

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

**In the Matter of:**

<b>AN ELECTRONIC EXAMINATION BY THE PUBLIC</b>	)	
<b>SERVICE COMMISSION OF THE ENVIRONMENTAL</b>	)	
<b>SURCHARGE MECHANISM OF EAST KENTUCKY</b>	)	
<b>POWER COOPERATIVE, INC. FOR THE SIX-</b>	)	<b>CASE NO.</b>
<b>MONTH EXPENSE PERIOD ENDING</b>	)	<b>2018-00306</b>
<b>MAY 31, 2018, AND THE PASS-THROUGH</b>	)	
<b>MECHANISM FOR ITS SIXTEEN MEMBER</b>	)	
<b>DISTRIBUTION COOPERATIVES</b>	)	

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

**Filed: October 24, 2018**

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:

- 23 • Describe how EKPC has applied the environmental surcharge mechanism in a  
24 reasonable manner during the period under review; and

- 1           • Describe how EKPC and the Member Cooperatives have applied the pass-through  
2           mechanism in a reasonable manner during the period under review.

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

5 A. Pursuant to the Commission’s September 20, 2018 Order, EKPC is preparing testimony on  
6 behalf of each Member Cooperative. The Member Cooperatives are: Big Sandy Rural  
7 Electric Cooperative Corporation (“RECC”), Blue Grass Energy Cooperative Corporation,  
8 Clark Energy Cooperative, Inc., Cumberland Valley Electric, Inc., Farmers RECC,  
9 Fleming-Mason Energy Cooperative, Grayson RECC, Inter-County Energy Cooperative  
10 Corporation, Jackson Energy Cooperative, Licking Valley RECC, Nolin RECC, Owen  
11 Electric Cooperative, Salt River Electric Cooperative Corporation, Shelby Energy  
12 Cooperative, Inc., South Kentucky RECC, and Taylor County RECC. EKPC is also  
13 providing Response 2 to the Commission Staff’s First Request for Information (“Staff’s  
14 First Request”).

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

17 A. Yes. Mark Horn, Manager of Fuel and Emissions, has provided emission allowance  
18 information in Response 3 to the Staff’s First Request. Thomas Stachnik, Vice President  
19 – Finance and Treasurer, has provided the debt and average interest rate information in  
20 Response 5 to the Staff’s First Request.

21 **Q. Previous Commission Orders required EKPC to incorporate certain provisions into**  
22 **the calculation of the monthly environmental surcharge factors. Please comment on**  
23 **how EKPC has addressed the most significant aspects of these Orders during the**  
24 **periods under review.**

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

3 • **Compliance Plan Projects**

4 As of the end of the six-month review period, EKPC has 16 projects in its  
5 Environmental Compliance Plan. These projects were approved by the Commission in  
6 Case Nos. 2004-00321,<sup>1</sup> 2008-00115,<sup>2</sup> 2010-00083,<sup>3</sup> 2013-00259,<sup>4</sup> 2014-00252,<sup>5</sup> and  
7 2017-00376.<sup>6</sup> In conjunction with the establishment of a regulatory asset for the  
8 undepreciated balance of the William C. Dale Generating Station assets that were being  
9 retired early, EKPC was required in Case No. 2015-00302 to remove Project 5, Dale  
10 Low Nitrogen Oxide Burners, and Project 10, Dale Continuous Monitoring Equipment,

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<sup>1</sup> 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).

<sup>2</sup> 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).

<sup>3</sup> 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).

<sup>4</sup> 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).

<sup>5</sup> 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).

<sup>6</sup> See *In the Matter of Application of East Kentucky Power Cooperative, Inc. for Approval to Amend Its Environmental Compliance Plan and Recover Costs Pursuant to Its Environmental Surcharge, Settlement of Certain Asset Retirement Obligations and Issuance of a Certificate of Public Convenience and Necessity and Other Relief*, Order, Case No. 2017-00376, (Ky. P.S.C., May 18, 2018).

1 from the environmental surcharge.<sup>7</sup> The monthly environmental surcharge reports,  
2 incorporated by reference in this case, show the capital costs for the remaining projects.

3 • **Base/Current Method**

4 The surcharge mechanism, as shown in EKPC's Rate ES – Environmental Surcharge,  
5 reflects the base/current method through the formula  $MESF = CESF - BESF$ .<sup>8</sup> As  
6 shown in Response 1 to the Staff's First Request, EKPC's BESF is 0%.

7 • **Actual Emission Allowance Expense**

8 EKPC included only actual sulfur dioxide ("SO<sub>2</sub>") and nitrogen oxide ("NO<sub>x</sub>")  
9 emission allowance expense in the monthly filings.

10 • **Return on Emission Allowance Inventory and Limestone Inventory**

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

14 EKPC's emission allowance inventories for SO<sub>2</sub> and NO<sub>x</sub> reflect operations under the  
15 Cross-State Air Pollution Rules ("CSAPR") along with a continuation of the Acid Rain  
16 program. Under CSAPR, SO<sub>2</sub> and NO<sub>x</sub> allowances are awarded annually with carry-  
17 forward of unused balances from prior years. The allowances allocated to EKPC by  
18 the Environmental Protection Agency under CSAPR have a dollar value of \$0, which  
19 is consistent with the valuation afforded EPA allocated allowances under prior  
20 programs. EKPC's SO<sub>2</sub> inventory as of the end of the review period reflects the

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<sup>7</sup> 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.

<sup>8</sup> MESF is the Monthly Environmental Surcharge Factor; CESF is the Current Environmental Surcharge Factor; and BESF is the Base Environmental Surcharge Factor.

1 allowances remaining from the Acid Rain program. The NO<sub>x</sub> inventory as of the end  
2 of the review period has a \$0 balance as all the allowances were issued under CSAPR.

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

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

7 • **Rate of Return**

8 One rate of return was in effect during the period under review. For the expense months  
9 of December 2017 through May 2018, the rate of return was 6.075%, which was  
10 approved by the Commission in Case No. 2017-00326.<sup>9</sup> 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.<sup>10</sup> The use of debt  
18 costs is based on the fact that all of EKPC’s environmental compliance investments are

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<sup>9</sup> 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 Two-Year Billing Period Ending June 30, 2017 and the Pass Through Mechanism for Its Sixteen Member Distribution Cooperatives*, Order, Case No. 2017-00326, (Ky. P.S.C., Jan. 5, 2018).

<sup>10</sup> 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 financed with long-term debt.<sup>11</sup> The use of a 1.50 TIER was first approved by the  
2 Commission in Case No. 2011-00032.<sup>12</sup> This rate-making methodology is different  
3 from that employed by investor-owned utilities. The rate of return for the  
4 environmental compliance rate base for investor-owned utilities reflects a weighted  
5 average cost of capital approach. The weighted average cost of capital reflects the  
6 blended interest rates for the investor-owned utilities' long-term and short-term debt  
7 and a return on the common equity. The weighted average cost of capital is then  
8 "grossed up" for income taxes. Consequently, the rate of return for the investor-owned  
9 utilities is higher than the rate of return proposed by or authorized for EKPC.<sup>13</sup>

10 When determining a reasonable TIER for the environmental surcharge rate of return,  
11 consideration first must be given to the Debt Service Coverage Ratio ("DSC"), which  
12 is EKPC's critical financial metric. This metric evaluates EKPC's ability to service  
13 principal and interest payments and thus is more relevant to lenders than TIER, which  
14 only considers interest payment. The two metrics can be related in that the margin  
15 required to achieve an acceptable DSC implies a TIER level.

16 EKPC's target annual DSC range is set forth in Board Policy 203, which states, "The  
17 Debt Service Coverage Ratio (DSC) is a financial measurement of EKPC's ability to

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<sup>11</sup> 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.

<sup>12</sup> 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.

<sup>13</sup> 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 October 31, 2016*, Order, Case No. 2016-00437 (Ky. P.S.C., Jun. 23, 2017). 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 10.35%.

1 repay its long-term debt and is computed as depreciation plus interest on long-term debt  
2 plus net margins divided by interest on long-term debt plus principal payments. EKPC  
3 shall strive to maintain an average DSC of at least 1.15 – 1.35 for two of every three  
4 successive years and not less than a DSC of 1.10 in any given year. DSC above 1.20  
5 is preferred.”

6 Further, the credit rating agencies, Fitch Ratings (“Fitch”) and Standard & Poor’s  
7 (“S&P”), both prefer high DSC ratios to support EKPC’s A- Stable and A Stable credit  
8 ratings respectively, which in turn result in lower cost of borrowings. In its October  
9 2015 report on EKPC, Fitch had set a DSC of 1.25 as a threshold that would support  
10 EKPC’s upgrade to A-, which occurred in October 2016. The median DSC for A- rated  
11 Generation and Transmission Cooperatives as of Fitch’s June 15, 2018 Public Power  
12 Peer Study was 1.30. S&P does not publish medians for ratings because its ratings are  
13 based on several factors. However, S&P has repeatedly praised EKPC’s DSC ratio  
14 being at or above 1.25, most recently in its July 24, 2018 report which affirmed EKPC’s  
15 A rating. Moody’s, which does not rate EKPC, targets a DSC of 1.2 – 1.4 for “A” rated  
16 companies.

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



1 EKPC’s achieved DSC and TIER<sup>14</sup> were as follows for calendar years 2014 through  
2 2017:

Calendar Year Ending	DSC	TIER
December 31, 2014	1.30	1.56
December 31, 2015	1.26	1.44
December 31, 2016	1.33	1.48
December 31, 2017	1.26	1.19
Four-Year Averages	1.29	1.42

3 Note that because interest expense and depreciation change from year to year, the  
4 relationship between DSC and TIER is not locked in but should be recalculated. That  
5 is, a DSC of 1.30 will not always imply a TIER of 1.50. Because DSC is the critical  
6 metric, but not the only metric, for credit evaluation and financial performance, EKPC  
7 will strive to maintain the DSC near target and adjust the TIER accordingly over time.  
8 Based upon the foregoing, EKPC proposes no change to the TIER component of the  
9 rate of return. EKPC is proposing a rate of return of 6.032% in this proceeding, as  
10 shown in Response 5 to the Staff’s First Request. EKPC’s proposed rate of return is  
11 consistent with the Settlement Agreement approved in Case No. 2004-00321, which  
12 provided that the rate of return on compliance-related capital expenditures would be  
13 updated to reflect current average debt cost as of the end of each six-month review  
14 period.

15 • **Operation and Maintenance (“O&M”) Expenses**

16 EKPC has continued to use a 12-month rolling average for O&M expenses associated  
17 with the compliance plan projects. For those instances where the change in the level  
18 of O&M expenses exceeded 10 percent, EKPC has provided an explanation. These  
19 explanations are provided in Response 4 to the Staff’s First Request.

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<sup>14</sup> DSC is calculated by dividing the sum of depreciation, interest expense, and net margins by the sum of interest expense and principal payments. TIER is calculated by dividing the sum of interest expense and net margins by interest expense.

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

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

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

7 A. Yes. However, as shown in Response 1 to the Staff's First Request, EKPC applied its May  
8 2018 under-recovery to the June 2018 expense month, which was billed in July 2018. Thus,  
9 from the normal operation of the surcharge mechanism, no adjustment is needed in this  
10 proceeding to collect any under-recovery from the Member Cooperatives.

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

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

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

23 A. Yes. The over- or under-recovery amounts for each Member Cooperative are shown in  
24 Response 2 to the Staff's First Request. The determination of the over- or under-recovery

1 amounts has been prepared utilizing the revised methodology approved by the Commission  
2 in Case No. 2015-00281.<sup>15</sup>

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

5 A. As approved in the Commission's November 5, 2010 Order in Case No. 2010-00021,<sup>16</sup> the  
6 Member Cooperatives propose that the over- or under-recovery amounts be amortized over  
7 a period of six months beginning in the first month after the Commission's Order in this  
8 proceeding.

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

10 A. Yes. As previously discussed, EKPC proposes an updated rate of return of 6.032%. This  
11 updated rate of return reflects an average debt cost as of May 31, 2018 of 4.021% and a  
12 TIER of 1.50. The determination of the average debt cost as of May 31, 2018 is shown in  
13 Response 5 to the Staff's First Request. EKPC notes that its weighted average debt cost in  
14 the five previous surcharge review cases and as reported in this case are relatively constant,  
15 fluctuating on average no more than 0.002 of a percent between cases. While this is due  
16 in part to a favorable interest rate environment, EKPC's ability to build equity is also a  
17 major contributor to this trend.

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

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<sup>15</sup> 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).

<sup>16</sup> 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 A. EKPC proposes to use the updated rate of return in the surcharge calculations in the first  
2 month following the Commission's final Order in this proceeding.

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

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

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

10 A. Yes it does.

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 MECHANISM FOR ITS SIXTEEN MEMBER )  
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AFFIDAVIT

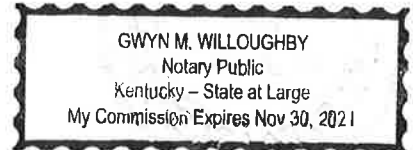
STATE OF KENTUCKY )  
 )  
 COUNTY OF CLARK )

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.

Isaac S. Scott

Subscribed and sworn before me on this 24<sup>th</sup> day of October 2018.

Gwyn M. Willoughby #590567  
 Notary Public



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MONTH EXPENSE PERIOD ENDING )  
MAY 31, 2018 AND THE PASS-THROUGH )  
MECHANISM OF ITS SIXTEEN MEMBER )  
DISTRIBUTION COOPERATIVES )**

**CASE NO.  
2018-00306**

**RESPONSES TO COMMISSION STAFF'S FIRST REQUEST FOR  
INFORMATION TO EAST KENTUCKY POWER COOPERATIVE, INC.  
DATED SEPTEMBER 20, 2018**

**EAST KENTUCKY POWER COOPERATIVE, INC.**

**PSC CASE NO. 2018-00306**

**PUBLIC SERVICE COMMISSION REQUEST DATED 09/20/18**

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 (“Commission”) in this case dated September 20, 2018. Each response with its associated supportive reference materials is individually tabbed.

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CASE NO.
2018-00306

CERTIFICATE

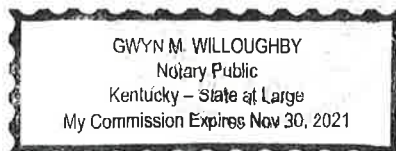
STATE OF KENTUCKY )
COUNTY OF CLARK )

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
First Request for Information contained in Appendix B in the above-referenced case dated
September 20, 2018, 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.

Handwritten signature of Mark Horn

Subscribed and sworn before me on this 24th day of October, 2018.

Handwritten signature of Gwyn M. Willoughby #590567
Notary Public





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**CERTIFICATE**

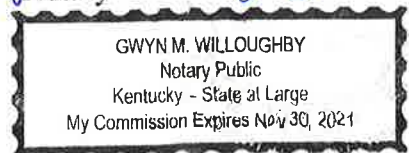
**STATE OF KENTUCKY** )  
                                       )  
**COUNTY OF CLARK**     )

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 First Request for Information contained in Appendix B in the above-referenced case dated September 20, 2018, 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 24<sup>th</sup> day of October, 2018.

*Gwyn M. Willoughby #590567*  
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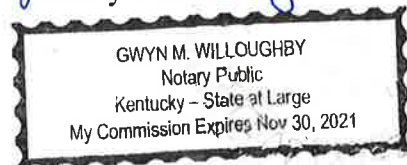
STATE OF KENTUCKY )  
 )  
 COUNTY OF CLARK )

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 First Request for Information contained in Appendix B in the above-referenced case dated September 20, 2018, 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.

*Thomas J. Stachnik*

Subscribed and sworn before me on this 24<sup>th</sup> day of October, 2018.

*Gwyn M. Willoughby* # 590567  
 Notary Public



**EAST KENTUCKY POWER COOPERATIVE, INC.**  
**PSC CASE NO. 2018-00306**  
**ENVIRONMENTAL SURCHARGE MECHANISM**  
**RESPONSE TO INFORMATION REQUEST**

**COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 09/20/18**  
**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 the response included on file "Response 1 – Summary Schedule E(m) w Over-Under.xlsx". As shown in the response, EKPC is not proposing any additional over- or under-recovery to be recognized for the six-month review.

**EAST KENTUCKY POWER COOPERATIVE, INC.**  
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**COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 09/20/18**  
**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 responses included on file "Response 2 – Member Coop Summary w Over-Under.xlsx". Each Member Cooperative's calculations are shown on a separate tab. The calculations follow the revised methodology approved by the Commission in Case No. 2015-00281. Concerning the amortization periods for the resulting over- or under-recoveries, all of the Member Cooperatives have notified EKPC that they are proposing six-month amortization periods.

**EAST KENTUCKY POWER COOPERATIVE, INC.**  
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**ENVIRONMENTAL SURCHARGE MECHANISM**  
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**COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 09/20/18**  
**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 emission allowance inventory, explain the reason(s) for all purchases of allowances reported during these expense months.
- b. For the nitrogen oxide 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.** No SO<sub>2</sub> or NO<sub>x</sub> allowance purchases were made during the period of December 1, 2017 through May 31, 2018.

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**COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 09/20/18**  
**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 November 2017 to May 2018

501010 - SP03	Fuel Coal Gilbert	Nov	Dec	Jan	Feb	Mar	Apr	May
400-2610	Expense Dollars	\$ 147,661	\$ 123,228	\$ 122,294	\$ 104,783	\$ 87,715	\$ 113,852	\$ 4,889
	Expense Dollars Change		\$ (24,433)	\$ (934)	\$ (17,511)	\$ (17,068)	\$ 26,137	\$ (108,963)
	Percent Change		-16.55%	-0.76%	-14.32%	-16.29%	29.80%	-95.71%

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

501010 - SP04	Fuel Coal Spurlock 4	Nov	Dec	Jan	Feb	Mar	Apr	May
	Expense Dollars	\$ 29,970	\$ 105,455	\$ 96,073	\$ 92,977	\$ 3,578	\$ 25,899	\$ 101,261
	Expense Dollars Change		\$ 75,485	\$ (9,382)	\$ (3,096)	\$ (89,399)	\$ 22,321	\$ 75,362
	Percent Change		251.87%	-8.90%	-3.22%	-96.15%	623.84%	290.98%

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

501010 - CPxx	Fuel Coal Cooper (Unit 2 AQCS)	Nov	Dec	Jan	Feb	Mar	Apr	May
	Expense Dollars	\$ 77,000	\$ 7,000	\$ 7,000	\$ 7,000	\$ 7,000	\$ -	\$ 7,000
	Expense Dollars Change		\$ (70,000)	\$ -	\$ -	\$ -	\$ (7,000)	\$ 7,000
	Percent Change		-90.91%	0.00%	0.00%	0.00%	-100.00%	0.00%

November 2017 included January - November lease payments. December and forward represent the monthly lease of the trucks for hauling. April 2018 lease charges of \$7,000 were inadvertently omitted from filing. As this level of charges would not change the surcharge factor, no correction is proposed.

512000 - CPxx	Maintenance of Cooper (Unit 2 AQCS)	Nov	Dec	Jan	Feb	Mar	Apr	May
	Expense Dollars	\$ 32,776	\$ 75,252	\$ 12,932	\$ 29,790	\$ 8,338	\$ -	\$ 73,832
	Expense Dollars Change		\$ 42,476	\$ (62,320)	\$ 16,858	\$ (21,452)	\$ (8,338)	\$ 73,832
	Percent Change		129.59%	-82.82%	130.36%	-72.01%	-100.00%	0.00%

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

Unit 2 was only in operation for 1 week in December 2017, 3 weeks in January, 1 week in February, and 1 week in May. Unit was off line the remainder of the time of this review.

December17-  
Project 03350- Contractor payments increased \$2.7k, EKPC Payroll & Benefits increased \$0.7k, Materials increased \$1.6k, Accruals increased \$10.5k  
Project 03351- EKPC Payroll & Benefits decreased \$0.8k, Materials decreased \$0.1k, Accruals increased \$2.5k  
Slide gate installed (03350), blowdown valve replaced and MPCV repaired (03351)  
Adjustment to accruals to match actual resulted in an increase of \$25.4k.

January18-  
Project 03350- Contractor payments increased \$8.3k, EKPC Payroll & Benefits decreased \$0.3k, Materials increased \$0.7k, Accruals decreased \$20.5k  
Project 03351- Contractor payments increased \$3.3k, EKPC Payroll & Benefits increased \$3.3k, Materials increased \$2k, Accruals decreased \$5.5k  
No major repairs January  
Adjustment to accruals to match actual resulted in a decrease of \$53.6k

February18-  
Project 03350- Contractor payments decreased \$12.9k, EKPC Payroll & Benefits decreased \$0.2k, Materials decreased \$1.4k, Accruals increased \$15.9k  
Project 03351- Contractor payments decreased \$1.9k, EKPC Payroll & Benefits increased \$1.9k, Materials increased \$4k, Accruals increased \$3.1k  
Overhead door repairs (03350); inspections/repairs (03351)  
Adjustment to accruals to match actual resulted in an increase of \$8.3k.

**East Kentucky Power Cooperative, Inc.  
Environmental Surcharge Operating and Expense Month over Month Analysis  
For the Expense Period November 2017 to May 2018**

**March18-**

Project 03350- Contractor payments increased \$0.6k, EKPC Payroll & Benefits increased \$0.7k, Materials decreased \$0.6k, Accruals decreased \$3.1k  
Project 03351- Contractor payments decreased \$1k, EKPC Payroll & Benefits decreased \$1k, Materials decreased \$6k, Accruals increased \$1.7k  
Adjustment to accruals to match actual resulted in a decrease of \$12.6k

**April18-**

Project 03350- Contractor payments decreased \$1.1k, EKPC Payroll & Benefits increased \$2.8k, Materials decreased \$0.6k, Accruals increased \$9.6k  
Project 03351- Contractor payments increased \$1.5k, EKPC Payroll & Benefits decreased \$5.5k, Materials increased \$0.1k, Accruals decreased \$2.7k  
Adjustment to accruals to match actual resulted in a decrease of \$12.4k

**May18-**

Project 03350- Contractor payments increased \$20k, EKPC Payroll & Benefits decreased \$0.1k, Materials increased \$10.2k, Accruals decreased \$16.9k  
Project 03351- Contractor payments decreased \$1.1k, EKPC Payroll & Benefits increased \$1.6k, Materials increased \$0.2k, Accruals increased \$0.2k  
Inlet cylinder replacement and diagnostics; bag changeout and inspection/leaktest  
Adjustment to accruals to match actual resulted in an increase of \$59.7k

512000 - SP01	Maintenance of Boiler Plant Spurlock 1	Nov	Dec	Jan	Feb	Mar	Apr	May
	Expense Dollars	\$ 49,394	\$ 304,673	\$ (25)	\$ 32,877	\$ 10,897	\$ (33,750)	\$ 65,109
	Expense Dollars Change		\$ 255,279	\$ (304,698)	\$ 32,902	\$ (21,980)	\$ (44,647)	\$ 98,859
	Percent Change		516.82%	-100.01%	-131608.00%	-66.86%	-409.72%	-292.92%

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

**December17-**

Project 03330- Contractor payments increased \$153.6k, EKPC Payroll & Benefits increased \$9k, Materials increased \$7.6k, Accruals increased \$52.4k  
Project 03501- Contractor payments increased \$1.8k, EKPC Payroll & Benefits increased \$4.2k, Materials decreased \$7.9k, Accruals increased \$32.8k  
Precipitator outage inspection and repairs  
Adjustment to accruals to match actual resulted in an increase of \$1.8k

**January18-**

Project 03330- Contractor payments decreased \$188.4k, EKPC Payroll & Benefits decreased \$10.3k, Materials decreased \$7.6k, Accruals decreased \$54.4k  
Project 03501- Contractor payments increased \$20.2k, EKPC Payroll & Benefits decreased \$4.8k, Materials increased \$7.9k, Accruals decreased \$63.5k  
Adjustment to accruals to match actual resulted in a decrease of \$3.8k

**February18-**

Project 03330- Contractor payments decreased \$2.4k, EKPC Payroll & Benefits increased \$5.6k, Materials increased \$0.4k, Accruals increased \$2k  
Project 03501- Contractor payments decreased \$5.7k, EKPC Payroll & Benefits increased \$0.6k, Accruals increased \$30.7k  
Ammonia injection grid tuning  
Adjustment to accruals to match actual resulted in an increase of \$2.5k

**March18-**

Project 03330- EKPC Payroll & Benefits decreased \$3.5k, Materials increased \$3.4k,  
Project 03501- Contractor payments decreased \$25k, EKPC Payroll & Benefits decreased \$0.2k, Accruals increased \$2k  
Minor repairs  
Adjustment to accruals to match actual resulted in an increase of \$1.3k

**April18-**

Project 03330- Contractor payments increased \$3.1k, EKPC Payroll & Benefits increased \$3.9k, Materials decreased \$3.6k, Accruals decreased \$51.2k  
Project 03501- Contractor payments increased \$9.4k, EKPC Payroll & Benefits decreased \$1.5k, Accruals decreased \$4k  
Replace differential pressure transmitter, re-insulation  
Adjustment to accruals to match actual resulted in a decrease of \$0.7k



East Kentucky Power Cooperative, Inc.  
Environmental Surcharge Operating and Expense Month over Month Analysis  
For the Expense Period November 2017 to May 2018

May18-  
Project 03330- Contractor payments increased \$9k, EKPC Payroll & Benefits increased \$1.2k, Materials decreased \$0.1k, Accruals increased \$51.2k  
Project 03501- Contractor payments increased \$15.3k, EKPC Payroll & Benefits increased \$0.9k, Materials increased \$10.4k, Accruals increased \$1.3k  
SCR catalyst inspection/testing  
Adjustment to accruals to match actual resulted in an increase of \$9.7k.

512000 - SP02	Maintenance of Boiler Plant Spurlock 2	Nov	Dec	Jan	Feb	Mar	Apr	May
	Expense Dollars	\$ 249,774	\$ 108,606	\$ 12,395	\$ 63,780	\$ 13,772	\$ 14,522	\$ 29,583
	Expense Dollars Change		\$ (141,168)	\$ (96,211)	\$ 51,385	\$ (50,008)	\$ 750	\$ 15,061
	Percent Change		-56.52%	-88.59%	414.56%	-78.41%	5.45%	103.71%

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

December17-  
Project 03330- Contractor payments increased \$500.8k, EKPC Payroll & Benefits decreased \$3.4k, Materials decreased \$0.7k, Accruals decreased \$612.5k  
Project 03501- Contractor payments decreased \$73.3k, EKPC Payroll & Benefits decreased \$2.3k, Accruals increased \$43.6k  
Continued November's precipitator repairs  
Adjustment to accruals to match actual resulted in an increase of \$6.6k.

January18-  
Project 03330- Contractor payments decreased \$811.1k, EKPC Payroll & Benefits increased \$1.3k, Materials increased \$3k, Accruals increased \$720.5k  
Project 03501- Contractor payments decreased \$14k, EKPC Payroll & Benefits increased \$4.7k, Accruals increased \$8.7k  
Complete precipitator repairs/inspection  
Adjustment to accruals to match actual resulted in a decrease of \$9.3k.

February18-  
Project 03330- Contractor payments decreased \$15.8k, EKPC Payroll & Benefits decreased \$3.2k, Materials decreased \$3k, Accruals increased \$29.4k  
Project 03501- Contractor payments increased \$30.4k, EKPC Payroll & Benefits decreased \$2.6k, Accruals increased \$12.7k  
Ammonia injection grid tuning  
Adjustment to accruals to match actual resulted in an increase of \$3.5k.

March18-  
Project 03330- Contractor payments increased \$15.2k, EKPC Payroll & Benefits increased \$1.5k, Materials increased \$0.2k, Accruals decreased \$29.5k  
Project 03501- Contractor payments decreased \$16.4k, Accruals decreased \$25.4k  
Minor repairs  
Adjustment to accruals to match actual resulted in a decrease of \$4.4k.

May18-  
Project 03330- Contractor payments decreased \$2.7k, EKPC Payroll & Benefits decreased \$1.6k, Materials increased \$0.2k,  
Project 03501- Contractor payments increased \$0.9k, EKPC Payroll & Benefits decreased \$2.5k, Accruals decreased \$2.8k  
Minor repairs  
Adjustment to accruals to match actual resulted in an increase of \$23.6k.

East Kentucky Power Cooperative, Inc.  
Environmental Surcharge Operating and Expense Month over Month Analysis  
For the Expense Period November 2017 to May 2018

512000 - SP03	Maintenance of Boiler Plant Gilbert	Nov	Dec	Jan	Feb	Mar	Apr	May
	Expense Dollars	103,546	133,044	60,411	113,497	108,945	882,558	1,512,125
	Expense Dollars Change		29,498	(72,633)	53,086	(4,552)	773,613	629,567
	Percent Change		28.49%	-54.59%	87.87%	-4.01%	710.10%	71.33%

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

December17-

Project 03206- Contractor payments increased \$41.6k, EKPC Payroll & Benefits increased \$3.2k, Materials increased \$6.6k, Accruals decreased \$70.4k  
Project 03350- Contractor payments decreased \$2.1k, EKPC Payroll & Benefits increased \$8.9k, Materials increased \$2.2k, Accruals increased \$22.5k  
Re-insulate; replace ash control valve bonnets; baghouse repairs  
Adjustment to accruals to match actual resulted in an increase of \$17.0k.

January18-

Project 03206- Contractor payments decreased \$44.9k, EKPC Payroll & Benefits increased \$5.5k, Materials increased \$16.4k, Accruals increased \$44.3k  
Project 03350- Contractor payments decreased \$16.8k, EKPC Payroll & Benefits decreased \$9k, Materials decreased \$3.9k, Accruals decreased \$34.3k  
Continued baghouse repairs  
Adjustment to accruals to match actual resulted in a decrease of \$29.9k

February18-

Project 03206- Contractor payments increased \$39.5k, EKPC Payroll & Benefits decreased \$2.3k, Materials decreased \$16.5k, Accruals decreased \$2.3k  
Project 03350- Contractor payments decreased \$21.1k, EKPC Payroll & Benefits increased \$5.6k, Materials increased \$16.1k, Accruals increased \$20.4k  
Truck assembly upgrade; re-insulate  
Adjustment to accruals to match actual resulted in an increase of \$13.7k.

April18-

Project 03206- Contractor payments increased \$35.8k, EKPC Payroll & Benefits increased \$8k, Materials decreased \$24.4k, Accruals increased \$772k  
Project 03350- Contractor payments decreased \$16.5k, EKPC Payroll & Benefits decreased \$10.8k, Materials decreased \$0.4k, Accruals increased \$11.1k  
Beginning of planned 2018 outage repairs  
Adjustment to accruals to match actual resulted in a decrease of \$1.2k

May18-

Project 03206- Contractor payments increased \$1231.2k, EKPC Payroll & Benefits increased \$103.3k, Materials increased \$60.8k, Accruals decreased \$994.9k  
Project 03350- Contractor payments increased \$143k, EKPC Payroll & Benefits increased \$13k, Materials increased \$20.4k, Accruals increased \$47.2k  
Bulk of planned 2018 outage repairs  
Adjustment to accruals to match actual resulted in an increase of \$5.6k.

512000 - SP04	Maintenance of Boiler Plant Spurlock 4	Nov	Dec	Jan	Feb	Mar	Apr	May
	Expense Dollars	297,592	202,757	380,639	460,744	1,227,885	1,345,997	170,306
	Expense Dollars Change		(94,835)	177,882	80,105	767,141	118,112	(1,175,691)
	Percent Change		-31.87%	87.73%	21.04%	166.50%	9.62%	-87.35%

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

December17-

Project 03206- Contractor payments decreased \$152.3k, EKPC Payroll & Benefits decreased \$8.3k, Materials increased \$16.5k, Accruals increased \$23.3k  
Project 03350- Contractor payments increased \$52.2k, EKPC Payroll & Benefits increased \$3.6k, Materials increased \$10.1k, Accruals decreased \$52k  
Baghouse repairs; bonnet assembly; screw conveyor and drive shaft; repairs to pneumatic positioner  
Adjustment to accruals to match actual resulted in an increase of \$12.1k.

**East Kentucky Power Cooperative, Inc.**  
**Environmental Surcharge Operating and Expense Month over Month Analysis**  
**For the Expense Period November 2017 to May 2018**

January18-

Project 03206- Contractor payments decreased \$0.9k, EKPC Payroll & Benefits increased \$26k, Materials increased \$9.2k, Accruals decreased \$69.8k  
Project 03350- Contractor payments decreased \$27.4k, EKPC Payroll & Benefits decreased \$5.8k, Materials increased \$226.8k, Accruals increased \$43.1k  
Membrane filter replacement  
Adjustment to accruals to match actual resulted in a decrease of \$23.3k

February18-

Project 03206- Contractor payments increased \$1.3k, EKPC Payroll & Benefits decreased \$30.4k, Materials decreased \$12.9k, Accruals increased \$56.2k  
Project 03350- Contractor payments increased \$64.2k, EKPC Payroll & Benefits increased \$12.5k, Materials increased \$14.6k, Accruals decreased \$36.3k  
Membrane filter replacement  
Adjustment to accruals to match actual resulted in an increase of \$10.9k.

March18-

Project 03206- Contractor payments increased \$860.1k, EKPC Payroll & Benefits increased \$22.3k, Materials increased \$53.4k, Accruals increased \$23.4k  
Project 03350- Contractor payments decreased \$2.4k, EKPC Payroll & Benefits increased \$4.6k, Materials decreased \$212k, Accruals increased \$17.9k  
Refractory repairs  
Adjustment to accruals to match actual resulted in a decrease of \$0.2k

May18-

Project 03206- Contractor payments decreased \$763.9k, EKPC Payroll & Benefits decreased \$87.4k, Materials decreased \$65k, Accruals increased \$17.2k  
Project 03350- Contractor payments decreased \$201.6k, EKPC Payroll & Benefits decreased \$102.1k, Materials increased \$1.5k, Accruals increased \$3.7k  
Outage repairs completed  
Adjustment to accruals to match actual resulted in an increase of \$21.9k.

512000 - SP21	Maintenance of Boiler Plant Scrubber 1	Nov	Dec	Jan	Feb	Mar	Apr	May
	Expense Dollars	\$ 256,059	\$ 367,476	\$ 134,984	\$ 12,218	\$ 77,950	\$ 85,227	\$ 30,703
	Expense Dollars Change		\$ 111,417	\$ (232,492)	\$ (122,766)	\$ 65,732	\$ 7,277	\$ (54,524)
	Percent Change		43.51%	-63.27%	-90.95%	537.99%	9.34%	-63.98%

December17-

Project 03521- Contractor payments decreased \$17.3k, EKPC Payroll & Benefits increased \$8.1k, Materials increased \$27.7k, Accruals increased \$160.7k  
2017 contract to provide preventative and daily maintenance  
Adjustment to accruals to match actual resulted in a decrease of \$67.8k

January18-

Project 03521- Contractor payments increased \$25.6k, EKPC Payroll & Benefits decreased \$9k, Materials decreased \$27.3k, Accruals decreased \$265.3k  
Re-insulate; repairs on absorber inlet duct  
Adjustment to accruals to match actual resulted in an increase of \$43.5k.

February18-

Project 03521- Contractor payments decreased \$78.7k, EKPC Payroll & Benefits increased \$1.3k, Materials decreased \$29.1k, Accruals increased \$7.5k  
2018 maintenance contract and outage repairs  
Adjustment to accruals to match actual resulted in a decrease of \$23.8k

March18-

Project 03521- Contractor payments decreased \$19.5k, EKPC Payroll & Benefits increased \$2.6k, Materials increased \$36.5k, Accruals increased \$52.4k  
Seals and converter replacements and contract maintenance  
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 November 2017 to May 2018

May18-  
Project 03521- Contractor payments decreased \$35.8k, EKPC Payroll & Benefits increased \$7.3k, Materials increased \$1k, Accruals decreased \$19k  
Inlet repairs, re-insulate, SIRE cleaning  
Adjustment to accruals to match actual resulted in a decrease of \$8.0k

512000 - SP22	Maintenance of Boiler Plant Scrubber 2	Nov	Dec	Jan	Feb	Mar	Apr	May
	Expense Dollars	\$ 178,389	\$ 75,067	\$ 94,061	\$ 249,277	\$ 188,019	\$ 140,884	\$ 114,798
	Expense Dollars Change		\$ (103,322)	\$ 18,994	\$ 155,216	\$ (61,258)	\$ (47,135)	\$ (26,086)
	Percent Change		-57.92%	25.30%	165.02%	-24.57%	-25.07%	-18.52%

December17-  
Project 03521- Contractor payments decreased \$262.4k, EKPC Payroll & Benefits decreased \$9k, Materials increased \$0.4k, Accruals increased \$138.4k  
Contract maintenance only versus outage repairs in November.  
Adjustment to accruals to match actual resulted in a decrease of \$29.3k

January18-  
Project 03521- Contractor payments decreased \$30.9k, EKPC Payroll & Benefits increased \$11.2k, Materials increased \$0.9k, Accruals increased \$51.8k  
Solenoid valve replacements, continued contract maintenance  
Adjustment to accruals to match actual resulted in a decrease of \$14.0k

February18-  
Project 03521- Contractor payments increased \$32.8k, EKPC Payroll & Benefits decreased \$10.3k, Materials increased \$1.8k, Accruals increased \$123.5k  
Contract maintenance  
Adjustment to accruals to match actual resulted in an increase of \$7.4k.

March18-  
Project 03521- Contractor payments increased \$27.3k, EKPC Payroll & Benefits increased \$5.2k, Materials increased \$38.9k, Accruals decreased \$129.7k  
Contract maintenance and replacement of SIRE unit  
Adjustment to accruals to match actual resulted in a decrease of \$3.0k

April18-  
Project 03521- Contractor payments decreased \$45.6k, EKPC Payroll & Benefits decreased \$7.5k, Materials decreased \$5.5k, Accruals increased \$3.6k  
Contract maintenance and seal replacements  
Adjustment to accruals to match actual resulted in an increase of \$7.9k.

May18-  
Project 03521- Contractor payments increased \$18.6k, EKPC Payroll & Benefits increased \$0.3k, Materials decreased \$2.2k, Accruals decreased \$17.1k  
Contract maintenance and converter/bearing assembly repairs  
Adjustment to accruals to match actual resulted in a decrease of \$25.7k

East Kentucky Power Cooperative, Inc.  
Environmental Surcharge Operating and Expense Month over Month Analysis  
For the Expense Period November 2017 to May 2018

**Air Permit Fees**

506002 - DA00	Misc Stm Pwr Env - Dale	Nov	Dec	Jan	Feb	Mar	Apr	May
	Expense Dollars	\$ -	\$ 150	\$ (150)	\$ -	\$ -	\$ -	\$ -
	Expense Dollars Change		\$ 150	\$ (300)	\$ 150	\$ -	\$ -	\$ -
	Percent Change		0.00%	200.00%	100.00%	0.00%	0.00%	0.00%

506002 - CP00	Misc Stm Pwr Env - Cooper	Nov	Dec	Jan	Feb	Mar	Apr	May
	Expense Dollars	\$ -	\$ 98,114	\$ 398	\$ 4,833	\$ 4,690	\$ 66	\$ 825
	Expense Dollars Change		\$ 98,114	\$ (97,716)	\$ 4,435	\$ (143)	\$ (4,624)	\$ 759
	Percent Change		0.00%	-99.59%	1114.32%	-2.96%	-98.59%	1150.00%

506002 - SP00	Misc Stm Pwr Env - Spurlock	Nov	Dec	Jan	Feb	Mar	Apr	May
	Expense Dollars	\$ 60	\$ 782,405	\$ 44,629	\$ 12,917	\$ 24,130	\$ 47,732	\$ 8,442
	Expense Dollars Change		\$ 782,345	\$ (737,776)	\$ (31,712)	\$ 11,213	\$ 23,602	\$ (39,290)
	Percent Change		1303908.33%	-94.30%	-71.06%	86.81%	97.81%	-82.31%

Air permit fees paid for Dale, Cooper and Spurlock for calendar 2018 emissions.

**Operating Expense- Ammonia**

506001 - CPxx	Misc Stm Pwr Exp - Cooper	Nov	Dec	Jan	Feb	Mar	Apr	May
	Expense Dollars	\$ 2,928	\$ 10,238	\$ 47,357	\$ 22,076	\$ -	\$ -	\$ 2,711
	Expense Dollars Change		\$ 7,310	\$ 37,119	\$ (25,281)	\$ (22,076)	\$ -	\$ 2,711
	Percent Change		249.66%	362.56%	-53.38%	-100.00%	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 - CP22	Misc Stm Pwr Exp - Cooper Unit #2 AQCS	Nov	Dec	Jan	Feb	Mar	Apr	May
	Expense Dollars	\$ 91,489	\$ 187,110	\$ 558,042	\$ 118,578	\$ -	\$ -	\$ 39,121
	Expense Dollars Change		\$ 95,621	\$ 370,932	\$ (439,464)	\$ (118,578)	\$ -	\$ 39,121
	Percent Change		104.52%	198.24%	-78.75%	-100.00%	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	Nov	Dec	Jan	Feb	Mar	Apr	May
	Expense Dollars	\$ 55,596	\$ 32,581	\$ 83,425	\$ 68,255	\$ 46,308	\$ 35,511	\$ 31,968
	Expense Dollars Change		\$ (23,015)	\$ 50,844	\$ (15,170)	\$ (21,947)	\$ (10,797)	\$ (3,543)
	Percent Change		-41.40%	156.05%	-18.18%	-32.15%	-23.32%	-9.98%

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

506001 - SP02	Misc Steam Power Exp - Spurlock 2	Nov	Dec	Jan	Feb	Mar	Apr	May
	Expense Dollars	\$ 948	\$ 47,774	\$ 26,129	\$ 48,035	\$ 52,796	\$ 43,287	\$ 28,244
	Expense Dollars Change		\$ 46,826	\$ (21,645)	\$ 21,906	\$ 4,761	\$ (9,509)	\$ (15,043)
	Percent Change		4939.45%	-45.31%	83.84%	9.91%	-18.01%	-34.75%

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 November 2017 to May 2018

Operating Expense- Ammonia and Limestone

506001 - SP03	Misc Steam Power Expense- Gilbert	Nov	Dec	Jan	Feb	Mar	Apr	May
	Ammonia Expense	\$ 31,913	\$ 44,088	\$ 36,143	\$ 20,170	\$ 31,471	\$ 20,686	\$ 11,010
	Limestone Expense	\$ 292,753	\$ 393,882	\$ 349,961	\$ 183,250	\$ 327,483	\$ 231,412	\$ 107,981
	Limestone Tons Used	22,280	31,171	26,096	13,533	24,125	17,051	7,954
	Total Expense Dollars	\$ 324,666	\$ 437,970	\$ 386,104	\$ 203,420	\$ 358,953	\$ 252,098	\$ 118,991
	Expense Dollars Change		\$ 113,304	\$ (51,866)	\$ (182,684)	\$ 155,533	\$ (106,855)	\$ (133,107)
	Percent Change		34.90%	-11.84%	-47.31%	76.46%	-29.77%	-52.80%

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, but the noted change in limestone primarily reflects the level of stockpile usage by the unit for the month indicated.

December17 - Limestone expenses increased by \$100k and Ammonia expenses increased by \$12k

January18 - Limestone expenses decreased by \$43.9k and Ammonia expenses decreased by \$7.9k

February18 - Limestone expenses decreased by \$166.7k and Ammonia expenses decreased by \$16k  
Unit off-line 2/19-2/28

March18 - Limestone expenses increased by \$144.2k and Ammonia expenses increased by \$11.3k  
Burn was 10.6 tons greater than prior month

April18 - Limestone expenses decreased by \$96.1k and Ammonia expenses decreased by \$10.8k  
Unit off-line 4/21-4/30

May18 - Limestone expenses decreased by \$123.4k and Ammonia expenses decreased by \$9.7k  
Unit off-line 5/1-5/20

Operating Expense- Limestone and Magnesium

506001 - SP21	Misc Stm Pwr Exp- Spurlock 1	Nov	Dec	Jan	Feb	Mar	Apr	May
	Magnesium Expense	\$ 16,642	\$ 17,268	\$ 16,152	\$ 5,271	\$ 26,509	\$ 15,767	\$ 11,895
	Limestone Expense	\$ 102,283	\$ 41,745	\$ 100,015	\$ 79,196	\$ 57,162	\$ 45,264	\$ 46,634
	Limestone Tons Used	10,032	3,424	9,602	11,888	5,362	4,244	4,372
	Expense Dollars	\$ 118,925	\$ 59,013	\$ 116,167	\$ 84,467	\$ 83,671	\$ 61,031	\$ 58,529
	Expense Dollars Change		\$ (59,912)	\$ 57,154	\$ (31,700)	\$ (796)	\$ (22,640)	\$ (2,502)
	Percent Change		-50.38%	96.85%	-27.29%	-0.94%	-27.06%	-4.10%

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, but the noted change in limestone primarily reflects the level of stockpile usage by the unit for the month indicated.

December17 - Limestone expenses decreased by \$60.5k and Ammonia expenses increased by \$0.6k  
Unit outage 12/14-12/29

**East Kentucky Power Cooperative, Inc.**  
**Environmental Surcharge Operating and Expense Month over Month Analysis**  
**For the Expense Period November 2017 to May 2018**

January18 - Limestone expenses increased by \$58.2k and Ammonia expenses decreased \$0.3k  
No outages

February18 - Limestone expenses decreased by \$20.8k and Ammonia expenses decreased \$10.9k.

April18 - Limestone expenses decreased \$11.9k and Ammonia expenses decreased \$10.7k  
Unit outage 4/24-4/30

**Operating Expense-Limestone and Magnesium**

506001 - SP22	Misc Strm Pwr Exp- Spurlock 2	Nov	Dec	Jan	Feb	Mar	Apr	May
	Magnesium Expense	\$ 6,744	\$ 63,048	\$ 74,255	\$ 55,702	\$ 105,916	\$ 51,737	\$ 84,971
	Limestone Expense	\$ 4,262	\$ 148,005	\$ 85,198	\$ 153,733	\$ 181,013	\$ 160,480	\$ 103,798
	Limestone Tons Used	418	12,140	8,179	10,126	16,978	15,048	9,731
	Expense Dollars	\$ 11,006	\$ 211,053	\$ 159,453	\$ 209,435	\$ 286,929	\$ 212,217	\$ 188,769
	Expense Dollars Change	\$ 200,047	\$ (51,600)	\$ 49,982	\$ 77,494	\$ (74,712)	\$ (23,448)	
	Percent Change		1817.62%	-24.45%	31.35%	37.00%	-26.04%	-11.05%

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, but the noted change in limestone primarily reflects the level of stockpile usage by the unit for the month indicated.

December17 - Limestone expenses increased by \$143.7k and Ammonia expenses increased by \$56.3k  
Unit was only operational for 4 days the prior month.

January18 - Limestone expenses decreased by \$62.8k and Ammonia expenses increased by \$11.2k  
Unit outage 1/9 - 1/12 and 1/18 - 1/28.

February18 - Limestone expenses increased by \$68.5k and Ammonia expenses decreased by \$18.6k

March18 - Limestone expenses increased by \$27.3k and Ammonia expenses increased by \$50.2k

April18 - Limestone expenses decreased by \$20.5k and Ammonia expenses decreased by \$54.2k

May18 - Limestone expenses decreased by \$56.7k and Ammonia expenses increased by \$33.2k  
Unit outage 5/17-5/26

East Kentucky Power Cooperative, Inc.  
Environmental Surcharge Operating and Expense Month over Month Analysis  
For the Expense Period November 2017 to May 2018

Operating Expense- Ammonia and Limestone

506001 - SP04	Misc Stm Pwr Exp- Spurlock 4	Nov	Dec	Jan	Feb	Mar	Apr	May
	Ammonia Expense	\$ 25,167	\$ 35,240	\$ 36,349	\$ 17,256	\$ 2,409	\$ 13,380	\$ 30,270
	Limestone Expense	\$ 194,364	\$ 285,083	\$ 374,478	\$ 179,040	\$ -	\$ 150,986	\$ 354,070
	Limestone Tons Used	14,792	22,772	27,907	13,226	-	11,132	26,095
	Expense Dollars	\$ 219,531	\$ 320,323	\$ 410,827	\$ 196,296	\$ 2,409	\$ 164,366	\$ 384,340
	Expense Dollars Change		\$ 100,792	\$ 90,504	\$ (214,531)	\$ (193,887)	\$ 161,957	\$ 219,974
	Percent Change		45.91%	28.25%	-52.22%	-98.77%	6723.00%	133.83%

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, but the noted change in limestone primarily reflects the level of stockpile usage by the unit for the month indicated.

December17 - Limestone expenses increased by \$90k and Ammonia expenses increased by \$10k  
Tons delivered in December were 21k more than November

January18- Limestone expenses increased by \$89.4k and Ammonia expenses increased by \$1.1k  
No outage and cost per ton increased an average of \$0.24

February18 - Limestone expenses decreased by \$195.4k and Ammonia expenses decreased by \$19.1k  
Unit off-line 2/15-2/28

March18 - Limestone expenses decreased by \$179k and Ammonia expenses decreased by \$14.8k  
Unit off-line entire month of March

April18 - Limestone expensed increased by \$151k and Ammonia expenses increased by \$11k  
Unit off-line 4/1-4/14; 4/28-4/30

May18- Limestone expenses increased by \$203.1k and Ammonia expenses increased by \$16.9k  
Unit off-line 5/1-5/2



**EAST KENTUCKY POWER COOPERATIVE, INC.**  
**PSC CASE NO. 2018-00306**  
**ENVIRONMENTAL SURCHARGE MECHANISM**  
**RESPONSE TO INFORMATION REQUEST**

**COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 09/20/18**  
**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, 2018:

- 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 included on file “Response 5 – Debt Cost & Weighted Aver Debt Cost – 05-31-18.xlsx”. The debt cost for each debt issuance is at a fixed interest rate. EKPC is proposing a weighted average cost of debt of 4.021% based on the debt cost for each debt issuance directly related to the projects in the environmental compliance plan as of May 31, 2018. 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 6.032%.