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March 28, 2017

RECEIVED
MAR 28 2017
PUBLIC SERVICE
COMMISSION

Dr. Talina R. Mathews, Ph.D.
Executive Director
Public Service Commission
211 Sower Boulevard
Frankfort, Kentucky 40602

Re: PSC Case No. 2017-00071

Dear Dr. Mathews:

Please find enclosed for filing with the Commission in the above-referenced case, an original and eight copies of the responses of East Kentucky Power Cooperative, Inc., ("EKPC") to the Commission's Appendix B First Information Requests, contained in the Commission's Order dated February 21, 2107, and the Prepared Testimony of Isaac S. Scott on behalf of EKPC. Documents contained in this filing are also being filed on behalf of EKPC's member systems.

Please return a file-stamped copy to my office.

Very truly yours,

A handwritten signature in black ink that reads "David S. Samford" followed by a stylized flourish in parentheses.

David S. Samford

Enclosures

RECEIVED

MAR 28 2017

**PUBLIC SERVICE
COMMISSION**

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

In the Matter of:

**AN EXAMINATION BY THE PUBLIC SERVICE)
COMMISSION OF THE ENVIRONMENTAL)
SURCHARGE MECHANISM OF EAST KENTUCKY)
POWER COOPERATIVE, INC. FOR THE SIX-)
MONTH BILLING PERIOD ENDING)
DECEMBER 31, 2016 AND THE PASS THROUGH)
MECHANISM FOR ITS SIXTEEN MEMBER)
DISTRIBUTION COOPERATIVES)**

**CASE NO.
2017-00071**

**RESPONSES TO COMMISSION STAFF'S FIRST REQUEST FOR
INFORMATION TO EAST KENTUCKY POWER COOPERATIVE, INC.
DATED FEBRUARY 21, 2017**

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN EXAMINATION BY THE PUBLIC SERVICE)	
COMMISSION OF THE ENVIRONMENTAL)	
SURCHARGE MECHANISM OF EAST)	
KENTUCKY POWER COOPERATIVE, INC.)	CASE NO.
FOR THE SIX-MONTH BILLING PERIOD)	2017-00071
ENDING DECEMBER 31, 2016, AND THE PASS)	
THROUGH MECHANISM FOR ITS SIXTEEN)	
MEMBER DISTRIBUTION COOPERATIVES)	

DIRECT TESTIMONY OF ISAAC S. SCOTT
ON BEHALF OF EAST KENTUCKY POWER COOPERATIVE, INC.

Filed: March 28, 2017

1 **Q. Please state your name, business address, and occupation.**

2 A. My name is Isaac S. Scott and my business address is East Kentucky Power Cooperative,
3 Inc. ("EKPC"), 4775 Lexington Road, Winchester, Kentucky 40391. I am the Manager of
4 Pricing for EKPC.

5 **Q. Please state your education and professional experience.**

6 A. I received a B.S. degree in Accounting, with distinction, from the University of Kentucky
7 in 1979. After graduation I was employed by the Kentucky Auditor of Public Accounts,
8 where I performed audits of numerous state agencies. In December 1985, I transferred to
9 the Kentucky Public Service Commission ("Commission") as a public utilities financial
10 analyst, concentrating on the electric and natural gas industries. In August 2001, I became
11 manager of the Electric and Gas Revenue Requirements Branch in the Division of Financial
12 Analysis at the Commission. In this position, I supervised the preparation of revenue
13 requirement determinations for electric and natural gas utilities as well as determined the
14 revenue requirements for the major electric and natural gas utilities in Kentucky. I retired
15 from the Commission effective August 1, 2008. In November 2008, I became the Manager
16 of Pricing at EKPC.

17 **Q. Please provide a brief description of your duties at EKPC.**

18 A. As Manager of Pricing, I am responsible for rate-making activities which include designing
19 and developing wholesale and retail electric rates and developing pricing concepts and
20 methodologies. I report directly to the Director of Regulatory and Compliance Services.

21 **Q. What is the purpose of your testimony in this proceeding?**

22 A. The purpose of my testimony is to address the following topics:

- Describe how EKPC and its Member Cooperatives have applied the environmental surcharge mechanism and the pass through mechanism in a reasonable manner during the period under review; and
- Propose updating the rate of return used in the environmental surcharge calculation.

Q. Is EKPC preparing testimony and responding to data requests on behalf of its Member Cooperatives?

A. Pursuant to the Commission's February 21, 2017 Order, EKPC is preparing testimony on behalf of each Member Cooperative. The Member Cooperatives are: Big Sandy Rural Electric Cooperative Corporation ("RECC"), Blue Grass Energy Cooperative Corporation, Clark Energy Cooperative, Inc., Cumberland Valley Electric, Inc., Farmers RECC, Fleming-Mason Energy Cooperative, Grayson RECC, Inter-County Energy Cooperative Corporation, Jackson Energy Cooperative, Licking Valley RECC, Nolin RECC, Owen Electric Cooperative, Salt River Electric Cooperative Corporation, Shelby Energy Cooperative, Inc., South Kentucky RECC, and Taylor County RECC. EKPC is also providing Response 2 to the Commission Staff's First Request for Information ("Staff's First Request").

Q. Have other EKPC representatives provided responses to Commission Staff's First Request for Information in this proceeding?

A. Yes. Mark Horn, Manager of Fuel and Emissions, has provided emission allowance information in Response 3 to the Staff's First Request. Thomas Stachnik, Treasurer and Director of Finance, has provided the debt and average interest rate information in Response 5 to the Staff's First Request.

Q. Previous Commission Orders required EKPC to incorporate certain provisions into the calculation of the monthly environmental surcharge factors. Please comment on

1 **how EKPC has addressed the most significant aspects of these Orders during the**
2 **periods under review.**

3 A. A brief description of each component of the environmental surcharge calculation, applied
4 consistently with Commission Orders, is discussed below.

5 • **Compliance Plan Projects**

6 As of the end of the six-month review period, EKPC has 14 projects in its
7 Environmental Compliance Plan. These projects were approved by the Commission in
8 Case Nos. 2004-00321,¹ 2008-00115,² 2010-00083,³ 2013-00259,⁴ and 2014-00252.⁵

9 In conjunction with the establishment of a regulatory asset for the undepreciated
10 balance of the William C. Dale Generating Station assets that were being retired early,
11 EKPC was required in Case No. 2015-00302⁶ to remove Project 5, Dale Low Nitrogen
12 Oxide Burners, and Project 10, Dale Continuous Monitoring Equipment, from the

¹ See *In the Matter of Application of East Kentucky Power Cooperative, Inc. for Approval of an Environmental Compliance Plan and Authority to Implement an Environmental Surcharge*, Order, Case No. 2004-00321, (Ky. P.S.C., Mar. 17, 2005).

² See *In the Matter of the Application of East Kentucky Power Cooperative, Inc. for Approval of an Amendment to Its Environmental Compliance Plan and Environmental Surcharge*, Order, Case No. 2008-00115, (Ky. P.S.C., Sep. 29, 2008).

³ See *In the Matter of Application of East Kentucky Power Cooperative, Inc. for Approval of an Amendment to Its Environmental Compliance Plan and Environmental Surcharge*, Order, Case No. 2010-00083, (Ky. P.S.C., Sep. 24, 2010).

⁴ See *In the Matter of Application of East Kentucky Power Cooperative, Inc. for a Certificate of Public Convenience and Necessity for Alteration of Certain Equipment at the Cooper Station and Approval of a Compliance Plan Amendment for Environmental Surcharge Cost Recovery*, Order, Case No. 2013-00259, (Ky. P.S.C., Feb. 20, 2014).

⁵ See *In the Matter of Application of East Kentucky Power Cooperative, Inc. for a Certificate of Public Convenience and Necessity for construction of an Ash Landfill at J.K. Smith Station, the Removal of Impounded Ash from William C. Dale Station for Transport to J.K. Smith and Approval of a Compliance Plan Amendment for Environmental Surcharge Recovery*, Order, Case No. 2014-00252, (Ky. P.S.C., Mar. 6, 2015).

⁶ See *In the Matter of Application of East Kentucky Power Cooperative, Inc. for an Order Approving the Establishment of a Regulatory Asset for the Undepreciated Balance of the William C. Dale Generating Station*, Order, Case No. 2015-00302, (Ky. P.S.C. Feb. 11, 2016). Projects 5 and 10 were originally approved as part of EKPC's environmental compliance plan and eligible for surcharge recovery in Case No. 2008-00115.

environmental surcharge. The monthly environmental surcharge reports, incorporated by reference in this case, show the capital costs for the remaining projects.

- **Base/Current Method**

The surcharge mechanism, as shown in EKPC's Rate ES – Environmental Surcharge, reflects the base/current method through the formula $MESF = CESF - BESF$.⁷ As shown in Response 1 to the Staff's First Request, EKPC's BESF is 0%.

- **Actual Emission Allowance Expense**

EKPC included only actual sulfur dioxide ("SO₂") and nitrogen oxide ("NO_x") emission allowance expense in the monthly filings.

- **Return on Emission Allowance Inventory and Limestone Inventory**

EKPC has included a return on all environmental surcharge assets, including emission allowances. This is addressed in Response 3 to the Staff's First Request. EKPC has also included a return on its limestone inventory.

EKPC's emission allowance inventories for SO₂ and NO_x reflect operations under the Cross-State Air Pollution Rules ("CSAPR") along with a continuation of the Acid Rain program. Under CSAPR, SO₂ and NO_x allowances are awarded annually with carry-forward of unused balances from prior years. The allowances allocated to EKPC by the Environmental Protection Agency under CSAPR have a dollar value of \$0, which is consistent with the valuation afforded EPA allocated allowances under prior programs. EKPC's SO₂ inventory as of the end of the review period reflects the allowances remaining from the Acid Rain program. The NO_x inventory as of the end of the review period has a \$0 balance as all the allowances were issued under CSAPR.

⁷ MESF is the Monthly Environmental Surcharge Factor; CESF is the Current Environmental Surcharge Factor; and BESF is the Base Environmental Surcharge Factor.

1 • **Return on Construction Work in Progress (“CWIP”), Net of Allowance for Funds**
2 **Used During Construction**

3 As approved in Case No. 2008-00115, EKPC has included a return on CWIP during
4 the period under review.

5 • **Rate of Return**

6 Two rates of return were in effect during the periods under review. For the expense
7 months of June and July 2016, the rate of return was 6.045%, which was approved by
8 the Commission in Case No. 2015-00281.⁸ For the expense months of August through
9 November 2016, the rate of return was 6.041%, which was approved by the
10 Commission in Case No. 2016-00144.⁹ In each case, the Commission approved
11 EKPC’s request to incorporate a Times Interest Earned Ratio (“TIER”) of 1.50 in the
12 determination of the rate of return.

13 EKPC’s rate of return on environmental compliance rate base is determined by
14 multiplying the weighted average debt cost for the debt issuances directly related to
15 projects in the approved compliance plan times a stated TIER. The rate of return on
16 the environmental compliance rate base is updated to reflect current average debt cost
17 at the conclusion of the six-month and two-year surcharge reviews.¹⁰ The use of debt

⁸ See *In the Matter of an Examination by the Public Service Commission of the Environmental Surcharge Mechanism of East Kentucky Power Cooperative, Inc. for the Six-Month Billing Periods Ending June 30, 2014 and December 31, 2014, Two-Year Billing Period Ending June 30, 2015, and the Pass Through Mechanism for Its Sixteen Member Distribution Cooperatives*, Order, Case No. 2015-00281, (Ky. P.S.C., Apr. 8, 2016).

⁹ See *In the Matter of an Examination by the Public Service Commission of the Environmental Surcharge Mechanism of East Kentucky Power Cooperative, Inc. for the Six-Month Billing Period Ending December 31, 2015 and the Pass Through Mechanism for Its Sixteen Member Distribution Cooperatives*, Order, Case No. 2016-00144, (Ky. P.S.C., Sept. 9, 2016).

¹⁰ The determination of the rate of return was a provision in the settlement agreement filed in Case No. 2004-00321, which the Commission approved in ordering paragraph 4 of the March 17, 2005 Order authorizing an environmental surcharge for EKPC.

1 costs is based on the fact that all of EKPC's environmental compliance investments are
2 financed with long-term debt.¹¹ The use of a 1.50 TIER was first approved by the
3 Commission in Case No. 2011-00032.¹² This rate-making methodology is different
4 from that employed by investor-owned utilities. The rate of return for the
5 environmental compliance rate base for investor-owned utilities reflects a weighted
6 average cost of capital approach. The weighted average cost of capital reflects the
7 blended interest rates for the investor-owned utilities' long-term and short-term debt
8 and a return on the common equity. The weighted average cost of capital is then
9 "grossed up" for income taxes. Consequently, the rate of return for the investor-owned
10 utilities is higher than the rate of return proposed by or authorized for EKPC.¹³
11 When determining a reasonable TIER for the environmental surcharge rate of return,
12 consideration first must be given to the Debt Service Coverage Ratio ("DSC"), which
13 is EKPC's critical financial metric. This metric evaluates EKPC's ability to service
14 principal and interest payments and thus is more relevant to lenders than TIER, which
15 only considers interest payment. The two metrics can be related in that the margin
16 required to achieve an acceptable DSC implies a TIER level.

¹¹ Many of EKPC's environmental compliance investments are initially funded through existing general funds or short-term debt; however, these forms of financing are later replaced by long-term debt.

¹² See *In the Matter of An Examination by the Public Service Commission of the Environmental Surcharge Mechanism of East Kentucky Power Cooperative, Inc. for the Six-Month Billing Period Ending December 31, 2010; and the Pass-Through Mechanism for Its Sixteen Member Distribution Cooperatives*, Order, Case No. 2011-00032, (Ky. P.S.C., Aug. 2, 2011). EKPC requested authority to use the 1.50 TIER as it was consistent with the TIER authorized by the Commission in EKPC's last base rate case, Case No. 2010-00167. The Commission found the request reasonable and approved the use of the 1.50 TIER.

¹³ See *In the Matter of Electronic Examination by the Public Service Commission of the Environmental Surcharge Mechanism of Kentucky Utilities Company for the Six-Month Billing Period Ending April 30, 2016*, Order, Case No. 2016-00214 (Ky. P.S.C., Oct. 25, 2016). Utilizing the weighted average cost of capital approach with a gross up for income taxes, the Commission authorized a rate of return for the Kentucky Utilities Company of 10.54%.

1 EKPC's target annual DSC range is set forth in Board Policy 203, which states, "The
2 Debt Service Coverage Ratio (DSC) is a financial measurement of EKPC's ability to
3 repay its long-term debt and is computed as depreciation plus interest on long-term debt
4 plus net margins divided by interest on long-term debt plus principal payments. EKPC
5 shall strive to maintain an average DSC of at least 1.15 – 1.35 for two of every three
6 successive years and not less than a DSC of 1.10 in any given year. DSC above 1.20
7 is preferred."

8 Further, the credit rating agencies, Fitch Ratings ("Fitch") and Standard & Poor's
9 ("S&P"), both prefer high DSC ratios to support EKPC's A- Stable credit ratings,
10 which in turn result in lower cost of borrowings. In its October 2015 report on EKPC,
11 Fitch had set a DSC of 1.25 as a threshold that would support EKPC's upgrade to A-,
12 which occurred in October 2016. The median DSC for A- rated Generation and
13 Transmission Cooperatives as of Fitch's June 13, 2016 Public Power Peer Study was
14 1.43. S&P does not publish medians for ratings because its ratings are based on several
15 factors. However, S&P has repeatedly praised EKPC's DSC ratio being at or above
16 1.25 in its reports on EKPC which affirm EKPC's A- rating. Moody's, which does not
17 rate EKPC, targets a DSC of 1.2 – 1.4 for "A" rated companies.

18 Based on the Board Policy and Rating Agency input, EKPC management targets a DSC
19 ratio of 1.30 each year. This target recognizes that the DSC will vary each year as its
20 components vary (for example, mild weather would result in lower margins and a lower
21 DSC) and thus allows for some decline without crossing the 1.25 threshold discussed
22 above. An actual DSC below this level, and forecasted to remain low, would be a
23 primary indicator of the need for a base rate increase.

For the year ended December 31, 2015, EKPC's DSC was 1.26. The components and the corresponding margins and implied TIER are:

	December 31, 2015
1. Depreciation	\$95,163,880
2. Interest Expense	\$113,258,537
3. Net Margins	\$49,289,615
4. Principal Payments	\$90,648,813
DSC Ratio (1+2+3) / (2+4)	1.26
TIER (2+3) / (2)	1.44
To achieve a DSC of 1.30, Net Margins would have needed to be	\$56,700,000
Implied TIER corresponding to DSC of 1.30	1.50

Note that because interest expense and depreciation change from year to year, the relationship between DSC and TIER is not locked in but should be recalculated. That is, a DSC of 1.30 will not always imply a TIER of 1.50. Because DSC is the critical metric, but not the only metric, for credit evaluation and financial performance, EKPC will strive to maintain the DSC near target and adjust the TIER accordingly over time. Based upon the foregoing, EKPC proposes no change to the TIER component of the rate of return. EKPC is proposing a rate of return of 6.068% in this proceeding, as shown in Response 5 to the Staff's First Request. EKPC's proposed rate of return is consistent with the Settlement Agreement approved in Case No. 2004-00321, which provided that the rate of return on compliance-related capital expenditures would be updated to reflect current average debt cost as of the end of each six-month review period. The Commission clarified in its March 21, 2014 Order in Case No. 2013-00324 that the expense month should constitute the end of an environmental surcharge review period.

- **Operation and Maintenance ("O&M") Expenses**

EKPC has continued to use a 12-month rolling average for O&M expenses associated with the compliance plan projects. For those instances where the change in the level

1 of O&M expenses exceeded 10 percent, EKPC has provided an explanation. These
2 explanations are provided in Response 4 to the Staff's First Request.

3 **Q. Were the environmental-related amounts included in the monthly surcharge**
4 **calculation based on booked costs?**

5 A. Yes. EKPC continues to use the amounts booked for the various cost categories included
6 in the surcharge calculation and these costs were actual costs and incurred in a prudent
7 manner.

8 **Q. Did EKPC incur any over- or under-recoveries during the period under review?**

9 A. Yes. However, as shown in Response 1 to the Staff's First Request, EKPC applied its
10 November 2016 under-recovery to the December 2016 expense month, which was billed
11 in January 2017. Thus, from the normal operation of the surcharge mechanism, no
12 adjustment is needed in this proceeding to collect any under-recovery from the Member
13 Cooperatives.

14 **Q. Previous Commission Orders also required EKPC's Member Cooperatives to**
15 **incorporate certain provisions into the calculation of the monthly pass-through**
16 **factors. Please comment on how the Member Cooperatives have addressed the most**
17 **significant aspects of these Orders during the periods under review.**

18 A. Under the pass-through mechanism the environmental surcharge factors computed for
19 retail customers were billed by EKPC's Member Cooperatives at approximately the same
20 time as EKPC billed the Member Cooperatives at wholesale. The calculation of the
21 monthly factors for each Member Cooperative was provided in the monthly reports filed
22 with the Commission. EKPC and the Member Cooperatives adhered to these and all other
23 requirements and provisions of the Commission's Orders for the periods under review.

1 **Q. Did the Member Cooperatives incur any over- or under-recoveries during the review**
2 **period?**

3 A. Yes. The over- or under-recovery amounts for each Member Cooperative are shown in
4 Response 2 to the Staff's First Request. The determination of the over- or under-recovery
5 amounts has been prepared utilizing the revised methodology approved by the Commission
6 in Case No. 2015-00281.

7 **Q. How will the Member Cooperatives reflect recovery of these over- or under-recovery**
8 **amounts?**

9 A. As approved in the Commission's November 5, 2010 Order in Case No. 2010-00021,¹⁴ the
10 Member Cooperatives propose that the over- or under-recovery amounts be amortized over
11 a period of six months beginning in the first month after the Commission's Order in this
12 proceeding.

13 **Q. Has EKPC updated the rate of return to be used prospectively?**

14 A. Yes. As previously discussed, EKPC proposes an updated rate of return of 6.068%. This
15 updated rate of return reflects an average debt cost as of November 30, 2016 of 4.045%
16 and a TIER of 1.50. The determination of the average debt cost as of November 30, 2016
17 is shown in Response 5 to the Staff's First Request. EKPC notes that its weighted average
18 debt cost in the five previous cases and as reported in this case are relatively constant,
19 fluctuating no more than 0.30% between cases. While this is due in part to a favorable
20 interest rate environment, EKPC's ability to build equity is also a major contributor to this
21 trend.

¹⁴ See *In the Matter of an Examination by the Public Service Commission of the Environmental Surcharge Mechanism of East Kentucky Power Cooperative, Inc. for the Six-Month Billing Period Ending December 31, 2009 and the Pass-Through Mechanism for Its Sixteen Member Distribution Cooperatives*, Order, Case No. 2010-00021, (Ky. P.S.C., Nov. 5, 2010).

1 **Q. When does EKPC propose to apply the updated rate of return in its surcharge**
2 **calculations?**

3 A. EKPC proposes to use the updated rate of return in the surcharge calculations in the first
4 month following the Commission's final Order in this proceeding.

5 **Q. Does EKPC have a request concerning the timing of the issuance of the final Order**
6 **in this surcharge review proceeding?**

7 A. Yes. EKPC is requesting that the Commission issue its final Order in this case either within
8 the first 10 days of the month or after the 21st day of the month. This is due to the
9 processing procedure for the monthly surcharge factor filing and the critical processing
10 period between the 11th and 20th of the month.

11 **Q. Are there any other topics that need to be addressed in your testimony?**

12 A. Yes. As of the filing date of this testimony, the Commission has not ruled on the proposal
13 in Case No. 2016-00335¹⁵ by EKPC and the Member Cooperatives requesting that EKPC's
14 monthly environmental surcharge factor be determined using the "flat rate" approach.
15 EKPC and the Member Cooperatives reaffirm their support for this proposal.

16 **Q. Does this conclude your testimony?**

17 A. Yes it does.

¹⁵ See *In the Matter of an Examination by the Public Service Commission of the Environmental Surcharge Mechanism of East Kentucky Power Cooperative, Inc. for the Six-Month Billing Period Ending June 30, 2016, and the Pass Through Mechanism for Its Sixteen Member Distribution Cooperatives*, Case No. 2016-00335.

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In re the Matter of:

AN EXAMINATION BY THE PUBLIC SERVICE)	
COMMISSION OF THE ENVIRONMENTAL)	
SURCHARGE MECHANISM OF EAST KENTUCKY)	
POWER COOPERATIVE, INC. FOR THE SIX-)	CASE NO.
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DECEMBER 31, 2016 AND THE PASS THROUGH)	
MECHANISM FOR ITS SIXTEEN MEMBER)	
DISTRIBUTION COOPERATIVES)	


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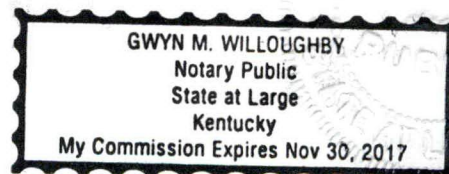
STATE OF KENTUCKY)
)
COUNTY OF CLARK)

Isaac S. Scott, being duly sworn, states that he has read the foregoing prepared testimony and that he would respond in the same manner to the questions if so asked upon taking the stand and that the matters and things set forth therein are true and correct, to the best of his knowledge, information and belief.



Subscribed and sworn before me on this 28 day of March 2017.

 500144
Notary Public



EAST KENTUCKY POWER COOPERATIVE, INC.

PSC CASE NO. 2017-00071

PUBLIC SERVICE COMMISSION REQUEST DATED 02/21/17

East Kentucky Power Cooperative, Inc. ("EKPC") hereby submits responses to the information requests contained in Appendix B to the Order of the Public Service Commission ("PSC") in this case dated February 21, 2017. Each response with its associated supportive reference materials is individually tabbed.

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

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AN EXAMINATION BY THE PUBLIC SERVICE)	
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DECEMBER 31, 2016 AND THE PASS THROUGH)	
MECHANISM FOR ITS SIXTEEN MEMBER)	
DISTRIBUTION COOPERATIVES)	

CERTIFICATE

STATE OF KENTUCKY)
)
COUNTY OF CLARK)

Mark Horn, being duly sworn, states that he has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to the Public Service Commission Staff's Requests for Information contained in Appendix B in the above-referenced case dated February 21, 2017, and that the matters and things set forth therein are true and accurate to the best of his knowledge, information and belief, formed after reasonable inquiry.

Mark Horn

Subscribed and sworn before me on this 28 day of March, 2017.

Gwyn M. Willey 500114
Notary Public
GWYN M. WILLEY
Notary Public
State of Kentucky
My Commission Expires 03/31/2021

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN EXAMINATION BY THE PUBLIC SERVICE)
COMMISSION OF THE ENVIRONMENTAL)
SURCHARGE MECHANISM OF EAST KENTUCKY)
POWER COOPERATIVE, INC. FOR THE SIX-)
MONTH BILLING PERIOD ENDING)
DECEMBER 31, 2016 AND THE PASS THROUGH)
MECHANISM FOR ITS SIXTEEN MEMBER)
DISTRIBUTION COOPERATIVES)

CASE NO.
2017-00071

CERTIFICATE

STATE OF KENTUCKY)
COUNTY OF CLARK)

Isaac S. Scott, being duly sworn, states that he has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to the Public Service Commission Staff's Requests for Information contained in Appendix B in the above-referenced case dated February 21, 2017, and that the matters and things set forth therein are true and accurate to the best of his knowledge, information and belief, formed after reasonable inquiry.

Isaac S. Scott

Subscribed and sworn before me on this 28 day of March, 2017.

Gwyn M. Willoughby 50044
Notary Public
GWYN M. WILLOUGHBY
Notary Public
State at Large
Kentucky
My Commission Expires Nov. 30, 2017

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

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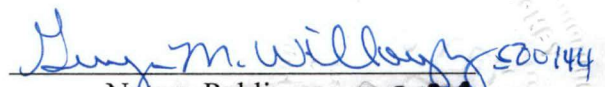
CERTIFICATE

STATE OF KENTUCKY)
)
COUNTY OF CLARK)

Thomas J. Stachnik, being duly sworn, states that he has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to the Public Service Commission Staff's Requests for Information contained in Appendix B in the above-referenced case dated February 21, 2017, and that the matters and things set forth therein are true and accurate to the best of his knowledge, information and belief, formed after reasonable inquiry.



Subscribed and sworn before me on this 28 day of March, 2017.


Notary Public
GWYN M. WILLOUGHBY
Notary Public
State at Large
Kentucky
My Commission Expires Nov 30, 2017

EAST KENTUCKY POWER COOPERATIVE, INC.

PSC CASE NO. 2017-00071

ENVIRONMENTAL SURCHARGE MECHANISM

RESPONSE TO INFORMATION REQUEST

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 02/21/17

REQUEST 1

RESPONSIBLE PARTY: Isaac S. Scott

Request 1. This question is addressed to EKPC. Prepare a summary schedule showing the calculation of E(m) and the surcharge factor for the expense months covered by the applicable billing period. Form 1.1 can be used as a model for this summary. Include the two expense months subsequent to the billing period in order to show the over- and under-recovery adjustments for the months included for the billing period. Include a calculation of any additional over- or under-recovery amount EKPC believes needs to be recognized for the six-month review. Provide the schedule and all supporting calculations and documentation in Excel spreadsheet format with all cells and formulas intact and unprotected.

Response 1. Please see page 3 of this response and the Request 1 file included on the attached CD. Page 3 of 3 shows the calculation of E(m). Because EKPC utilizes a one-month "true-up" adjustment, there is no additional over- or under-recovery amount that needs to be recognized for the six-month review.

The Request 1 file included on the attached CD contains the Excel spreadsheet format with all cells and formulas intact and unprotected. All supporting calculations and documentation comes from EKPC's monthly environmental surcharge reports, which have been incorporated by reference into the record of this case.

East Kentucky Power Cooperative, Inc. Environmental Surcharge Report
 Calculation of Current Month Environmental Surcharge Factor (CESF)
 and (Over)/Under Recovery Calculation (AS FILED)

Line	Description	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17
1	E(m) = RORB + OE - BAS									
2	Rate Base	\$711,623,240	\$709,086,364	\$706,390,759	\$703,879,200	\$701,463,912	\$698,850,257	\$696,231,200	\$693,815,708	\$691,252,468
3	Rate Base / 12	\$59,301,937	\$59,090,530	\$58,865,897	\$58,656,600	\$58,455,326	\$58,237,521	\$58,019,267	\$57,817,976	\$57,604,372
4	Rate of Return =	6.045%	6.045%	6.045%	6.041%	6.041%	6.041%	6.041%	6.041%	6.041%
5	Return on Rate Base (RORB) +	\$3,584,802	\$3,572,023	\$3,558,443	\$3,543,445	\$3,531,286	\$3,518,129	\$3,504,944	\$3,492,784	\$3,479,880
6	Operating Expenses (OE) +	\$5,932,565	\$6,289,208	\$6,035,091	\$6,154,025	\$6,457,174	\$6,466,776	\$6,523,907	\$5,697,017	\$5,678,414
7	By-Product and Emission Allowance Sales (BAS) -	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8	Sub-Total E(m)	\$9,517,367	\$9,861,231	\$9,593,534	\$9,697,470	\$9,988,460	\$9,984,904	\$10,028,851	\$9,189,801	\$9,158,294
8a	Prior Periods Adjustments									
9	Member System Allocation Ratio for the Month (Form 3.0)	99.00%	98.93%	99.17%	99.17%	99.14%	99.18%	99.27%	99.20%	99.20%
10	Subtotal E(m) = Subtotal E(m) x Member System Allocation Ratio	\$9,422,194	\$9,755,716	\$9,513,908	\$9,616,981	\$9,902,560	\$9,903,028	\$9,955,641	\$9,116,282	\$9,085,027
11	Adjustment for (Over)/Under Recovery, as applicable	\$0	\$0	\$0	\$124,591	\$124,591	\$0	\$0	\$0	\$0
12a	E(m) = Subtotal E(m) plus (Over)/Under Recovery	\$9,422,194	\$9,755,716	\$9,513,908	\$9,741,572	\$10,027,151	\$9,903,028	\$9,955,641	\$9,116,282	\$9,085,027
12b	1-month true up adjustment	\$1,518,492	\$1,505,440	(\$12,960)	(\$1,437,772)	(\$1,416,311)	\$110,644	\$1,659,527	\$897,029	(\$2,507,397)
12c	E(m)= Ln 12a + Ln 12 b	\$10,940,686	\$11,261,156	\$9,500,948	\$8,303,800	\$8,610,840	\$10,013,672	\$11,615,168	\$10,013,311	\$6,577,630
13	R(m) = Average Monthly Wholesale Revenue for the 12 Months Ending with the Current Expense Month (Form 3.0)	\$57,621,256	\$57,451,580	\$57,572,249	\$58,104,442	\$58,327,397	\$58,334,839	\$58,207,052	\$59,168,400	\$58,669,777
14	CESF: Line 12 c / Line 13 E(m) / R(m); as a % of Revenue	18.99%	19.60%	16.50%	14.29%	14.76%	17.17%	19.95%	16.92%	11.21%
15	BESF	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
16	MESF	18.99%	19.60%	16.50%	14.29%	14.76%	17.17%	19.95%	16.92%	11.21%
17	Authorized Recovery Amount: Line 13 x Line 16	\$10,940,686	\$11,261,156	\$9,500,948	\$8,303,800	\$8,610,840	\$10,013,672	\$11,615,168	\$10,013,311	\$6,577,630
18	Environmental Surcharge Revenues Billed	\$8,618,744	\$10,953,646	\$12,698,928	\$10,917,259	\$8,193,156	\$6,951,313	\$9,116,643	\$14,122,565	\$11,962,514
19	Monthly (Over)/Under = Previous Month Line 17 Minus Current Month Line 18	\$1,505,440	(\$12,960)	(\$1,437,772)	(\$1,416,311)	\$110,644	\$1,659,527	\$897,029	(\$2,507,397)	(\$1,949,203)

EAST KENTUCKY POWER COOPERATIVE, INC.

PSC CASE NO. 2017-00071

ENVIRONMENTAL SURCHARGE MECHANISM

RESPONSE TO INFORMATION REQUEST

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 02/21/17

REQUEST 2

RESPONSIBLE PARTY: **Isaac S. Scott**

Request 2. This question is addressed to EKPC and the Member Cooperatives. For each of the 16 Member Cooperatives, prepare a summary schedule showing the Member Cooperative's pass-through revenue requirement for the months corresponding with the six-month review. Include a calculation of any additional over- or under-recovery amount the distribution cooperative believes needs to be recognized for the six-month review. Provide the schedule and all supporting calculations and documentation in Excel spreadsheet format with all cells and formulas intact and unprotected.

Response 2. Please see the enclosed CD for each Member Cooperatives' schedule and calculation of over- or under-recovery for the current review period. EKPC is providing the requested schedules on behalf of each of its Member Cooperatives. The calculations follow the revised methodology approved by the Commission in Case No. 2015-00281. All of the Member Cooperatives have indicated to EKPC that they are proposing 6-month amortization periods for the respective over- or under-recoveries.

As of the date these responses are being filed, the final resolution of Case No. 2016-00335 is still pending. EKPC believed it was important to include this pending case in the listing of surcharge review cases with the outstanding over- or under-recovery amortizations to complete. Line Nos. 1d and 8d were added for this purpose. However, the inclusion of Case No. 2016-00335 will not impact the determination of this review period's over- or under-recovery for each Member Cooperative, as Line Nos. 1d and 8d offset each other in the calculations.

EKPC would point out that for the Member Cooperatives amortizing the over- or under-recovery authorized in Case No. 2015-00281 over a six-month period, Line 8a of the schedules for many of those Member Cooperatives show a small dollar amount remaining to be amortized. This is not surprising as most of the total over- or under-recoveries authorized by the Commission when divided by six months did not produce even monthly dollar amounts. These small rounding differences appear in the schedules because when EKPC prepared the monthly pass-through calculations it entered the monthly amortization stated in Appendix A of the April 8, 2016 Order. The responses for Farmers Rural Electric Cooperative Corporation ("Farmers") and Owen Electric Cooperative ("Owen") also show similar rounding differences for the 12-month amortization from Case No. 2014-00051. Like the situation in Case No. 2015-00281, EKPC entered the monthly amortization stated in Appendix A to the Commission's August 25, 2015 Order in Case No. 2014-00051 in the monthly pass-through calculations for Farmers and Owen.

EKPC notes that these rounding differences are reflected in the cumulative six-month over- or under-recovery as shown on Line 9 and the monthly recovery shown on Line 10. EKPC proposes that the over- or under-recoveries shown on Lines 9 and 10 be accepted and the amortization from Case No. 2015-00281 be considered completed and closed for those Member Cooperatives utilizing a six-month amortization period. For Farmers and Owen, EKPC also proposes that any rounding differences from the Case No. 2014-00051 amortization be considered completed and closed.

Owen was authorized to use a 12-month amortization for Case No. 2015-00281. All the Member Cooperatives were authorized to use a six-month amortization for the over- or under-recoveries authorized in the Commission's September 9, 2016 Order in Case No. 2016-00144. As of the date these responses are being filed, the Owen amortization for Case No. 2015-00281 and the amortization for Case No. 2016-00144 have been completed. EKPC followed the approach it described for these cases in its response to Request 2 of the Commission Staff's First Request for Information dated October 12, 2016 in Case No. 2016-00335. When the last month of the amortization period applicable to each case was to be reflected in the monthly surcharge pass-through calculations, EKPC compared the previous monthly amortization amounts with the total amortization ordered by the Commission and adjusted the last monthly amount to resolve any rounding issues. EKPC proposes to follow this approach for all subsequent amortization periods.

EAST KENTUCKY POWER COOPERATIVE, INC.
PSC CASE NO. 2017-00071
ENVIRONMENTAL SURCHARGE MECHANISM
RESPONSE TO INFORMATION REQUEST

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 02/21/17
REQUEST 3

RESPONSIBLE PARTY: **Mark Horn**

Request 3. This question is addressed to EKPC. Refer to Form 2.3, Inventory and Expense of Emission Allowances, for each of the expense months covered by the applicable billing period.

- a. For the sulfur dioxide ("SO₂") emission allowance inventory, explain the reason(s) for all purchases of allowances reported during these expense months.
- b. For the nitrogen oxide ("NO_x") emission allowance inventory, explain the reason(s) for all purchases of allowances reported during these expense months.
- c. Explain how the purchases of allowances in the expense months covered by the applicable billing periods comply with EKPC's emissions allowance strategy plan.

Response 3a-c. (a) No SO₂ purchases were made during the period of June 1, 2016, through November 30, 2016.

(b) No NO_x purchases were made during the period of June 1, 2016, through November 30, 2016.

(c) No purchases of allowances were made in the expense months covered by the applicable billing periods.

EAST KENTUCKY POWER COOPERATIVE, INC.
PSC CASE NO. 2017-00071
ENVIRONMENTAL SURCHARGE MECHANISM
RESPONSE TO INFORMATION REQUEST

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 02/21/17
REQUEST 4

RESPONSIBLE PARTY: **Isaac S. Scott**

Request 4. This question is addressed to EKPC. Refer to Form 2.5, Operating and Maintenance Expenses, for each of the expense months covered by the applicable billing period. For each of the expense account numbers listed on this schedule, explain the reason(s) for any change in the expense levels from month to month if that change is greater than plus or minus 10 percent.

Response 4. Please see pages 2 through 11 of this response.

East Kentucky Power Cooperative, Inc.
Environmental Surcharge Operating and Expense Month over Month Analysis
For the Expense Period July 2016 - December 2016

501010 - SP03	Fuel Coal Gilbert	Jun	Jul	Aug	Sept	Oct	Nov	Dec
400-2610	Expense Dollars	\$ 118,335	\$ 81,416	\$ 76,051	\$ 114,775	\$ 81,366	\$ 76,633	\$ 104,355
	Expense Dollars Change		\$ (36,919)	\$ (5,365)	\$ 38,723	\$ (33,408)	\$ (4,733)	\$ 27,722
	Percent Change		-31.20%	-6.59%	50.92%	-29.11%	-5.82%	36.17%

Monthly expense changes are due to increases or decreases in contractor payments for ash removal.

501010 - SP04	Fuel Coal Spurlock 4	Jun	Jul	Aug	Sept	Oct	Nov	Dec
	Expense Dollars	\$ 123,176	\$ 116,768	\$ 118,669	\$ 119,435	\$ 120,959	\$ 57,908	\$ 117,220
	Expense Dollars Change		\$ (6,408)	\$ 1,901	\$ 766	\$ 1,524	\$ (63,051)	\$ 59,312
	Percent Change		-5.20%	1.63%	0.65%	1.28%	-52.13%	102.43%

Monthly expense changes are due to increases or decreases in contractor payments for ash removal.

501010 - CPxx	Fuel Coal Cooper (Unit 2 AQCS)	Jun	Jul	Aug	Sept	Oct	Nov	Dec
	Expense Dollars	\$ 43,507	\$ 41,915	\$ 132,224	\$ -	\$ 73,181	\$ 66,447	\$ -
	Expense Dollars Change		\$ (1,592)	\$ 90,309	\$ (132,224)	\$ 73,181	\$ (6,734)	\$ (66,447)
	Percent Change		-3.66%	215.46%	-100.00%	0.00%	-9.20%	-100.00%

Monthly expense changes are due to increases or decreases in contractor payments for ash removal.

512000 - CPxx	Mtc of Cooper (Unit 2 AQCS)	Jun	Jul	Aug	Sept	Oct	Nov	Dec
	Expense Dollars	\$ 5,555	\$ 24,622	\$ 11,451	\$ 17,153	\$ 20,530	\$ 42,895	\$ 78,496
	Expense Dollars Change		\$ 19,067	\$ (13,171)	\$ 5,702	\$ 3,377	\$ 22,365	\$ 35,601
	Percent Change		343.25%	-53.49%	49.79%	19.69%	108.94%	83.00%

Project 03350 is Bag House, Dry Scrub, SNCR & SCR, Project 03351 is Ammonia Handling System and Project 03520 is Common Scrubber Maintenance

July16-

Project 03350- Contractor payments increased \$0.9k, EKPC Payroll & Benefits increased \$20.2k, Materials increased \$3.7k, Accruals increased \$1.3k

Project 03351- Contractor payments decreased \$0.2k, EKPC Payroll & Benefits decreased \$7k, Materials decreased \$3.9k, Accruals increased \$1.3k
Adjustment to accruals to match actual resulted in an increase of \$2.8K.

August16-

Project 03350- Contractor payments decreased \$1k, EKPC Payroll & Benefits decreased \$19.1k, Materials decreased \$3.3k, Accruals decreased \$1.3k

Project 03351- Contractor payments increased \$1.4k, EKPC Payroll & Benefits increased \$2.2k, Materials increased \$0.5k, Accruals decreased \$2.5k
Adjustment to accruals to match actual resulted in an increase of \$9.9K.

September16-

Project 03350- Contractor payments increased \$6.8k, EKPC Payroll & Benefits increased \$0.2k, Materials increased \$1k, Accruals decreased \$1.3k

Project 03351- Contractor payments increased \$4.7k, EKPC Payroll & Benefits decreased \$0.8k, Materials increased \$0.1k, Accruals increased \$1.3k
Adjustment to accruals to match actual resulted in a decrease of \$6.3K.

East Kentucky Power Cooperative, Inc.
Environmental Surcharge Operating and Expense Month over Month Analysis
For the Expense Period July 2016 - December 2016

October16-

Project 03350- Contractor payments decreased \$6.8k, EKPC Payroll & Benefits decreased \$0.4k, Materials decreased \$0.7k, Accruals increased \$1.3k
 Project 03351- Contractor payments decreased \$3.3k, EKPC Payroll & Benefits decreased \$1k, Materials decreased \$0.6k,
 Adjustment to accruals to match actual resulted in an increase of \$14.9K.

November16-

Project 03350- EKPC Payroll & Benefits increased \$7.4k, Materials decreased \$0.2k,
 Project 03351- Contractor payments decreased \$2.7k,
 Adjustment to accruals to match actual resulted in an increase of \$17.9K.

December16-

Project 03350- EKPC Payroll & Benefits decreased \$4.3k, Accruals decreased \$0.3k
 Project 03351- Contractor payments increased \$5.5k, EKPC Payroll & Benefits increased \$3.3k, Accruals increased \$6.4k
 Adjustment to accruals to match actual resulted in an increase of \$25.0K.

512000 - SP01	Mtce of Boiler Plant Spurlock 1	Jun	Jul	Aug	Sept	Oct	Nov	Dec
	Expense Dollars	\$ 8,854	\$ 12,241	\$ 9,615	\$ 62,413	\$ 403,654	\$ 38,742	\$ 94,596
	Expense Dollars Change		\$ 3,387	\$ (2,625)	\$ 52,798	\$ 341,241	\$ (364,912)	\$ 55,854
	Percent Change		38.25%	-21.45%	549.11%	546.75%	-90.40%	144.17%

Project 03330 is for the Spurlock 1 Electrostatic Precipitator and Project 03501 is for Spurlock 1 SCR maintenance.

July16-

Project 03330- Contractor payments increased \$0.3k, EKPC Payroll & Benefits increased \$2.9k, Materials increased \$0.1k, Accruals decreased \$0.5k
 Project 03501- Contractor payments increased \$3k, EKPC Payroll & Benefits increased \$1.7k, Accruals decreased \$5.6k
 Adjustment to accruals to match actual resulted in an increase of \$1.5K.

August16-

Project 03330- Contractor payments increased \$1.7k, EKPC Payroll & Benefits decreased \$0.5k, Materials decreased \$0.1k, Accruals decreased \$1.7k
 Project 03501- Contractor payments decreased \$0.7k, EKPC Payroll & Benefits decreased \$0.5k, Accruals decreased \$1.6k
 Adjustment to accruals to match actual resulted in an increase of \$0.8K.

September16-

Project 03330- Contractor payments decreased \$2k, EKPC Payroll & Benefits decreased \$1.4k, Materials increased \$14.3k, Accruals increased \$4.3k
 Project 03501- Contractor payments increased \$13k, EKPC Payroll & Benefits decreased \$0.1k, Materials increased \$16.4k, Accruals increased \$5.7k
 Adjustment to accruals to match actual resulted in an increase of \$2.6K.

October16-

Project 03330- Contractor payments increased \$32.3k, EKPC Payroll & Benefits increased \$10.1k, Materials decreased \$13.2k, Accruals increased \$217.7k
 Project 03501- Contractor payments increased \$67.9k, EKPC Payroll & Benefits increased \$15.8k, Materials decreased \$15.2k, Accruals increased \$31.1k
 Adjustment to accruals to match actual resulted in a decrease of \$5.3K.

November16-

Project 03330- Contractor payments increased \$189.3k, EKPC Payroll & Benefits decreased \$14.5k, Materials decreased \$1.1k, Accruals decreased \$441.4k
 Project 03501- Contractor payments decreased \$18k, EKPC Payroll & Benefits decreased \$20.7k, Materials decreased \$0.8k, Accruals decreased \$66.7k
 Adjustment to accruals to match actual resulted in an increase of \$9.0K.

East Kentucky Power Cooperative, Inc.
Environmental Surcharge Operating and Expense Month over Month Analysis
For the Expense Period July 2016 - December 2016

December16-

Project 03330- Contractor payments decreased \$220.7k, EKPC Payroll & Benefits increased \$5.8k, Materials increased \$5.2k, Accruals increased \$223k

Project 03501- Contractor payments decreased \$32.7k, EKPC Payroll & Benefits increased \$8.7k, Materials increased \$7.4k, Accruals increased \$43.9k

Adjustment to accruals to match actual resulted in an increase of \$15.3K.

512000 - SP02	Mtce of Boiler Plant Spurlock 2	Jun	Jul	Aug	Sept	Oct	Nov	Dec
	Expense Dollars	\$ 5,350	\$ 19,040	\$ 24,323	\$ 21,131	\$ 97,900	\$ 369,506	\$ 133,506
	Expense Dollars Change		\$ 13,690	\$ 5,283	\$ (3,192)	\$ 76,769	\$ 271,606	\$ (236,000)
	Percent Change		255.91%	27.75%	-13.12%	363.30%	277.43%	-63.87%

Project 03330 is for the Spurlock 2 Electrostatic Precipitator and Project 03501 is for Spurlock 2 SCR maintenance.

July16-

Project 03330- EKPC Payroll & Benefits decreased \$2.4k, Materials increased \$7.8k, Accruals increased \$5.9k

Project 03501- Contractor payments decreased \$1.5k, EKPC Payroll & Benefits increased \$0.7k, Accruals increased \$1.7k

Adjustment to accruals to match actual resulted in an increase of \$1.5K.

August16-

Project 03330- Contractor payments increased \$4.4k, EKPC Payroll & Benefits increased \$11.4k, Materials decreased \$3.8k, Accruals decreased \$8.7k

Project 03501- Contractor payments increased \$1.7k, EKPC Payroll & Benefits increased \$2.4k, Accruals decreased \$3.4k

Adjustment to accruals to match actual resulted in an increase of \$1.3K.

September16-

Project 03330- Contractor payments decreased \$6k, EKPC Payroll & Benefits decreased \$13.5k, Materials increased \$6.6k, Accruals increased \$7.7k

Project 03501- Contractor payments decreased \$1.3k, EKPC Payroll & Benefits decreased \$4k, Accruals increased \$1.7k

Adjustment to accruals to match actual resulted in an increase of \$5.6K.

October16-

Project 03330- Contractor payments increased \$59.9k, EKPC Payroll & Benefits increased \$8.4k, Materials decreased \$2.5k, Accruals increased \$7.3k

Project 03501- Contractor payments increased \$4.7k, EKPC Payroll & Benefits increased \$3.8k, Materials increased \$4.2k,

Adjustment to accruals to match actual resulted in a decrease of \$9.0K.

November16-

Project 03330- Contractor payments decreased \$51.8k, EKPC Payroll & Benefits increased \$9.1k, Materials decreased \$8.6k, Accruals increased \$292.9k

Project 03501- Contractor payments decreased \$5.1k, EKPC Payroll & Benefits increased \$3.4k, Materials decreased \$4.2k, Accruals increased \$35.5k

Adjustment to accruals to match actual resulted in an increase of \$0.4K.

December16-

Project 03330- Contractor payments increased \$315.7k, EKPC Payroll & Benefits decreased \$15.9k, Materials increased \$4.5k, Accruals decreased \$615.4k

Project 03501- Contractor payments increased \$126.7k, EKPC Payroll & Benefits decreased \$4.3k, Accruals decreased \$58.6k

Adjustment to accruals to match actual resulted in an increase of \$11.3K.

East Kentucky Power Cooperative, Inc.
Environmental Surcharge Operating and Expense Month over Month Analysis
For the Expense Period July 2016 - December 2016

512000 - SP03	Maintenance of Boiler Plant Gilbert	Jun	Jul	Aug	Sept	Oct	Nov	Dec
	Expense Dollars	238,814	153,878	343,333	94,576	118,672	283,204	866,558
	Expense Dollars Change		(84,936)	189,455	(248,756)	24,095	164,533	583,354
	Percent Change		-35.57%	123.12%	-72.45%	25.48%	138.65%	205.98%

Project 03206 is for Spurlock 3 Boiler Pollution Control equipment and Project 03350 is for Spurlock 3 Bag House, SNCR and FDA equipment.

July16-

Project 03206- Contractor payments decreased \$88.5k, EKPC Payroll & Benefits increased \$11.6k, Materials increased \$14.7k, Accruals decreased \$7.3k
Project 03350- Contractor payments decreased \$7.8k, EKPC Payroll & Benefits increased \$21.9k, Materials decreased \$2.9k, Accruals decreased \$27k
Adjustment to accruals to match actual resulted in an increase of \$0.4K.

August16-

Project 03206- Contractor payments decreased \$29.3k, EKPC Payroll & Benefits decreased \$1k, Materials decreased \$52.7k, Accruals increased \$44.3k
Project 03350- Contractor payments increased \$19.4k, EKPC Payroll & Benefits decreased \$23.9k, Materials increased \$2.7k, Accruals increased \$229.4k
Adjustment to accruals to match actual resulted in an increase of \$0.6K.

September16-

Project 03206- Contractor payments decreased \$29k, EKPC Payroll & Benefits increased \$3.5k, Materials decreased \$19.6k, Accruals increased \$21.6k
Project 03350- Contractor payments increased \$110.2k, EKPC Payroll & Benefits increased \$12.7k, Materials increased \$8k, Accruals decreased \$361k
Adjustment to accruals to match actual resulted in an increase of \$4.8K.

October16-

Project 03206- Contractor payments increased \$14.2k, EKPC Payroll & Benefits decreased \$8.4k, Materials increased \$16.4k, Accruals decreased \$0.2k
Project 03350- Contractor payments decreased \$163.3k, EKPC Payroll & Benefits increased \$3.8k, Materials decreased \$0.1k, Accruals increased \$167.8k
Adjustment to accruals to match actual resulted in a decrease of \$6.1K.

November16-

Project 03206- Contractor payments increased \$141.2k, EKPC Payroll & Benefits increased \$7.3k, Materials decreased \$7.1k, Accruals increased \$4.2k
Project 03350- Contractor payments decreased \$13.2k, EKPC Payroll & Benefits decreased \$12.1k, Materials increased \$7.8k, Accruals increased \$30k
Adjustment to accruals to match actual resulted in an increase of \$6.4K.

December16-

Project 03206- Contractor payments decreased \$103.8k, EKPC Payroll & Benefits decreased \$3.9k, Materials increased \$20.8k, Accruals increased \$3.1k
Project 03350- Contractor payments increased \$40.6k, EKPC Payroll & Benefits increased \$41.6k, Materials increased \$452.5k, Accruals increased \$98.9k
Adjustment to accruals to match actual resulted in an increase of \$33.6K.

512000 - SP04	Maintenance of Boiler Plant Spurlock 4	Jun	Jul	Aug	Sept	Oct	Nov	Dec
	Expense Dollars	99,316	73,486	102,001	64,849	54,039	249,154	147,950
	Expense Dollars Change		(25,829)	28,514	(37,151)	(10,810)	195,115	(101,204)
	Percent Change		-26.01%	38.80%	-36.42%	-16.67%	361.06%	-40.62%

Project 03206 is for Spurlock 4 Boiler Pollution Control equipment and Project 03350 is for Spurlock 4 Bag House, SNCR and FDA equipment.

East Kentucky Power Cooperative, Inc.
Environmental Surcharge Operating and Expense Month over Month Analysis
For the Expense Period July 2016 - December 2016

July16-

Project 03206- Contractor payments decreased \$13.7k, EKPC Payroll & Benefits increased \$1.2k, Materials increased \$9.9k, Accruals decreased \$10.9k
 Project 03350- Contractor payments increased \$7.6k, EKPC Payroll & Benefits increased \$1.5k, Materials decreased \$1.4k, Accruals decreased \$20.8k
 Adjustment to accruals to match actual resulted in an increase of \$0.8K.

August16-

Project 03206- Contractor payments decreased \$7.3k, EKPC Payroll & Benefits increased \$14.3k, Materials increased \$8.4k, Accruals increased \$8.6k
 Project 03350- Contractor payments decreased \$17.6k, EKPC Payroll & Benefits decreased \$8k, Materials decreased \$0.1k, Accruals increased \$28.8k
 Adjustment to accruals to match actual resulted in an increase of \$1.4K.

September16-

Project 03206- Contractor payments decreased \$19.2k, EKPC Payroll & Benefits decreased \$26.8k, Materials decreased \$10.2k, Accruals increased \$8.1k
 Project 03350- Contractor payments decreased \$2.9k, EKPC Payroll & Benefits increased \$11.7k, Materials decreased \$3.1k, Accruals increased \$1.1k
 Adjustment to accruals to match actual resulted in an increase of \$4.1K.

October16-

Project 03206- Contractor payments increased \$7.9k, EKPC Payroll & Benefits increased \$10.4k, Materials decreased \$0.5k, Accruals decreased \$12k
 Project 03350- Contractor payments increased \$21.1k, EKPC Payroll & Benefits decreased \$12.7k, Materials increased \$3.1k, Accruals decreased \$21.5k
 Adjustment to accruals to match actual resulted in a decrease of \$6.6K.

November16-

Project 03206- Contractor payments increased \$109.4k, EKPC Payroll & Benefits increased \$10.7k, Materials increased \$21.8k, Accruals increased \$30.6k
 Project 03350- Contractor payments decreased \$6.5k, EKPC Payroll & Benefits increased \$2.9k, Accruals increased \$21.1k
 Adjustment to accruals to match actual resulted in an increase of \$5.1K.

December16-

Project 03206- Contractor payments decreased \$40k, EKPC Payroll & Benefits decreased \$11.9k, Materials decreased \$21.6k, Accruals decreased \$60.5k
 Project 03350- Contractor payments increased \$27.8k, EKPC Payroll & Benefits increased \$2.2k, Materials increased \$0.2k, Accruals increased \$10k
 Adjustment to accruals to match actual resulted in a decrease of \$7.4K.

512000 - SP21	Mtce of Boiler Plant Scrubber 1	Jun	Jul	Aug	Sept	Oct	Nov	Dec
	Expense Dollars	\$ 83,815	\$ 226,994	\$ (35,221)	\$ 190,454	\$ 415,018	\$ 180,867	\$ 187,551
	Expense Dollars Change		\$ 143,179	\$ (262,215)	\$ 225,675	\$ 224,564	\$ (234,151)	\$ 6,684
	Percent Change		170.83%	-115.52%	-640.75%	117.91%	-56.42%	3.70%

July16-

Project 03521- Contractor payments increased \$6.1k, EKPC Payroll & Benefits increased \$6.7k, Materials decreased \$23.6k, Accruals increased \$160.5k
 Adjustment to accruals to match actual resulted in a decrease of \$6.5K.

August16-

Project 03521- Contractor payments increased \$34k, EKPC Payroll & Benefits decreased \$3.7k, Materials increased \$13.1k, Accruals decreased \$306.3k
 Adjustment to accruals to match actual resulted in an increase of \$0.7K.

East Kentucky Power Cooperative, Inc.
Environmental Surcharge Operating and Expense Month over Month Analysis
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September16-

Project 03521- Contractor payments increased \$17.3k, EKPC Payroll & Benefits increased \$5.8k, Materials decreased \$0.3k, Accruals increased \$209.6k
Adjustment to accruals to match actual resulted in a decrease of \$6.7K.

October16-

Project 03521- Contractor payments increased \$114.9k, EKPC Payroll & Benefits increased \$13.9k, Materials increased \$1.3k, Accruals increased \$89.8k
Adjustment to accruals to match actual resulted in an increase of \$4.7K.

November16-

Project 03521- Contractor payments increased \$49.1k, EKPC Payroll & Benefits decreased \$21.8k, Materials decreased \$7.2k, Accruals decreased \$287.1k
Adjustment to accruals to match actual resulted in an increase of \$32.8K.

512000 - SP22	Mtce of Boiler Plant Scrubber 2	Jun	Jul	Aug	Sept	Oct	Nov	Dec
	Expense Dollars	\$ 254,302	\$ 143,596	\$ 193,486	\$ 406,465	\$ 219,936	\$ 677,992	\$ 209,215
	Expense Dollars Change		\$ (110,706)	\$ 49,890	\$ 212,978	\$ (186,529)	\$ 458,056	\$ (468,777)
	Percent Change		-43.53%	34.74%	110.07%	-45.89%	208.27%	-69.14%

July16-

Project 03521- Contractor payments decreased \$132.9k, EKPC Payroll & Benefits decreased \$7.7k, Materials decreased \$51.2k, Accruals increased \$94.7k
Adjustment to accruals to match actual resulted in a decrease of \$13.6K.

August16-

Project 03521- Contractor payments increased \$83k, EKPC Payroll & Benefits increased \$1.6k, Materials decreased \$5.9k, Accruals decreased \$23k
Adjustment to accruals to match actual resulted in a decrease of \$5.8K.

September16-

Project 03521- Contractor payments decreased \$53.8k, EKPC Payroll & Benefits increased \$5.1k, Materials increased \$132.4k, Accruals increased \$132.6k
Adjustment to accruals to match actual resulted in a decrease of \$3.3K.

October16-

Project 03521- Contractor payments increased \$17.3k, EKPC Payroll & Benefits decreased \$5.9k, Materials decreased \$68.8k, Accruals decreased \$139.4k
Adjustment to accruals to match actual resulted in an increase of \$10.3K.

November16-

Project 03521- Contractor payments increased \$86.2k, EKPC Payroll & Benefits increased \$29.5k, Materials decreased \$51.8k, Accruals increased \$426.4k
Adjustment to accruals to match actual resulted in a decrease of \$32.2K.

December16-

Project 03521- Contractor payments increased \$105.6k, EKPC Payroll & Benefits decreased \$28.2k, Materials increased \$1.1k, Accruals decreased \$501.2k
Adjustment to accruals to match actual resulted in a decrease of \$46.1K.

East Kentucky Power Cooperative, Inc.
Environmental Surcharge Operating and Expense Month over Month Analysis
For the Expense Period July 2016 - December 2016

Air Permit Fees

50621	Misc Stm Pwr Env - Dale	Jun	Jul	Aug	Sept	Oct	Nov	Dec
	Expense Dollars	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Expense Dollars Change		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Percent Change		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
50631	Misc Stm Pwr Env - Cooper	Jun	Jul	Aug	Sept	Oct	Nov	Dec
	Expense Dollars	\$ -	\$ 209	\$ 64,400	\$ 16,500	\$ -	\$ -	\$ 28,745
	Expense Dollars Change		\$ 209	\$ 64,191	\$ (47,900)	\$ (16,500)	\$ -	\$ 28,745
	Percent Change		0.00%	30713.16%	-74.38%	-100.00%	0.00%	0.00%
50645	Misc Stm Pwr Env - Spurlock	Jun	Jul	Aug	Sept	Oct	Nov	Dec
	Expense Dollars	\$ 26,500	\$ 24,431	\$ -	\$ 15,410	\$ 17,800	\$ 738	\$ 37,140
	Expense Dollars Change		\$ (2,069)	\$ (24,431)	\$ 15,410	\$ 2,390	\$ (17,062)	\$ 36,402
	Percent Change		-7.81%	-100.00%	0.00%	15.51%	-95.86%	4934.32%

Air permit fees paid for Dale, Cooper and Spurlock for calendar 2016 emissions.

Operating Expense- Ammonia

506001 - CPxx	Misc Stm Pwr Exp - Cooper	Jun	Jul	Aug	Sept	Oct	Nov	Dec
	Expense Dollars	\$ (15,210)	\$ -	\$ 97,924	\$ 30,399	\$ 3,174	\$ 3,158	\$ 39,976
	Expense Dollars Change		\$ 15,210	\$ 97,924	\$ (67,525)	\$ (27,225)	\$ (16)	\$ 36,818
	Percent Change		-100.00%	0.00%	-68.96%	-89.56%	-0.50%	1165.91%

The monthly change in expense is due to the increase or decrease in payments for Ammonia receipts.

Operating Expense- Ammonia

506001 - CP22	Misc Stm Pwr Exp - Cooper Unit #2 AQCS	Jun	Jul	Aug	Sept	Oct	Nov	Dec
	Expense Dollars	\$ 52,140	\$ 364,090	\$ 620,178	\$ 133,490	\$ 62,003	\$ -	\$ 369,815
	Expense Dollars Change		\$ 311,950	\$ 256,088	\$ (486,688)	\$ (71,487)	\$ (62,003)	\$ 369,815
	Percent Change		598.30%	70.34%	-78.48%	-53.55%	0.00%	0.00%

The monthly change in expense is due to the increase or decrease in payments for Ammonia receipts.

Operating Expense- Ammonia

506001 - SP01	Misc Stm Pwr Exp - Spurlock 1	Jun	Jul	Aug	Sept	Oct	Nov	Dec
	Expense Dollars	\$ 57,699	\$ 71,755	\$ 59,606	\$ 48,463	\$ 24,891	\$ 49,928	\$ 34,992
	Expense Dollars Change		\$ 14,056	\$ (12,149)	\$ (11,143)	\$ (23,571)	\$ 25,037	\$ (14,936)
	Percent Change		24.36%	-16.93%	-18.69%	-48.64%	100.59%	-29.92%

The monthly change in expense is due to the increase or decrease in payments for Ammonia receipts.

East Kentucky Power Cooperative, Inc.
Environmental Surcharge Operating and Expense Month over Month Analysis
For the Expense Period July 2016 - December 2016

506001 -SP02	Misc Steam Power Exp - Spurlock 2	Jun	Jul	Aug	Sept	Oct	Nov	Dec
	Expense Dollars	\$ 39,557	\$ 45,672	\$ 30,970	\$ 31,818	\$ 16,305	\$ 1,848	\$ 42,033
	Expense Dollars Change		\$ 6,115	\$ (14,701)	\$ 848	\$ (15,513)	\$ (14,457)	\$ 40,185
	Percent Change		15.46%	-32.19%	2.74%	-48.76%	-88.67%	2174.86%

The monthly change in expense is due to the increase or decrease in payments for Ammonia receipts.

Operating Expense- Ammonia and Limestone

506001 - SP03	Misc Steam Power Expense- Gilbert	Jun	Jul	Aug	Sept	Oct	Nov	Dec
	Ammonia Expense	\$ 24,036	\$ 22,234	\$ 15,282	\$ 24,741	\$ 14,471	\$ 14,702	\$ 23,148
	Limestone Expense	\$ 339,455	\$ 283,847	\$ 230,843	\$ 309,900	\$ 221,505	\$ 182,729	\$ 305,364
	Limestone Tons Used	27,045	22,506	18,265	24,540	17,542	14,450	22,478
	Total Expense Dollars	\$ 363,491	\$ 306,080	\$ 246,124	\$ 334,641	\$ 235,976	\$ 197,431	\$ 328,512
	Expense Dollars Change		\$ (57,411)	\$ (59,956)	\$ 88,517	\$ (98,665)	\$ (38,545)	\$ 131,081
	Percent Change		-15.79%	-19.59%	35.96%	-29.48%	-16.33%	66.39%

Limestone is stockpiled throughout the year and taken from the stockpile for usage. There may be slight variances in the cost according to fluctuations in contract prices and freight cost per shipment of limestone.

July 16- Limestone expenses decreased by \$55.6k and Ammonia expenses decreased by \$1.8k

August 16- Limestone expenses decreased by \$53k and Ammonia expenses decreased by \$7k
Unit Outage- 08/14/2016- 08/20/2016

September 16- Limestone expenses increased by \$79.1k and Ammonia expenses increased by \$9.5k

October 16- Limestone expenses decreased by \$88.4k and Ammonia expenses decreased by \$10.3k
Unit Outage- 10/02/2016- 10/08/2016

November 16- Limestone expenses decreased by \$38.8k and Ammonia expenses increased by \$0.2k

December 16- Limestone expenses increased by \$122.6k and Ammonia expenses increased by \$8.4k

East Kentucky Power Cooperative, Inc.
Environmental Surcharge Operating and Expense Month over Month Analysis
For the Expense Period July 2016 - December 2016

Operating Expense- Limestone and Magnesium

506001 - SP21	Misc Stm Pwr Exp- Spurlock 1	Jun	Jul	Aug	Sept	Oct	Nov	Dec
	Magnesium Expense	\$ 28,315	\$ 32,269	\$ 15,104	\$ 17,242	\$ 33,853	\$ 8,008	\$ 16,270
	Limestone Expense	\$ 82,469	\$ 79,406	\$ 108,275	\$ 70,114	\$ 49,401	\$ 83,382	\$ 54,550
	Limestone Tons Used	8,554	8,269	11,045	7,196	5,077	8,564	5,597
	Expense Dollars	\$ 110,784	\$ 111,675	\$ 123,379	\$ 87,356	\$ 83,254	\$ 91,390	\$ 70,820
	Expense Dollars Change		\$ 891	\$ 11,704	\$ (36,023)	\$ (4,102)	\$ 8,136	\$ (20,570)
	Percent Change		0.80%	10.48%	-29.20%	-4.70%	9.77%	-22.51%

Limestone is stockpiled throughout the year and taken from the stockpile for usage. There may be slight variances in the cost according to fluctuations in contract prices and freight cost per shipment of limestone.

August- Limestone expenses increased by \$28.9k and Ammonia expenses decreased by \$17.2k

September- Limestone expenses decreased by \$38.2k and Ammonia expenses increased by \$2.1k

November- Limestone expenses increased by \$34k and Ammonia expenses decreased by \$25.8k

December- Limestone expenses decreased by \$28.8k and Ammonia expenses increased by \$8.3k

Operating Expense-Limestone and Magnesium

506001 - SP22	Misc Stm Pwr Exp- Spurlock 2	Jun	Jul	Aug	Sept	Oct	Nov	Dec
	Magnesium Expense	\$ 77,063	\$ 101,319	\$ 47,946	\$ 42,367	\$ 7,613	\$ 25,229	\$ 71,326
	Limestone Expense	\$ 140,420	\$ 135,205	\$ 143,527	\$ 124,647	\$ 87,824	\$ 8,247	\$ 182,624
	Limestone Tons Used	14,565	14,080	14,640	12,793	9,026	847	18,738
	Expense Dollars	\$ 217,483	\$ 236,523	\$ 191,473	\$ 167,014	\$ 95,437	\$ 33,476	\$ 253,950
	Expense Dollars Change		\$ 19,040	\$ (45,050)	\$ (24,459)	\$ (71,577)	\$ (61,962)	\$ 220,474
	Percent Change		8.75%	-19.05%	-12.77%	-42.86%	-64.92%	658.61%

Limestone is stockpiled throughout the year and taken from the stockpile for usage. There may be slight variances in the cost according to fluctuations in contract prices and freight cost per shipment of limestone.

August- Limestone expenses increased by \$8.3k and Ammonia expenses decreased by \$53.4k

September- Limestone expenses decreased by \$18.9k and Ammonia expenses decreased by \$5.6k

October- Limestone expenses decreased by \$36.8k and Ammonia expenses decreased by \$34.8k

East Kentucky Power Cooperative, Inc.
Environmental Surcharge Operating and Expense Month over Month Analysis
For the Expense Period July 2016 - December 2016

November- Limestone expenses decreased by \$79.6k and Ammonia expenses increased by \$17.6k

December- Limestone expenses increased by \$174.4k and Ammonia expenses increased by \$46.1k

Operating Expense- Ammonia and Limestone

506001 - SP04	Misc Stm Pwr Exp- Spurlock 4	Jun	Jul	Aug	Sept	Oct	Nov	Dec
	Ammonia Expense	\$ 17,576	\$ 29,933	\$ 25,317	\$ 27,498	\$ 21,062	\$ 12,823	\$ 25,562
	Limestone Expense	\$ 345,915	\$ 348,696	\$ 362,261	\$ 343,708	\$ 361,014	\$ 171,856	\$ 367,216
	Limestone Tons Used	27,560	27,659	28,663	27,218	28,593	13,590	27,030
	Expense Dollars	\$ 363,491	\$ 378,629	\$ 387,578	\$ 371,206	\$ 382,076	\$ 184,679	\$ 392,777
	Expense Dollars Change		\$ 15,138	\$ 8,949	\$ (16,372)	\$ 10,871	\$ (197,397)	\$ 208,098
	Percent Change		4.16%	2.36%	-4.22%	2.93%	-51.66%	112.68%

Limestone is stockpiled throughout the year and taken from the stockpile for usage. There may be slight variances in the cost according to fluctuations in contract prices and freight cost per shipment of limestone.

November- Limestone expenses decreased by \$189.2k and Ammonia expenses decreased by \$8.2k
Unit outage- 11/05/2016-11/17/2016

December- Limestone expenses increased by \$195.4k and Ammonia expenses increased by \$12.7k

EAST KENTUCKY POWER COOPERATIVE, INC.
PSC CASE NO. 2017-00071
ENVIRONMENTAL SURCHARGE MECHANISM
RESPONSE TO INFORMATION REQUEST

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 02/21/17
REQUEST 5

RESPONSIBLE PARTY: **Thomas J. Stachnik**

Request 5. This question is addressed to EKPC. The Settlement Agreement approved in Case No. 2004-00321 provides that EKPC's rate of return on compliance-related capital expenditures will be updated to reflect current average debt cost at the conclusion of the surcharge review period. Provide the following information as of May 31, 2016:

- a. The debt issuances directly related to projects in the approved compliance plan and corresponding outstanding balances of each debt issuance.
- b. The debt cost for each debt issuance directly related to the projects in the approved compliance plan, and whether the debt cost is a fixed or variable rate.
- c. EKPC's calculation of the weighted average debt cost and the rate of return resulting from multiplying the weighted average debt cost by a 1.50 Times Interest Earned Ratio. Include all supporting calculations showing how the weighted average debt cost was determined.
- d. Provide all schedules and supporting calculations and documentation in Excel spreadsheet format with all cells and formulas intact and unprotected.

Responses 5a-d. Please see the response to Request 5 on the attached CD. EKPC is proposing a weighted average cost of debt of 4.045% based on the debt cost for each debt issuance directly related to the projects in the environmental compliance plan as of November 30, 2016. Using a weighted average cost of debt and a TIER of 1.50 produces a rate of return on the environmental compliance related capital expenditures of 6.068%. All of debt issuances are at fixed interest rates. Through communications between EKPC's counsel and Commission Staff counsel, it was confirmed the information sought was as of November 30, 2016 and not May 31, 2016 as stated in the request.