BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN ELECTRONIC EXAMINATION BY THE PUBLIC)	
SERVICE COMMISSION OF THE ENVIRONMENTAL)	
SURCHARGE MECHANISM OF EAST KENTUCKY)	
POWER COOPERATIVE, INC. FOR THE SIX-)	CASE NO.
MONTH EXPENSE PERIOD ENDING)	2019-00171
NOVEMBER 30, 2018, 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: July 3, 2019

1

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

A. My name is Isaac S. Scott and my business address is East Kentucky Power Cooperative,
Inc. ("EKPC"), 4775 Lexington Road, Winchester, Kentucky 40391. I am the Manager of
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, where I performed audits of numerous state agencies. In December 1985, I transferred to 8 the Kentucky Public Service Commission ("Commission") as a public utilities financial 9 analyst, concentrating on the electric and natural gas industries. In August 2001, I became 10 manager of the Electric and Gas Revenue Requirements Branch in the Division of Financial 11 Analysis at the Commission. In this position, I supervised the preparation of revenue 12 requirement determinations for electric and natural gas utilities as well as determined the 13 revenue requirements for the major electric and natural gas utilities in Kentucky. I retired 14 from the Commission effective August 1, 2008. In November 2008, I became the Manager 15 of Pricing at EKPC. 16

17 **Q. P**

Please provide a brief description of your duties at EKPC.

A. As Manager of Pricing, I am responsible for rate-making activities which include designing
 and developing wholesale and retail electric rates and developing pricing concepts and
 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 has applied the environmental surcharge mechanism in a reasonable manner during the period under review; and

2

Describe how EKPC and the Member Cooperatives have applied the pass-through 1 • mechanism in a reasonable manner during the period under review. 2 0. Is EKPC preparing testimony and responding to data requests on behalf of its 3 **Member Cooperatives?** 4 A. Pursuant to the Commission's June 5, 2019 Order, EKPC is preparing testimony on behalf 5 of each Member Cooperative. The Member Cooperatives are: Big Sandy Rural Electric 6 Cooperative Corporation ("RECC"), Blue Grass Energy Cooperative Corporation, Clark 7 Energy Cooperative, Inc., Cumberland Valley Electric, Inc., Farmers RECC, Fleming-8 Mason Energy Cooperative, Grayson RECC, Inter-County Energy Cooperative 9 Corporation, Jackson Energy Cooperative, Licking Valley RECC, Nolin RECC, Owen 10 11 Electric Cooperative, Salt River Electric Cooperative Corporation, Shelby Energy Cooperative, Inc., South Kentucky RECC, and Taylor County RECC. EKPC is also 12 providing Response 2 to the Commission Staff's First Request for Information ("Staff's 13 First Request"). 14 Have other EKPC representatives provided responses to Commission Staff's First **Q**. 15

16

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, Vice President
 Finance and Treasurer, 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
 how EKPC has addressed the most significant aspects of these Orders during the
 periods under review.

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

3

Compliance Plan Projects

As of the end of the six-month review period, EKPC has 16 projects in its Environmental Compliance Plan. These projects were approved by the Commission in Case Nos. 2004-00321,¹ 2008-00115,² 2010-00083,³ 2013-00259,⁴ 2014-00252,⁵ and 2017-00376.⁶ In conjunction with the establishment of a regulatory asset for the undepreciated balance of the William C. Dale Generating Station assets that were being retired early, EKPC was required in Case No. 2015-00302 to remove Project 5, Dale Low Nitrogen Oxide Burners, and Project 10, Dale Continuous Monitoring Equipment,

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).

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).

⁶ 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. ⁷ 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 $MESF = CESF - BESF$. ⁸ 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 ("SO2") and nitrogen oxide ("NOx")
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
11 12	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
12	allowances. This is addressed in Response 3 to the Staff's First Request. EKPC has
12 13	allowances. This is addressed in Response 3 to the Staff's First Request. EKPC has also included a return on its limestone inventory.
12 13 14	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 SO ₂ and NO _x reflect operations under the
12 13 14 15	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 SO ₂ and NO _x reflect operations under the Cross-State Air Pollution Rules ("CSAPR") along with a continuation of the Acid Rain
12 13 14 15 16	 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-
12 13 14 15 16 17	 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

⁷ 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.

⁸ 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_x 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		Two rates of return were in effect during the period under review. For the expense
9		month of June 2018, the rate of return was 6.075%, which was approved by the
10		Commission in Case No. 2017-00326.9 For the expense months of July through
11		November 2018, the rate of return was 6.023%, which was approved by the
12		Commission in Case No. 2018-00075. ¹⁰ In each case, the Commission approved
13		EKPC's request to incorporate a Times Interest Earned Ratio ("TIER") of 1.50 in the
14		determination of the rate of return.
15		EKPC's rate of return on environmental compliance rate base is determined by
16		multiplying the weighted average debt cost for the debt issuances directly related to
17		projects in the approved compliance plan times a stated TIER. The rate of return on
18		the environmental compliance rate base is updated to reflect current average debt cost

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 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).

¹⁰ 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, 2017, and the Pass-Through Mechanism of Its Sixteen Member Distribution Cooperatives, Order, Case No. 2018-00075, (Ky. P.S.C., Jul. 23, 2018).

1	at the conclusion of the six-month and two-year surcharge reviews. ¹¹ The use of debt
2	costs is based on the fact that all of EKPC's environmental compliance investments are
3	financed with long-term debt. ¹² The use of a 1.50 TIER was first approved by the
4	Commission in Case No. 2011-00032. ¹³ This rate-making methodology is different
5	from that employed by investor-owned utilities. The rate of return for the
6	environmental compliance rate base for investor-owned utilities reflects a weighted
7	average cost of capital approach. The weighted average cost of capital reflects the
8	blended interest rates for the investor-owned utilities' long-term and short-term debt
9	and a return on the common equity. The weighted average cost of capital is then
10	"grossed up" for income taxes. Consequently, the rate of return for the investor-owned
11	utilities is higher than the rate of return proposed by or authorized for EKPC. ¹⁴
12	When determining a reasonable TIER for the environmental surcharge rate of return,
13	consideration first must be given to the Debt Service Coverage Ratio ("DSC"), which
14	is EKPC's critical financial metric. This metric evaluates EKPC's ability to service
15	principal and interest payments and thus is more relevant to lenders than TIER, which

¹¹ 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.

¹² 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.

¹³ 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.

¹⁴ 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%.

only considers interest payment. The two metrics can be related in that the margin
 required to achieve an acceptable DSC implies a TIER level.

EKPC's target annual DSC range is set forth in Board Policy 203, which states, "The Debt Service Coverage Ratio (DSC) is a financial measurement of EKPC's ability to repay its long-term debt and is computed as depreciation plus interest on long-term debt plus net margins divided by interest on long-term debt plus scheduled principal payments. EKPC shall strive to maintain an average DSC of at least 1.25 for two of every three successive years and not less than a DSC of 1.10 in any given year. DSC above 1.30 is preferred."

Further, the credit rating agencies, Fitch Ratings ("Fitch") and Standard & Poor's 10 ("S&P"), both prefer high DSC ratios to support EKPC's BBB+ Stable and A Stable 11 credit ratings respectively, which in turn result in lower cost of borrowings. In its 12 October 2015 report on EKPC, Fitch had set a DSC of 1.25 as a threshold that would 13 support EKPC's upgrade to A-, which occurred in October 2016. The median DSC for 14 A- rated Generation and Transmission Cooperatives as of Fitch's June 15, 2018 Public 15 Power Peer Study was 1.30. Fitch has implemented a new rating methodology which 16 focuses more on Net Debt divided by Funds Available for Debt Service ("FADS")¹⁵ 17 than DSC which is FADS divided by Debt Service. Since Debt Service is correlated 18 to Net Debt, these measures are similar. While EKPC was downgraded to BBB+ on 19 June 7, 2019 due to Fitch's new expectations set for this ratio, EKPC would expect that 20 maintaining its current DSC targets would result in an upgrade back to A- within the 21 next one to three years. S&P does not publish medians for ratings because its ratings 22 23 are based on several factors. However, S&P has repeatedly praised EKPC's DSC ratio

¹⁵ FADS is calculated as Margin plus Interest Expense plus Depreciation and Amortization Expenses.

1	being at or above 1.25, most recently in its July 24, 2018 report which affirmed EKPC's
2	A rating. Moody's, which does not rate EKPC, targets a DSC of $1.2 - 1.4$ for "A" rated
3	companies.

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

10 EKPC's achieved DSC and TIER¹⁶ were as follows for calendar years 2014 through
11 2018:

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
December 31, 2018	1.33	1.35
Five-Year Averages	1.30	1.40

12	Note that because interest expense and depreciation change from year to year, the
13	relationship between DSC and TIER is not locked in but should be recalculated. That
14	is, a DSC of 1.30 will not always imply a TIER of 1.50. Because DSC is the critical
15	metric, but not the only metric, for credit evaluation and financial performance, EKPC
16	will strive to maintain the DSC near target and adjust the TIER accordingly over time.
17	Based upon the foregoing, EKPC proposes no change to the TIER component of the
18	rate of return. EKPC is proposing a rate of return of 6.047% in this proceeding, as

¹⁶ 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.

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.

6

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

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

13 A. Yes. EKPC continues to use the amounts booked for the various cost categories included 14 in the surcharge calculation and these costs were actual costs and incurred in a prudent 15 manner.

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

A. Yes. However, as shown in Response 1 to the Staff's First Request, EKPC applied its
November 2018 under-recovery to the December 2018 expense month, which was billed
in January 2019. Thus, from the normal operation of the surcharge mechanism, no
adjustment is needed in this proceeding to collect any under-recovery from the Member
Cooperatives.

22 Q. Previous Commission Orders also required EKPC's Member Cooperatives to 23 incorporate certain provisions into the calculation of the monthly pass-through

10

1		factors. Please comment on how the Member Cooperatives have addressed the most
2		significant aspects of these Orders during the periods under review.
3	A.	Under the pass-through mechanism the environmental surcharge factors computed for
4		retail customers were billed by EKPC's Member Cooperatives at approximately the same
5		time as EKPC billed the Member Cooperatives at wholesale. The calculation of the
6		monthly factors for each Member Cooperative was provided in the monthly reports filed
7		with the Commission. EKPC and the Member Cooperatives adhered to these and all other
8		requirements and provisions of the Commission's Orders for the periods under review.
9	Q.	Did the Member Cooperatives incur any over- or under-recoveries during the review
10		period?
11	A.	Yes. The over- or under-recovery amounts for each Member Cooperative are shown in
12		Response 2 to the Staff's First Request. The determination of the over- or under-recovery
13		amounts has been prepared utilizing the revised methodology approved by the Commission
14		in Case No. 2015-00281. ¹⁷
15	Q.	How will the Member Cooperatives reflect recovery of these over- or under-recovery
16		amounts?
17	A.	As approved in the Commission's November 5, 2010 Order in Case No. 2010-00021, ¹⁸ the
18		Member Cooperatives propose that the over- or under-recovery amounts be amortized over

¹⁷ 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).

¹⁸ 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).

a period of six months beginning in the first month after the Commission's Order in this
 proceeding.

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

A. Yes. As previously discussed, EKPC proposes an updated rate of return of 6.047%. This 4 updated rate of return reflects an average debt cost as of November 30, 2018 of 4.031% 5 and a TIER of 1.50. The determination of the average debt cost as of November 30, 2018 6 is shown in Response 5 to the Staff's First Request. EKPC notes that its weighted average 7 debt cost in the five previous surcharge review cases and as reported in this case are 8 9 relatively constant, fluctuating on average no more than 0.002 of a percent between cases. While this is due in part to a favorable interest rate environment, EKPC's ability to build 10 equity is also a major contributor to this trend. 11

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

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

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

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

22 Q. Does this conclude your testimony?

23 A. Yes it does.

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DISTRIBUTION COOPERATIVES)	

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.

Jean

Subscribed and sworn before me on this $\frac{3^{n-1}}{2}$ day of July 2019.

90567



COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN ELECTRONIC EXAMINATION BY THE PUBLIC)	
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RESPONSES TO COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION TO EAST KENTUCKY POWER COOPERATIVE, INC. DATED JUNE 5, 2019

EAST KENTUCKY POWER COOPERATIVE, INC.

PSC CASE NO. 2019-00171

PUBLIC SERVICE COMMISSION REQUEST DATED 06/05/19

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 June 5, 2019. Each response with its associated supportive reference materials is individually tabbed.

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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 First Request for Information contained in Appendix B in the above-referenced case dated June 5, 2019, 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.

Mail Horn

Subscribed and sworn before me on this $3^{\prime\prime}$ day of July, 2019.

Ulter Notary Public GWYN M. WILLOUGHBY Notary Public Kentucky - State at Large My Commission Expires Nov 30, 2021

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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 June 5, 2019, 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 3^{rd} day of July, 2019.

55007 otary Public

GWYN M. WILLOUGHBY Notary Public Kentucky ~ State at Large My Commission Expires Nov 30, 2021

BEFORE THE PUBLIC SERVICE COMMISSION

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DISTRIBUTION COOPERATIVES)	

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 First Request for Information contained in Appendix B in the above-referenced case dated June 5, 2019, 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.

The JS

Subscribed and sworn before me on this 3^{12} day of July, 2019.

4590567 otary

GWYN M. WILLOUGHBY Notary Public Kentucky – State at Large My Commission Expires Nov 30, 2021

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 06/05/19 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 ScheduleE(m) w Over-Under.xlsx". As shown in the response, EKPC is not proposing any additionalover- or under-recovery to be recognized for the six-month review.

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 06/05/19 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 sixmonth review. Include a calculation of any additional over- or under-recovery amount the distribution cooperative believes needs to be recognized for the sixmonth 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 underrecoveries, all of the Member Cooperatives have notified EKPC that they are proposing sixmonth amortization periods.

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 06/05/19 REQUEST 3 RESPONSIBLE PARTY: Mark Horn

<u>Request 3.</u> 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.

<u>Response 3a-c.</u> No SO_2 or NO_x allowance purchases were made during the period of June 1, 2018 through November 30, 2018.

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 06/05/19 REQUEST 4 RESPONSIBLE PARTY: Isaac S. Scott

<u>Request 4.</u> 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 June 2018 to November 2018

501010 - SP03	Fuel Coal Gilbert	May	June	July	Aug		Sept		Oct	ž	Nov
400-2610	Expense Dollars	\$ 4,889	\$ 110,437	\$ 93,990	69	853 \$	225,604	ь	52,494	(A	209,174
	Expense Dollars Change		\$ 105,548	\$ (16,447)	ю	(93,137) \$	224,751	ب ج	173,110)	\$ 15	156,680
	Percent Change		2158.89%	-14 89%		%6	26348.30%		-76 73%	29	298 47%

Monthly expense changes are due to increases or decreases in volume of ash removed.

501010 - SP04	Fuel Coal Spurlock 4	May	June	July	Aug		Sept	Oct	-	lov
	Expense Dollars	\$ 101,261	\$	6	ь	853 \$	205,259		ь	50,787
	Expense Dollars Change		\$ 13,675	\$ (24,414)	ю	(89,669) \$	204,406 \$	\$ (187,493) \$	\$	33,021
	Percent Change		13.50%			,06%	23963.19%			85.87%

Monthly expense changes are due to increases or decreases in volume of ash removed,

10 III III IIII IIII IIII IIII IIII III								100
501010 - CPxx	Fuel Coal Cooper (Unit 2 AQCS)	May	June	July	Aug	Sept	Oct	Nov
	Expense Dollars	\$ 7,000	\$ 7,053		μ	ь	\$ 7,000	\$ 77
	Expense Dollars Change		\$ 53 \$	\$ 201	\$ 246	\$ (500)	ы 69	\$ (6,923)
	Percent Change		0.76%				%00.0	

Monthly lease of the trucks for hauling ended October 2018. Switched to contract ash hauling.

512000 - CPxx	Maintenance of Cooper (Unit 2 AQCS)	May	June	July	Aug	Sept	Oct	Nov
	Expense Dollars	\$ 73,832	ŝ	5 1,948	\$ 28,610	\$ 25,018	в	
	Expense Dollars Change		\$ (37,383) \$	<u>ن</u>	\$ 26,662 \$		\$ (14,802) \$	\$ 11,792
	Percent Change		-50.63%			1		

Project 03350 is Bag House, Dry Scrub, SNCR & SCR, Project 03351 is Ammonia Handling System

June18-

Project 03350- Contractor payments decreased \$20k, EKPC Payroll & Benefits decreased \$3.7k, Materials decreased \$8.4k, Accruals increased \$8 k Project 03351- Contractor payments decreased \$0.8k, EKPC Payroll & Benefits increased \$2k, Materials increased \$3.1k, Accruals increased \$0.8k Adjustment to accruals to match actual resulted in a decrease of \$18.4k.

July18-

Project 03350- EKPC Payroll & Benefits increased \$1.7k, Materials decreased \$4.5k, Accruals decreased \$8.9k Project 03351- Contractor payments increased \$0.3k, Materials decreased \$3k, Accruals increased \$6.9k Adjustment to accruals to match actual resulted in a decrease of \$27.0k.

August18-

Project 03350- Contractor payments increased \$2.5k, EKPC Payroll & Benefits decreased \$1.8k, Materials increased \$8.4k, Accruals increased \$7.4k Project 03351- Contractor payments increased \$6.9k, EKPC Payroll & Benefits decreased \$1.3k, Materials decreased \$0.3k, Accruals decreased \$13.9k SCR Inspection and installation of a pressure regulator Adjustment to accruals to match actual resulted in an increase of \$18.8k.

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

September18-

Project 03350- Contractor payments decreased \$2.5k, EKPC Payroll & Benefits increased \$2.2k, Materials decreased \$2k, Accruals increased \$1.5k Project 03351- Contractor payments decreased \$7,1k, EKPC Payroll & Benefits decreased \$0.9k, Accruals increased \$6.9k Adjustment to accruals to match actual resulted in a decrease of \$1.7k.

October18-

Project 03350- Contractor payments increased \$0.9k, EKPC Payroll & Benefits decreased \$3.7k, Materials increased \$0.7k, Accruals decreased \$5.4k Project 03351- Contractor payments increased \$1.2k, EKPC Payroll & Benefits increased \$1.5k, Materials increased \$2.3k, Installation of a Dosing Valve Stern (03350), Installation of Sound Generator (03351)

Adjustment to accruals to match actual resulted in a decrease of \$12.3k

November18-

Project 03350- Contractor payments decreased \$0.8k, EKPC Payroll & Benefits increased \$5k, Materials decreased \$4.2k, Accruals increased \$7.4k Project 03351- Contractor payments decreased \$0.9k, EKPC Payroll & Benefits decreased \$1.8k, Materials decreased \$2.3k,

Adjustment to accruals to match actual resulted in an increase of \$9.4k. Accruals for coal and ash testing

					1				ļ			8
512000 - SP01	Maintenance of Boiler Plant Spurlock 1	May	June	luς	y.	Aug		Sept		Oct		Nov
	Expense Dollars	\$ 65,109	\$ 4,080		0,518		ŝ	203,756		394,321	G	36,315
	Expense Dollars Change		\$ (61,029) \$		36,438	5 (29,035) \$	\$	192,273 \$		190,565		(358,006)
	Percent Change		%2 23°		203 09%			1674 41%		%23.52%		%b2 Ub-

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

June 18-

Project 03330- Contractor payments decreased \$9.8k, EKPC Payroll & Benefits decreased \$6k, Project 03501- Contractor payments decreased \$24.7k, EKPC Payroll & Benefits decreased \$0.6k, Materials decreased \$10.4k, Accruals increased \$0.7k

Adjustment to accruals to match actual resulted in a decrease of \$10.2k

July18-

Project 03330- Contractor payments increased \$23.1k, EKPC Payroll & Benefits increased \$3.5k, Project 03501- Contractor payments increased \$5.9k, Accruals increased \$0.7k

Adjustment to accruals to match actual resulted in an increase of \$3.2k TR rebuild on electrostatic precipitator

August18-

Project 03330- Contractor payments decreased \$23.9k, EKPC Payroll & Benefits decreased \$1.8k, Materials decreased \$4,9k, Project 03501- Contractor payments increased \$0.3k, EKPC Payroll & Benefits increased \$4.5k, Accruals increased \$0.1k Adjustment to accruals to match actual resulted in a decrease of \$3.3k.

September 18-

Project 03330- Contractor payments increased \$55.2k, EKPC Payroll & Benefits increased \$3.3k, Materials increased \$14.1k, Project 03501- Contractor payments increased \$81k, EKPC Payroll & Benefits increased \$6.7k, Accruals increased \$31.9k Precipitator repairs and vac truck services

Adjustment to accruals to match actual resulted in an increase of \$0.1k

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

October18-

Project 03330- Contractor payments increased \$169.3k, EKPC Payroll & Benefits increased \$4.7k, Materials decreased \$9.1k, Project 03501- Contractor payments increased \$102.6k, EKPC Payroll & Benefits decreased \$9.3k, Accruals decreased \$67.1k Continued precipitator repairs and vac truck services

Adjustment to accruals to match actual resulted in a decrease of \$0,5k,

November18-

Project 03330- Contractor payments decreased \$223.3k, EKPC Payroll & Benefits decreased \$9.8k, Materials increased \$5.2k, Project 03501- Contractor payments decreased \$183.7k, EKPC Payroll & Benefits increased \$0.1k, Accruals increased \$51.9k Adjustment to accruals to match actual resulted in an increase of \$1.6k.

512000 - SP02	Maintenance of Boiler Plant Spurlock 2	May	June		VINC	A	Aug		Sept	-	Oct	ž	Nov
	Expense Dollars	\$ 29,583	69	33 \$	33,894	6	(1,702)	ı.	57,042	60	13,123	6	72,113
	Expense Dollars Change		\$ 2,1	2,150 \$	2,161		(35,596)	₩	58,744	κA	(43,919) \$	4	58,990
	Percent Change		7.2	7%	6.81%		05 02%	'	451.47%		-76.99%	4	49.52%

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

August18-

Project 03330- Contractor payments decreased \$2.4k, EKPC Payroll & Benefits decreased \$4.8k, Materials decreased \$16.5k, Project 03501- Contractor payments decreased \$5.9k, EKPC Payroll & Benefits increased \$1.7k, Materials increased \$0.6k,

Adjustment to accruals to match actual resulted in a decrease of \$8.3k. Transformer rectifier moved to inventory

September18-

Project 03501- Contractor payments increased \$2.2k, EKPC Payroll & Benefits decreased \$5.1k, Materials decreased \$0.6k, Project 03330- Contractor payments increased \$55k, EKPC Payroll & Benefits increased \$5.3k, Materials decreased \$0.2k, Precipitator repairs

Adjustment to accruals to match actual resulted in an increase of \$2.1k

October18-

Project 03330- Contractor payments decreased \$56.8k, EKPC Payroll & Benefits decreased \$5.5k, Materials increased \$21.1k, Project 03501- Contractor payments decreased \$2,2k, EKPC Payroll & Benefits increased \$2,6k, Precipitator repairs

Adjustment to accruals to match actual resulted in a decrease of \$3.1k.

November18-

Project 03330- Contractor payments decreased \$0.5k, EKPC Payroll & Benefits increased \$11.9k, Materials increased \$5.2k, Project 03501- Contractor payments increased \$33.1k, EKPC Payroll & Benefits increased \$5.3k, Materials increased \$3.6k, SCR cleaning for fall outage

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

512000 - SP03	Maintenance of Boiler Plant Gilbert	May	June	July		Sept	Oct	Nov
	Expense Dollars	1,512,125	157,611	148,296	121,368	135,614		53,391
	Expense Dollars Change		(1,354,514)	(9,315)		14,246		(75,554)
	Percent Change		-89.58%	-5.91%		11 74%		-58.59%

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

June18-

Project 03206- Contractor payments decreased \$674.9k, EKPC Payroll & Benefits decreased \$103.1k, Materials decreased \$48.3k, Accruals decreased \$321.8k Project 03350- Contractor payments decreased \$80.5k, EKPC Payroll & Benefits decreased \$3.1k, Materials decreased \$18.9k, Accruals decreased \$97.7k Refractory repairs prior month

Adjustment to accruals to match actual resulted in a decrease of \$6.2k

August18-

Project 03206- Contractor payments decreased \$32.2k, EKPC Payroll & Benefits decreased \$21.3k, Materials increased \$41.3k, Accruals increased \$27.1k Project 03350- Contractor payments decreased \$33.3k, EKPC Payroll & Benefits increased \$0.3k, Materials increased \$2k, Accruals decreased \$7.2k Replaced bushings and bearings

Adjustment to accruals to match actual resulted in a decrease of \$3.6k

September18-

Project 03206- Contractor payments increased \$29k, EKPC Payroll & Benefits increased \$24.9k, Materials decreased \$6.5k, Accruals increased \$17.2k Project 03350- Contractor payments increased \$9k, EKPC Payroll & Benefits decreased \$5.1k, Materials decreased \$2k, Accruals increased \$3.6k Shaft assembly plug replacements

Adjustment to accruals to match actual resulted in an increase of \$6,1k,

November18-

Project 03206- Contractor payments decreased \$58,1k, EKPC Payroll & Benefits decreased \$40,4k, Materials increased \$9,6k, Accruals increased \$0,8k Project 03350- Contractor payments decreased \$1.2k, EKPC Payroll & Benefits increased \$6.7k, Materials increased \$0.5k, Accruals increased \$5.1k Beginning of planned 2018 outage repairs

Adjustment to accruals to match actual resulted in an increase of \$1.4k.

512000 - SP04	Maintenance of Boiler Plant Spurlock 4	May	June	July	Aug	Sept	Oct	Nov
	Expense Dollars	170,306	77,283	174,888	127,155	51,868	269,428	235,981
	Expense Dollars Change		(93,023)	97,605	(47,733)	(75,287)	217,560	(33,447)
	Percent Change		-54.62%	126.30%	-27 29%	-59.21%	419.45%	-12,41%

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

June18-

Project 03206- Contractor payments decreased \$109.6k, EKPC Payroll & Benefits increased \$18.6k, Materials increased \$3.5k, Accruals increased \$32.8k Project 03350- Contractor payments decreased \$22k, EKPC Payroll & Benefits increased \$14.3k, Materials decreased \$2.6k, Accruals decreased \$6.2k Adjustment to accruals to match actual resulted in a decrease of \$21.8k.

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

July18-

Project 03206- Contractor payments increased \$49.5k, EKPC Payroll & Benefits increased \$1.1k, Materials increased \$35.9k, Accruals increased \$9.9k Project 03350- Contractor payments decreased \$16.2k, EKPC Payroll & Benefits decreased \$5.5k, Accruals increased \$19.9k Power Module repairs

Adjustment to accruals to match actual resulted in an increase of $33.0k_{\odot}$

August18-

Project 03206- Contractor payments decreased \$12,8k, EKPC Payroll & Benefits decreased \$0,6k, Materials decreased \$36,7k, Accruals decreased \$8,6k Project 03350- Contractor payments decreased \$7,1k, EKPC Payroll & Benefits increased \$5,2k, Materials increased \$19,6k, Accruals decreased \$3,5k Adjustment to accruals to match actual resulted in a decrease of \$3,2k.

September18-

Project 03206- Contractor payments increased \$16.2k, EKPC Payroll & Benefits decreased \$15.6k, Materials decreased \$3.5k, Accruals decreased \$43.2k Project 03350- Contractor payments decreased \$7.3k, EKPC Payroll & Benefits decreased \$12.2k, Materials decreased \$16.4k, Accruals increased \$6.3k Refractory repairs

Adjustment to accruals to match actual resulted in an increase of \$0,4k.

October18-

Project 03206- Contractor payments increased \$122.4k, EKPC Payroll & Benefits increased \$27.3k, Materials increased \$19.5k, Accruals increased \$49.4k Project 03350- Contractor payments increased \$17k, EKPC Payroll & Benefits increased \$4k, Materials increased \$0,4k, Accruals decreased \$21,5k Repairs on T&M forced outage (tube leak)

Adjustment to accruals to match actual resulted in a decrease of \$0.9k

November18-

Project 03206- Contractor payments increased \$13.6k, EKPC Payroll & Benefits decreased \$19.6k, Materials decreased \$14.6k, Accruals decreased \$42k Project 03350- Contractor payments decreased \$1.3k, EKPC Payroll & Benefits increased \$12.1k, Materials increased \$12.5k, Accruals increased \$15.2k

Adjustment to accruals to match actual resulted in an increase of \$1.6k.

May June July Aug Sept Oct Oct Dollars \$ 30,703 \$ 35,703 \$ 66,899 \$ 101,902 \$ 463,618 \$ 319,532 \$ Change \$ 5,000 \$ 31,196 \$ 35,003 \$ 361,716 \$ (144,086) \$ (13,026) \$ 31,06% -31,08%					-				ľ	-		ŀ		1
\$\$\$\$ 30,703 \$\$\$ 35,703 \$\$\$\$ 66,899 \$\$\$\$101,902 \$\$\$\$463,618 \$\$\$319,532 \$\$\$ \$\$\$\$5,000 \$\$\$31,196 \$\$\$35,003 \$\$36,1716 \$\$\$(144,086) \$\$\$ \$\$\$\$16,29% \$\$7,38% \$\$5,232% \$\$\$54,96% \$\$31,08%	512000 - SP21	Maintenance of Boiler Plant Scrubber 1	May	June	_	July		Aug	s	pt	Oct	_	Nov	-
\$ 5,000 \$ 31,196 \$ 35,003 \$ 361,716 \$ (144,086) \$ 16.29% 87,38% 52,32% 354,96% -31,08% -31,08%		Expense Dollars	\$ 30,703		\$	66'839	ю	101,902	G	3,618 \$	319,53	\$	91,107	-
16.29% 87.38% 52.32% 354.96% -31.08%		Expense Dollars Change		\$ 5,00	\$	31,196	ю	35,003	ю	31,716 \$	3 (144,08	\$ (9	(228,425)	_
		Percent Change		16.29	%	87.38%		52.32%		64 96%	-31.08	%	-71.49%	

June18-

Project 03521- Contractor payments decreased \$14,7k, EKPC Payroll & Benefits decreased \$9.4k, Materials increased \$17,1k, Accruals increased \$3k 2018 contract to provide preventative and daily maintenance

Adjustment to accruals to match actual resulted in an increase of \$9.0k

July18-

Project 03521- Contractor payments decreased \$1k, EKPC Payroll & Benefits increased \$7,1k, Materials decreased \$8,3k, Accruals increased \$34,6k Contract maintenance and repairs

Adjustment to accruals to match actual resulted in a decrease of \$1.2k

August18-

Project 03521- Contractor payments increased \$36k, EKPC Payroll & Benefits decreased \$5.1k, Materials increased \$5.2k, Pump install

Adjustment to accruals to match actual resulted in a decrease of \$1.1k

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

September18-

Project 03521- Contractor payments increased \$120.5k, EKPC Payroll & Benefits increased \$7.5k, Materials increased \$1.4k, Accruals increased \$236.3k Scaffolding, vac trucks, outage repairs

Adjustment to accruals to match actual resulted in a decrease of \$4.0k

October18-

Project 03521- Contractor payments increased \$228.2k, EKPC Payroll & Benefits increased \$17.2k, Materials increased \$34.3k, Accruals decreased \$442.1k Outage repairs completed prior month

Adjustment to accruals to match actual resulted in an increase of \$18.3k.

November18

Project 03521- Contractor payments decreased \$358.9k, EKPC Payroll & Benefits decreased \$32.5k, Materials decreased \$25.6k, Accruals increased \$188.9k Inlet repairs, re-insulate, SIRE cleaning

Adjustment to accruals to match actual resulted in a decrease of \$0.3k

512000 - SP22	Maintenance of Boiler Plant Scrubber 2	May	June	July	Aug	9	Sept		Oct		Nov
	Expense Dollars	\$ 114,798	с сэ	69		5,244	-	69 (P)	139,082	ь	645,209
	Expense Dollars Change		\$ 76,884	\$ (24,844) \$		(41,594)	\$ 59,095	\$	(45,257) \$		506,127
	Percent Change		66.97%			4.93%		%	-24.55%		363.91%

June 18-

Project 03521- Contractor payments increased \$57.9k, EKPC Payroll & Benefits increased \$6.6k, Materials decreased \$43.2k, Accruals increased \$31.2k Contract maintenance and outage inspection

Adjustment to accruals to match actual resulted in an increase of \$24.4k

July18-

Project 03521- Contractor payments decreased \$48,5k, EKPC Payroll & Benefits decreased \$4.9k, Materials increased \$9.2k, Accruals increased \$24,1k Adjustment to accruals to match actual resulted in a decrease of \$4 7k.

August18-

Project 03521- Contractor payments increased \$12 7k, EKPC Payroll & Benefits decreased \$3.7k, Materials decreased \$1.9k, Accruals decreased \$42.1k Adjustment to accruals to match actual resulted in a decrease of \$6.6k.

September18-

Project 03521- Contractor payments decreased \$6.1k, EKPC Payroll & Benefitis increased \$1.2k, Materials increased \$20.5k Contract maintenance and boiler cleaning

Adjustment to accruals to match actual resulted in an increase of \$11.1k.

October18-

Project 03521- Contractor payments decreased \$45.3k, EKPC Payroll & Benefits increased \$2.8k, Materials decreased \$29.9k, Accruals increased \$1.6k Adjustment to accruals to match actual resulted in an increase of \$25.5k

November18

Project 03521- Contractor payments increased \$201.5k, EKPC Payroll & Benefits increased \$16k, Materials increased \$51.3k, Accruals increased \$287.6k Contract maintenance and scaffolding/repairs for fall outage

Adjustment to accruals to match actual resulted in a decrease of \$50.3k

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

Expense Dollars S	506002 - DA00	Misc Stm Pwr Env - Dale	May	June	July	Aug		Sept	4	Oct	~	Nov
Expense Dollars Change 5 <td></td> <td>Expense Dollars \$</td> <td></td> <td>ہ ب</td> <td>' s</td> <td>63</td> <td>.,</td> <td></td> <td>69</td> <td>ŝî.</td> <td>S</td> <td></td>		Expense Dollars \$		ہ ب	' s	63	.,		69	ŝî.	S	
Percent Change 0.00%		Expense Dollars Change		, Ф	ч 9	Ф	1		Э	ŝ.	69	
Misc Stm Pwr Env - Cooper May June July Aug Sept Oct N Expense Dollars Change Expense Dollars Change \$ 825 \$ 307 11,709 \$ 12,776 \$ 49,477 \$ 5,994 \$ 5 Expense Dollars Change \$ 825 \$ 5,071 \$ 11,402 \$ 11,402 \$ 36,701 \$ 13,309% \$ -87,303 \$ -87,303 \$ -87,303 \$ -87,309 \$ -73,303 \$ -87,309 \$ -86,309 \$ -11,402 \$ 20,620 \$ 2,350 \$ 2,350 \$ 2,350 \$ 2,350 \$ 2,350 \$ 2,350 \$ 2,350 \$ 2,357 \$ 245,420 \$ (18,270) \$ 29,16 \$ -45,420 \$ (14,256 \$ -72,10% \$ 245,420 \$ -12,178 \$ 27,06% \$ 23,70% \$ -72,10% \$ 245,420 \$ -14,425 \$ -14,425 \$ -72,10%		Percent Change		%00 0	00.00		%00	00'00	%	0,00%		0.00%
Misc Stm Pwr Env - Cooper May June July Aug Sept Oct N Expense Dollars Change Expense Dollars Change \$ 825 \$ 307 11,709 \$ 12,776 \$ 49,477 \$ 5,994 \$ 5 Expense Dollars Change \$ 825 \$ 307 11,402 \$ 11,607 \$ 1067 \$ 36,701 \$ (43,483) \$ -87,29% \$ 5,994 \$ -87,89% \$ -81,89% \$ -81,89% \$ -12,17% \$ -46,336 \$ -46,336 \$ -46,320 \$ -46,320 </td <td></td>												
Expense Dollars Change 5 307 11,709 5 12,776 5 49,477 5 5,994 5 Expense Dollars Change Percent Change 5 (518) 5 11,402 5 1,067 5 36,701 5 5,994 5 Percent Change -62.79% 3714,01% 5 1,1402 5 1,1402 5 36,701 5 5,994 5 -67.89% -67.89% 5 -67.10% 287,27% 287,27% -87,89% -77.89% -77.89% -77.89% -77.89% -77.89% -77.89% -77.80% -77.10% 287,27% 5 946,336 5 -76.40% 5 -62.79% -77.10% 287,27% -76.40% 5 -67.10% 7 5 -46,336 5 -77.10% 7.2.10% 286,52% 5 -72.10% -72.10% 2.465,22% 5 -72.40% -72.10% -72.10% -72.10% -72.10% -72.10% -72.10% -72.10% -72.10% -72.10% -72.10% -72.10% -72.10% -72.10% -72.10% -72.10% -72.10%	506002 - CP00	Misc Stm Pwr Env - Cooper	May	June	July	Aug		Sept	┝	Oct	2	2
Expense Dollars Change \$ (518) \$ 11,402 \$ 36,701 \$ (43,483) \$ -82,79% \$ -87,27% \$ -87,27% \$ -87,29% >87,89% > > >			8		11,705	\$	776 \$	3 49,47	_	5,994	s	1,572
Percent Change -62.79% 3714.01% 9.11% 287.27% -87.89% -87.89% - Misc Stm Pwr Env - Spurlock May June July Aug Sept Oct N Expense Dollars \$ 8.442 \$ 2.350 \$ 3.383 \$ (2.367) \$ 46.336 \$ (45.420) \$ (18.270) \$ 39.70% \$ 7.270% \$ 456.52% \$ (18.270) \$ (18.270) \$ 39.70% \$ 7.27.10% 4958.52% \$ (14.25%) \$ (18.270) \$ 39.70% \$ 7.27.10% \$ 4958.52% \$ (14.25%) \$ (18.270) \$ 39.70% \$ 7.27.10% \$ 4958.52% \$ (14.25%) \$ (18.270) \$ 39.70% \$ 7.27.10% \$ 4958.52% \$ (14.25%) \$ (18.270) \$ 39.70% \$ 7.27.10% \$ 4958.52% \$ (18.27%) \$ (18.27%) \$ (18.27%) \$ (19.27%) \$ 2.357% \$ (19.27%) \$ (10.27%) \$ 2.367% \$ 39.70% \$ 7.27.10% \$ 2.356% \$ (10.27%) \$ 39.70% \$ 39.70% \$ 39.70% \$ 39.70% \$ 39.70% \$ 39.70% \$ 39.70% \$ 39.70% \$ 39.70% \$ 39.70% \$ 39.70%		Expense Dollars Change		\$ (518)	в	\$	067 \$	36,70		(43,483)	в	(4,422)
Misc Stm Pwr Env - Spurlock May June July Aug Sept Oct N Expense Dollars \$ 8,442 \$ 20,620 \$ 2,350 \$ 3,283 \$ 916 \$ 46,336 \$ 45,326 \$ 45,326 \$ 45,420 \$ 45,420 \$ 45,420 \$ 45,420 \$ 45,420 \$ 29,70% \$ 39,33 \$ (2,367) \$ 45,420 \$ 45,850 \$ 45,850		Percent Change		-62.79%			11%	287.27	%	-87 89%		73 77%
\$\$\$ 8,442 \$\$\$ 20,620 \$\$\$ 2,350 \$\$ 3,283 \$\$ 916 \$\$ 46,336 \$\$ \$\$\$\$ 12,178 \$\$ (18,270) \$\$ 933 \$\$ (2,367) \$\$ 45,420 \$\$ \$\$\$\$12,178 \$\$ (18,270) \$\$ 933 \$\$ (2,367) \$\$ 45,420 \$\$ \$\$\$\$144,25% -88,60% 39,70% -72,10% 4958,52% \$\$	506002 - SP00		May	June	July	Aug		Sept	_	Oct	2	٥٧
\$ 12,178 \$ (18,270) \$ 933 \$ (2,367) \$ 45,420 \$ 144,25% -88,60% 39,70% -72,10% 4958,52%					\$ 2,350	ф	-			46,336	÷	34,078
144.25% -88.60% 39.70% -72.10% 4958.52%		Expense Dollars Change			\$ (18,270	\$	933 \$; (2,36	_	45,420	\$	12,258)
		Percent Change		144.25%	-88,60%		%02	-72 10	%	4958 52%		26 45%
	Shenning Exper	Net Ammonia Misc Stm Dur Evn - Conner	Mav	ourl	And	Aun		Sant	-	+-0		2
nse-Ammonia Mise Stru Durr Evn - Cooner May Line Link Aur Sant Oct	VY 12 - 100000			1	1		t	ľ	+	135	1	
Misc Stm Pwr Exp - Cooper May June July Aug Sept Oct N						ю	_			17,719	Э	10,709
Misc Stm Pwr Exp - Cooper May June July Aug Sept Oct Expense Dollars \$ 2,711 \$ 44,742 \$ (17,964) \$ 26,447 \$ 13,574 \$ 17,719 \$		Expense Dollars Change		\$ 42,031	\$ (62,706	69	_		3)	4,145	ф	(7,010)
Misc Stm Pwr Exp - Cooper May June July Aug Sept Oct N Expense Dollars \$ 2,7711 \$ 44,742 \$ (17,964) \$ 26,447 \$ 13,574 \$ 17,719 \$ Expense Dollars Change \$ 42,031 \$ (62,706) \$ 44,411 \$ (12,873) \$ 4,145 \$		Percent Channe		1550.39%	-140-15%		70CC LVC-	AR R70	/0	20 5 40/		130 56%

506001 - CPxx	Misc Stm Pwr Exp - Cooper	May	June	_	July	Aug		Sept		Oct		Nov
	Expense Dollars	\$ 2,711 \$		\$	(17,964)	\$ 26,447	ь	13,574	ю	17,719	θ	10,709
	Expense Dollars Change		\$ 42,031 \$	\$		¢ 9	в	(12,873)	ю	4,145	ф	(7,010)
	Percent Change		1550 39%	%	-140 15%	-247 22%		-48.67%		30.54%		-39,56%

The monthly change in expense is due to the increase or decrease in Ammonia usage.

Operating Expense- Ammonia

506001 - CP22	Misc Stm Pwr Exp - Cooper Unit #2 AQCS	May	June	,	July	Aug		Sept	Oct	_	Nov
	Expense Dollars	\$ 39,121 \$			196,593	\$ 223,062	\$	161,114 \$		143,441 \$	66,326
	Expense Dollars Change		\$ 279,731 \$	-	(122,259)	\$ 26,469	\$	(61,948) \$	5 (17	(17,673) \$	Ŭ
	Percent Change		715.04%		-38.34%	13,46%	10%	-27 77%	-10	10.97%	-53.76%

The monthly change in expense is due to the increase or decrease in Ammonia usage.

Operating Expense-Ammonia

01 Misc Stm Pwr Exp - Spurlock 1	May	June	July	Aug	Sept	oct	Nov
Expense Dollars	\$ 31,968	\$ 34,295	6 3	6	69		FA
Expense Dollars Change		\$ 2,327	\$ 15,459	\$ 28,158	\$ (63,829) \$	\$ 35,404	\$ 33,786
Percent Change		7.28%					

The monthly change in expense is due to the increase or decrease in Ammonia usage.

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

EDEDA4 CDA2	Mice Steam Dower Exp. Shurlock 9	New	- Cont	hulv	Aur	Sont	č	ĺ	Nov
2010-100000	LEGILI LOVEL	INGY	2000	Ainc	- And	Copi	5		AON
	Expense Dollars	\$ 28,244	ю	\$ 46,879	\$ 58,710	\$ 35,957	ю	930 \$	3,861
	Expense Dollars Change		\$ 8,025	\$ 10,610	\$ 11,831	\$ (22,753)	ь	8,973	(41,069)
	Percent Change		28.41%	29.25%	25.24%			95%	-91.41%

The monthly change in expense is due to the increase or decrease in Ammonia usage.

Operating Expense-Ammonia and Limestone

506001 - SP03	Misc Steam Power Expense- Gilbert	May	٦u	June	٦ ۲	July	٩	Aug		Sept	Oct		Nov
	Ammonia Expense	\$ 11,010	ь в	23,208 \$		11,812) \$		41,454	ь	25,693 \$	5 22,8	314	41,82
	Limestone Expense	\$		26,413 \$	e	304,372 \$		327,629	ю	285,129 \$	191,	191,147 \$	340,95
	Limestone Tons Used	7,954		23,948		22,297		23,875		20,808	13	947	24,767
	Total Expense Dollars \$	\$ 118,991 \$		349,621 \$		292,560 \$		369,083	ь	310,822 \$	\$ 213,961	961 S	382,78
	Expense Dollars Change		\$ 23	230,630 \$		(57,061) \$		76,523	ю	(58,261) \$		61) \$	168,820
	Percent Change		10	193.82%	'	16.32%		26.16%		-15.79%		6%	78.90%

according to fluctuations in contract prices and freight cost per shipment of limestone, but the noted change in limestone primarily Limestone is stockpiled throughout the year and taken from the stockpile for usage. There may be slight variances in the cost reflects the level of stockpile usage by the unit for the month indicated.

June18 - Limestone expenses increased by \$218.4k and Ammonia expenses increased by \$12.2k

July18 - Limestone expenses decreased by \$22k and Ammonia expenses decreased by \$35k

August18 - Limestone expenses increased by \$23.3k and Ammonia expenses increased by \$53.3k

September18 - Limestone expenses decreased by \$42.5k and Ammonia expenses decreased by \$15.8k

October18 - Limestone expenses decreased by \$94k and Ammonia expenses decreased by \$2.9k Unit off-line for 10/1-10/13 November18 - Limestone expenses increased by \$149.8k and Ammonia expenses increased by \$19k

Operating Expense- Limestone and Magnesium

506001 - SP21	Misc Stm Pwr Exp- Spurlock 1	May	June	_	July	Aug	5	Sept		Oct		Νον
	Magnesium Expense	÷	\$ 25,918	18 \$	23,687	1	5,765		\$	15,319	εĐ	19,219
	Limestone Expense	\$ 46,634	\$ 63,1	63 \$	72,856		5,253	6	\$	74,989	ю	104,883
	Limestone Tons Used	4,372	5,8	92	6,771		8,817		~	6,937		9,676
	Expense Dollars \$	\$ 58,529	\$ 89,081	81 \$	96,543 \$		121,018	\$ 35,499 \$	\$	90,308	69	124,102
	Expense Dollars Change		\$ 30,552	52 \$	7,462		4,475	ھ	\$ (6	54,809	Ø	33,794
	Percent Change		52.20%	%0	8.38%	C	25.35%	-70.67%	%	154.40%		37.42%

according to fluctuations in contract prices and freight cost per shipment of limestone, but the noted change in limestone primarily Limestone is stockpiled throughout the year and taken from the stockpile for usage. There may be slight variances in the cost reflects the level of stockpile usage by the unit for the month indicated.

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

June18 - Limestone expenses increased by \$16.5k and Ammonia expenses increased by \$14k

August18 - Limestone expenses increased by \$22.4k and Ammonia expenses increased \$2.1k

September18 - Limestone expenses decreased by \$68.4k and Ammonia expenses decreased \$17,1k. Tons burned decreased by 6.3 tons

October18 - Limestone expenses increased \$48.1k and Ammonia expenses increased \$6.7k

November18 - Limestone expenses increased \$29.9k and Ammonia expenses increased \$3.9k

1,075 11,654 (240,573) 62,124 -79 48% 50.470 Nov ഗ ю Ś ю 302,697 8,194 127,723 174,974 2 78% 16,187 Oct Э Ь ю 69 294,503 (37,711) 114,677 179,826 16,649 -11 35% Sept 332,214 \$ 61,331 \$ 184,904 22 64% 147,310 17,114 Aug ю ф ю θ 270,883 (7,903) -2.83% 187,344 83,539 17,410 July ഗഗ ф 278,786 90,017 170,774 108,012 15,930 47.69% June ഗഗ 103,798 84,971 9,731 188,769 May 69 ю ю Expense Dollars Limestone Expense Magnesium Expense Limestone Tons Used Expense Dollars Change Percent Change Misc Stm Pwr Exp- Spurlock 2 **Operating Expense-Limestone and Magnesium** 506001 - SP22

according to fluctuations in contract prices and freight cost per shipment of limestone. but the noted change in limestone primarily Limestone is stockpiled throughout the year and taken from the stockpile for usage. There may be slight variances in the cost reflects the level of stockpile usage by the unit for the month indicated.

June18- Limestone expenses increased by \$67k and Ammonia expenses increased by \$23k

August18 - Limestone expenses decreased by \$2k and Ammonia expenses increased by \$63.3k

September18 - Limestone expenses decreased by \$5.1k and Ammonia expenses decreased by \$32.6k

November18 - Limestone expenses decreased by \$163.3k and Ammonia expenses decreased by \$77.3k

Operating Expension	perating Expense- Ammonia and Limestone											
506001 - SP04	Misc Stm Pwr Exp- Spurlock 4	May	June	J	July	Aug		Sept		Oct		Nov
	Ammonia Expense	\$ 30,270 \$	\$ 24,700 \$	Ь	(6,150) \$		1,705		69	16,393	φ	43,668
	Limestone Expense	с Ф	\$ 370,768	ся ся	341,240		389,512 \$	\$ 210,575 \$	\$	132,420 \$	ω	415,603
	Limestone Tons Used	26,095			24,985		28,383			9,661		30,190
	Expense Dollars	10	.,	Ь	335,090 \$		3,217		⇔	148,813 \$	ю	459,271
	Expense Dollars Change		\$ 11,128	в	(60,378) \$		98,127 \$	-	\$	(80,978) \$	ю	310,458
	Percent Change		2.90%		-15.27%	29	29 28%	46.96%	20	-35.24%		208,62%

. 0

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

July18 - Limestone expenses decreased by \$29,5k and Ammonia expenses decreased by \$30.9k

August18- Limestone expenses increased by \$48.3k and Ammonia expenses increased by \$49.9k

September18 - Limestone expenses decreased by \$178.9k and Ammonia expenses decreased by \$24.5k Unit off-line 9/17-9/24

October18 - Limestone expenses decreased by \$78,2k and Ammonia expenses decreased by \$2,8k Unit off-line 10/1-10/20 November18 - Limestone expensed increased by \$283.2k and Ammonia expenses increased by \$27.3k

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 06/05/19 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 November 30, 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.

<u>Responses 5a-d.</u> Please see the response included on file "Response 5 – Debt Cost & Weighted Aver Debt Cost – 11-30-18.xlsx". The debt cost for each debt issuance is at a fixed interest rate. EKPC is proposing a weighted average cost of debt of 4.031% based on the debt cost for each debt issuance directly related to the projects in the environmental compliance plan as of November 30, 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 6.047%.