within the previous twenty-four (24) months Staff's review of Company witness Burton L. Crawford's testimony, KCPL's response to Staff Data Request 0189, and KCPL's response to Staff Data Request No. 0309 confirms that each generating unit meets the previous 24-month heat rate testing requirement of Commission Rule 4 CSR 240-3.161(3)(Q).
<b>Objections</b>	NA

The attached information provided to Missouri Public Service Commission Staff in response to the above data information request is accurate and complete, and contains no material misrepresentations or omissions, based upon present facts of which the undersigned has knowledge, information or belief. The undersigned agrees to immediately inform the Missouri Public Service Commission if, during the pendency of Case No. ER-2016-0285 before the Commission, any matters are discovered which would materially affect the accuracy or completeness of the attached information. If these data are voluminous, please (1) identify the relevant documents and their location (2) make arrangements with requestor to have documents available for inspection in the MO PSC Staff-(All) office, or other location mutually agreeable. Where identification of a document is requested, briefly describe the document (e.g. book, letter, memorandum, report) and state the following information as applicable for the particular document: name, title number, author, date of publication and publisher, addresses, date written, and the name and address of the person(s) having possession of the document. As used in this data request the term "document(s)" includes publication of any format, workpapers, letters, memoranda, notes, reports, analyses, computer analyses, test results, studies or data, recordings, transcriptions and printed, typed or written materials of every kind in your possession, custody or control or within your knowledge. The pronoun "you" or "your" refers to MO PSC Staff-(All) and its employees, contractors, agents or others employed by or acting in its behalf.

**Security :** Public  
**Rationale :** NA

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## Missouri Public Service Commission

Respond Data Request

<b>Data Request No.</b>	0314.1
<b>Company Name</b>	MO PSC Staff-(All)
<b>Case/Tracking No.</b>	ER-2016-0285
<b>Date Requested</b>	12/12/2016
<b>Issue</b>	Cost Recovery Mechanism - Fuel Adjustment Clause
<b>Requested From</b>	Nicole Mers
<b>Requested By</b>	Timothy Opitz
<b>Brief Description</b>	Purpose of heat rate testing
<b>Description</b>	In Staff's opinion, what is the purpose of the heat rate testing required of an electric utility that is requesting a continuation or modification of an FAC [4 CSR 240-3.161 (3)(Q)]?
<b>Response</b>	The heat rate testing required by 4 CSR 240-3.161(3)(Q) ensures that utilities that request to continue or modify an FAC regularly test the efficiency of all the generating units for which the utility will recover fuel costs. Heat rate test results allow the utility to identify units that may not be operating as expected. Heat rate testing is a good utility management operating practice to help assure any degradation of generating units is identified early and corrections are made in a timely manner when economic to do so. Data Request response provided by J Luebbert (j.luebbert@psc.mo.gov).
<b>Objections</b>	NA

The attached information provided to Missouri Public Service Commission Staff in response to the above data information request is accurate and complete, and contains no material misrepresentations or omissions, based upon present facts of which the undersigned has knowledge, information or belief. The undersigned agrees to immediately inform the Missouri Public Service Commission if, during the pendency of Case No. ER-2016-0285 before the Commission, any matters are discovered which would materially affect the accuracy or completeness of the attached information. If these data are voluminous, please (1) identify the relevant documents and their location (2) make arrangements with requestor to have documents available for inspection in the MO PSC Staff-(All) office, or other location mutually agreeable. Where identification of a document is requested, briefly describe the document (e.g. book, letter, memorandum, report) and state the following information as applicable for the particular document: name, title number, author, date of publication and publisher, addresses, date written, and the name and address of the person(s) having possession of the document. As used in this data request the term "document(s)" includes publication of any format, workpapers, letters, memoranda, notes, reports, analyses, computer analyses, test results, studies or data, recordings, transcriptions and printed, typed or written materials of every kind in your possession, custody or control or within your knowledge. The pronoun "you" or "your" refers to MO PSC Staff-(All) and its employees, contractors, agents or others employed by or acting in its behalf.

<b>Security :</b>	Public
<b>Rationale :</b>	NA

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