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September 28, 2017

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PUBLIC SERVICE COMMISSION

Mr. John S. Lyons Deputy Executive Director - External Public Service Commission 211 Sower Boulevard Frankfort, Kentucky 40602

Re: PSC Case No. 2017-00326

Dear Mr. Lyons:

Please find enclosed for filing with the Commission in the above-referenced case, an original and seven copies of the responses of East Kentucky Power Cooperative, Inc., ("EKPC") to the Commission's Appendix B First Request for Information, contained in the Commission's Order dated August 31, 2107, and the Prepared Testimony of Isaac S. Scott on behalf of EKPC. Documents contained in this filing are also being filed on behalf of EKPC's member systems.

Please return a file-stamped copy to my office.

Very truly yours.

David S. Samford

Enclosures

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN EXAMINATION BY THE PUBLIC SERVICE COMMISSION OF THE ENVIRONMENTAL SURCHARGE MECHANISM OF EAST KENTUCKY POWER COOPERATIVE, INC. FOR THE TWO-YEAR BILLING PERIOD ENDING JUNE 30, 2017, AND THE PASS-THROUGH MECHANISM FOR ITS SIXTEEN MEMBER DISTRIBUTION COOPERATIVES

CASE NO. 2017-00326

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DIRECT TESTIMONY OF ISAAC S. SCOTT

ON BEHALF OF EAST KENTUCKY POWER COOPERATIVE, INC.

Filed: September 28, 2017

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.

I received a B.S. degree in Accounting, with distinction, from the University of Kentucky A. 6 in 1979. After graduation I was employed by the Kentucky Auditor of Public Accounts. 7 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**

Q. 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:

1 .		• Describe how EKPC and its Member Cooperatives have applied the environmental
2		surcharge mechanism and the pass through mechanism in a reasonable manner during
3		the period under review;
4		• Propose updating the rate of return used in the environmental surcharge calculation;
5		and
6		• Discuss EKPC and its Member Cooperatives' position concerning a roll-in of the
7		environmental surcharge into EKPC's wholesale base rates.
8	Q.	Is EKPC preparing testimony and responding to data requests on behalf of its
9		Member Cooperatives?
10	A.	Pursuant to the Commission's August 31, 2017 Order, EKPC is preparing testimony on
11		behalf of each Member Cooperative. The Member Cooperatives are: Big Sandy Rural
12		Electric Cooperative Corporation ("RECC"), Blue Grass Energy Cooperative Corporation,
13		Clark Energy Cooperative, Inc., Cumberland Valley Electric, Inc., Farmers RECC,
14		Fleming-Mason Energy Cooperative, Grayson RECC, Inter-County Energy Cooperative
15		Corporation, Jackson Energy Cooperative, Licking Valley RECC, Nolin RECC, Owen
16		Electric Cooperative, Salt River Electric Cooperative Corporation, Shelby Energy
17		Cooperative, Inc., South Kentucky RECC, and Taylor County RECC. EKPC is also
18		providing Response 2 to the Commission Staff's First Request for Information ("Staff's
19		First Request").
20	Q.	Have other EKPC representatives provided responses to Commission Staff's First
. 21		Request for Information in this proceeding?
22	A.	Yes. Mark Horn, Manager of Fuel and Emissions, has provided emission allowance
23		information in Response 3 to the Staff's First Request. Thomas Stachnik, Treasurer and

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Director of Finance, has provided the debt and average interest rate information in
 Response 5 to the Staff's First Request.

Q. Previous Commission Orders required EKPC to incorporate certain provisions into
 the calculation of the monthly environmental surcharge factors. Please comment on
 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.
- 9 10

• Compliance Plan Projects

As of the end of the two-year review period, EKPC has 14 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 and 2014-00252.⁵ 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

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

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

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

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

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

1		was required in Case No. 2015-00302 ⁶ to remove Project 5, Dale Low Nitrogen Oxide
2		Burners, and Project 10, Dale Continuous Monitoring Equipment, from the
3		environmental surcharge. The monthly environmental surcharge reports, incorporated
4		by reference in this case, show the capital costs for the remaining projects.
5	•	Base/Current Method
6		The surcharge mechanism, as shown in EKPC's Rate ES – Environmental Surcharge,
7		reflects the base/current method through the formula $MESF = CESF - BESF$. ⁷ As
. 8		shown in Response 1 to the Staff's First Request, EKPC's BESF is 0%.
9	•	Actual Emission Allowance Expense
10		EKPC included only actual sulfur dioxide ("SO2") and nitrogen oxide ("NOx")
11		emission allowance expense in the monthly filings.
11 12	•	emission allowance expense in the monthly filings. Return on Emission Allowance Inventory and Limestone Inventory
	•	
12	•	Return on Emission Allowance Inventory and Limestone Inventory
12 13	•	Return on Emission Allowance Inventory and Limestone Inventory EKPC has included a return on all environmental surcharge assets, including emission
12 13 14	•	Return on Emission Allowance Inventory and Limestone Inventory EKPC has included a return on all environmental surcharge assets, including emission allowances. This is addressed in Response 3 to the Staff's First Request. EKPC has
12 13 14 15	•	Return on Emission Allowance Inventory and Limestone Inventory EKPC has included a return on all environmental surcharge assets, including emission allowances. This is addressed in Response 3 to the Staff's First Request. EKPC has also included a return on its limestone inventory.
12 13 14 15 16	•	 Return on Emission Allowance Inventory and Limestone Inventory EKPC has included a return on all environmental surcharge assets, including emission allowances. This is addressed in Response 3 to the Staff's First Request. EKPC has also included a return on its limestone inventory. EKPC's emission allowance inventories for SO₂ and NO_x reflect operations under the
12 13 14 15 16 17	•	 Return on Emission Allowance Inventory and Limestone Inventory EKPC has included a return on all environmental surcharge assets, including emission allowances. This is addressed in Response 3 to the Staff's First Request. EKPC has also included a return on its limestone inventory. EKPC's emission allowance inventories for SO₂ and NO_x reflect operations under the Cross-State Air Pollution Rules ("CSAPR") along with a continuation of the Acid Rain

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

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

is consistent with the valuation afforded EPA allocated allowances under prior 1 2 programs. EKPC's SO₂ inventory as of the end of the review period reflects the allowances remaining from the Acid Rain program. The NO_x inventory as of the end 3 of the review period has a \$0 balance as all the allowances were issued under CSAPR. 4 Return on Construction Work in Progress ("CWIP"), Net of Allowance for Funds 5 **Used During Construction** 6 As approved in Case No. 2008-00115, EKPC has included a return on CWIP during 7 8 the period under review. **Rate of Return** 9 Five rates of return were in effect during the periods under review. For the expense 10 months of June and July 2015, the rate of return was 6.060%; which was approved by 11 the Commission in Case No. 2013-00324.⁸ For the expense months of August 2015 12 through February 2016, the rate of return was 6.063%, which was approved by the 13 Commission in Case No. 2014-00051.9 For the expense months of March 2016 through 14 July 2016, the rate of return was 6.045%, which was approved by the Commission in 15 Case No. 2015-00281.¹⁰ For the expense months of August 2016 through March 2017, 16 the rate of return was 6.041%, which was approved by the Commission in Case No. 17

⁸ See In the Matter of an Examination by the Public Service Commission of the Environmental Surcharge Mechanism of East Kentucky Power Cooperative, Inc. for the Two-Year Billing Period Ending June 30, 2013 and the Pass Through Mechanism for Its Sixteen Member Distribution Cooperatives, Order, Case No. 2013-00324, (Ky. P.S.C., Mar. 21, 2014).

⁹ See In the Matter of an Examination by the Public Service Commission of the Environmental Surcharge Mechanism of East Kentucky Power Cooperative, Inc. for the Six-Month Period Ending December 31, 2013 and the Pass-Through Mechanism for Its Sixteen Member Distribution Cooperatives, Order, Case No. 2014-00051, (Ky. P.S.C., Aug. 25, 2015).

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 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).

12016-00144.11For the expense months of April and May 2017, the rate of return was26.059%, which was approved by the Commission in Case No. 2016-00335.12In each3case, the Commission approved EKPC's request to incorporate a Times Interest Earned4Ratio ("TIER") of 1.50 in the determination of the rate of return.

EKPC's rate of return on environmental compliance rate base is determined by 5 multiplying the weighted average debt cost for the debt issuances directly related to 6 projects in the approved compliance plan times a stated TIER. The rate of return on 7 8 the environmental compliance rate base is updated to reflect current average debt cost at the conclusion of the six-month and two-year surcharge reviews.¹³ The use of debt 9 costs is based on the fact that all of EKPC's environmental compliance investments are 10 financed with long-term debt.¹⁴ The use of a 1.50 TIER was first approved by the 11 Commission in Case No. 2011-00032.¹⁵ This rate-making methodology is different 12 from that employed by investor-owned utilities. The rate of return for the 13

¹¹ See In the Matter of an Examination by the Public Service Commission of the Environmental Surcharge Mechanism of East Kentucky Power Cooperative, Inc. for the Six-Month Billing Period Ending December 31, 2015 and the Pass Through Mechanism for Its Sixteen Member Distribution Cooperatives, Order, Case No. 2016-00144, (Ky. P.S.C., Sept. 9, 2016).

¹² See In the Matter of an Examination by the Public Service Commission of the Environmental Surcharge Mechanism of East Kentucky Power Cooperative, Inc. for the Six-Month Billing Period Ending June 30, 2016, and the Pass Through Mechanism for Its Sixteen Member Distribution Cooperatives, Order, Case No. 2016-00335, (Ky. P.S.C., May 11, 2017).

¹³ 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.

¹⁴ 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.

¹⁵ See In the Matter of An Examination by the Public Service Commission of the Environmental Surcharge Mechanism of East Kentucky Power Cooperative, Inc. for the Six-Month Billing Period Ending 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.

1 environmental compliance rate base for investor-owned utilities reflects a weighted average cost of capital approach. The weighted average cost of capital reflects the 2 blended interest rates for the investor-owned utilities' long-term and short-term debt 3 and a return on the common equity. The weighted average cost of capital is then 4 "grossed up" for income taxes. Consequently, the rate of return for the investor-owned 5 6 utilities is higher than the rate of return proposed by or authorized for EKPC.¹⁶ When determining a reasonable TIER for the environmental surcharge rate of return, 7 consideration first must be given to the Debt Service Coverage Ratio ("DSC"), which 8 is EKPC's critical financial metric. This metric evaluates EKPC's ability to service 9 principal and interest payments and thus is more relevant to lenders than TIER, which 10 only considers interest payment. The two metrics can be related in that the margin 11 . required to achieve an acceptable DSC implies a TIER level. 12 EKPC's target annual DSC range is set forth in Board Policy 203, which states, "The 13 Debt Service Coverage Ratio (DSC) is a financial measurement of EKPC's ability to 14 repay its long-term debt and is computed as depreciation plus interest on long-term debt 15

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

Further, the credit rating agencies, Fitch Ratings ("Fitch") and Standard & Poor's ("S&P"), both prefer high DSC ratios to support EKPC's A- Stable and A Stable credit

¹⁶ 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	ratings respectively, which in turn result in lower cost of borrowings. In its October
2	2015 report on EKPC, Fitch had set a DSC of 1.25 as a threshold that would support
3	EKPC's upgrade to A-, which occurred in October 2016. The median DSC for A- rated
4	Generation and Transmission Cooperatives as of Fitch's June 16, 2017 Public Power
· 5	Peer Study was 1.49. S&P does not publish medians for ratings because its ratings are
6	based on several factors. However, S&P has repeatedly praised EKPC's DSC ratio
7	being at or above 1.25 for several years in its reports on EKPC announcing the upgrade
8	to an A rating. Moody's, which does not rate EKPC, targets a DSC of $1.2 - 1.4$ for
9	"A" rated 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.

For calendar years 2014, 2015, and 2016, EKPC's achieved DSC and TIER¹⁷ were as
follows:

Calendar Year Ending	DSC	TIER
December 31, 2014	1.30	1.52
December 31, 2015	1.26	1.44
December 31, 2016	1.32	1.48
Three-Year Averages	1.29	1.48

Note that because interest expense and depreciation change from year to year, the relationship between DSC and TIER is not locked in but should be recalculated. That

¹⁷ 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.

is, a DSC of 1.30 will not always imply a TIER of 1.50. Because DSC is the critical 1 2 metric, but not the only metric, for credit evaluation and financial performance, EKPC will strive to maintain the DSC near target and adjust the TIER accordingly over time. 3 Based upon the foregoing, EKPC proposes no change to the TIER component of the 4 5 rate of return. EKPC is proposing a rate of return of 6.075% in this proceeding, as shown in Response 5 to the Staff's First Request. EKPC's proposed rate of return is 6 consistent with the Settlement Agreement approved in Case No. 2004-00321, which 7 provided that the rate of return on compliance-related capital expenditures would be 8 updated to reflect current average debt cost as of the end of each six-month review 9 period. 10

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• 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?

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

21 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 May
- 23 2017 under-recovery to the June 2017 expense month, which was billed in July 2017. 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.

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

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

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

- A. Yes. The over- or under-recovery amounts for each Member Cooperative are shown in
 Response 2 to the Staff's First Request. The determination of the over- or under-recovery
 amounts has been prepared utilizing the revised methodology approved by the Commission
 in Case No. 2015-00281.
- This is the first two-year review since the adoption of the revised methodology approved in Case No. 2015-00281. Request 2 directs EKPC and the Member Cooperatives to prepare a summary schedule showing the Member Cooperative's pass-through revenue requirement for the months corresponding with the two-year review. In previous two-year reviews, EKPC prepared a response that combined the individual six-month revenue schedules into one schedule and presented the applicable over- or under-recovery amount

for each Member Cooperative. The revised methodology currently in use focuses on previously authorized amortizations of over- or under-recoveries outstanding as of the beginning of the review period and documents how the amortization flowed through the Member Cooperatives' revenue requirement calculations for the applicable six-month review period. It would be difficult to consolidate the format utilized with the current methodology into a single schedule as was previously done.

7 In order to be responsive to the request, EKPC is providing Excel spreadsheets for each 8 Member Cooperative that include four "tabs". The first three tabs provide the six-month schedules provided in the previous surcharge review cases, identified by the applicable 9 case number. The fourth tab covers the last six-months of the review period that has yet to 10 be reviewed and contains the determination of the over- or under-recovery for the current 11 review period. EKPC believes viewing all four schedules together accomplishes the 12 desired review of each Member Cooperative's revenue requirement during the review 13 period. 14

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

A. As approved in the Commission's November 5, 2010 Order in Case No. 2010-00021,¹⁸ the
Member Cooperatives propose that the over- or under-recovery amounts be amortized over
a period of six months beginning in the first month after the Commission's Order in this
proceeding.

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

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).

1	A.	Yes. As previously discussed, EKPC proposes an updated rate of return of 6.075%. This
2		updated rate of return reflects an average debt cost as of May 31, 2017 of 4.050% and a
3		TIER of 1.50. The determination of the average debt cost as of May 31, 2017 is shown in
4		Response 5 to the Staff's First Request. EKPC notes that its weighted average debt cost in
5		the five previous surcharge review cases and as reported in this case are relatively constant,
6		fluctuating no more than 0.30% between cases. While this is due in part to a favorable
7		interest rate environment, EKPC's ability to build equity is also a major contributor to this
8		trend.
9	Q.	When does EKPC propose to apply the updated rate of return in its surcharge
10		calculations?
11	A.	EKPC proposes to use the updated rate of return in the surcharge calculations in the first
12		month following the Commission's final Order in this proceeding.
13	Q.	Does EKPC believe that its environmental surcharge should be rolled into its
14		wholesale base rates?
15	A.	No. While EKPC is providing the information related to a potential roll-in of the
16		environmental surcharge into the wholesale base rates in Response 6 to the Staff's First
17		Request, EKPC does not believe it is appropriate at this time to roll its environmental
18		surcharge into its wholesale base rates.
19	Q.	Would you explain the reasons in support of EKPC's position?
20	A.	Yes. EKPC would initially note that whether or not there are amounts of environmental
21		costs incorporated into wholesale base rates, the effect on EKPC, the Member Systems,
22		and the retail ratepayer is that the total environmental revenue requirement should remain
23		the same. In addition, EKPC believes there are several reasons why a roll-in of the
24		environmental surcharge is not appropriate at this time.

1 First, like the environmental surcharge mechanisms approved for Kentucky Utilities Company, Louisville Gas and Electric Company, and Kentucky Power Company, the 2 environmental costs included in EKPC's revenue requirement represent both investment 3 costs and energy costs. As a general matter, investment costs are usually reflected in 4 5 demand charges while energy costs are reflected in the energy charge. Because both investment costs and energy costs make up the environmental costs, a roll-in of the 6 surcharge into base rates is more complicated than the roll-in performed in a two-vear fuel 7 8 adjustment clause proceeding. In the two-year fuel adjustment clause proceeding, only energy costs are rolled into the energy charge of base rates. If EKPC is required to roll-in 9 its environmental surcharge into its wholesale base rates, it believes the roll-in will have to 10 be allocated to both the demand and energy charges. Included in Response 6 is a rough 11 allocation of the calculated roll-in amount between demand and energy components. 12 Please note that this rough allocation assumes that the entire return on environmental 13 compliance rate base would be assigned to demand. A cost-of-service study would likely 14 assign the components of the environmental compliance rate base to both demand and 15 energy. - 16

Ideally, such an allocation should be performed utilizing a cost-of-service study. However, 17 there has not been any time in this review proceeding for EKPC to undertake a cost-of-18 service study that would provide a reasonable allocation of an environmental surcharge 19 roll-in into demand and energy related components. The belief that a cost-of-service study 20 should be the basis for allocating a surcharge roll-in between demand and energy rate 21 components is the primary reason why EKPC believes a roll-in of environmental costs 22 should occur at the time of a wholesale base rate case proceeding. Including a roll-in as 23 part of a wholesale base rate case would allow for the allocation of environmental costs in 24

a manner consistent with other costs through the utilization of a cost-of-service study. 1 EKPC notes that the Commission has accepted the argument that a surcharge roll-in should 2 be undertaken as part of a base rate case in previous environmental surcharge reviews.¹⁹ 3 The second reason concerns how the change in the wholesale base rates would be reflected 4 in the Member Systems' retail base rates. 5 When the Commission approved the environmental surcharge mechanism for EKPC and the corresponding pass-through 6 mechanism for the Member Systems, there was no discussion of how or when retail base 7 8 rates would be adjusted to reflect the change in the wholesale base rates resulting from the surcharge roll-in. Clearly any adjustment to the retail base rates should be accomplished 9 in the same proceeding as the roll-in to wholesale base rates and both changes in the base 10 rates become effective at the same time. If a surcharge roll-in was required as part of the 11 two-year review case, EKPC believes the necessary adjustments to the retail base rates 12 need to correspond as closely as possible to the change in the wholesale base rates. The 13 change in the wholesale demand-related base rates should be reflected in the corresponding 14 retail customer charges and demand base rates. The change in the wholesale energy-related 15 base rates should be reflected in the corresponding retail energy base rates. However, as a 16 surcharge roll-in during the two-year review to the wholesale base rates would not be cost-17

¹⁹ See In the Matter of an Examination by the Public Service Commission of the Environmental Surcharge Mechanism of Kentucky Power Company for the Six-Month Billing Periods Ending June 30, 2006 and December 31, 2006, and for the Two-Year Billing Period Ending June 30, 2007, Order, Case No. 2007-00381, p. 6 (Ky. P.S.C., Aug. 19, 2008); 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, 2009 and the Pass-Through Mechanism for Its Sixteen Member Distribution Cooperatives, Order, Case No. 2009-00317, p. 5 (Ky. P.S.C., Jan. 28, 2010); 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, 2011, p. 5 (Ky. P.S.C., Jan. 28, 2010); 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, 2011, for the Six-Month Billing Periods Ending December 31, 2011 and June 30, 2012, and the Pass-Through Mechanism for Its Sixteen Member Distribution Cooperatives, Order, Case No. 2012-00486, p. 5-6 (Ky. P.S.C., Aug. 2, 2013); also see the March 21, 2014 Order in Case No. 2013-00324, page 6 and the April 8, 2016 Order in Case No. 2015-00281, page 9.

of-service based, neither would the corresponding adjustment to the retail base rates be cost-of-service based.

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From May 2011 through August 2012, EKPC undertook a detailed rate design project that 3 looked closely at cost-of-service study results and the potential impacts on the Member 4 Systems. The Member Systems participated in numerous discussions held during this 5 period. One of the topics discussed extensively was whether or not the environmental 6 surcharge should be rolled into the wholesale base rates in conjunction with a base rate 7 8 proceeding. While there was a difference of opinion among the Member Systems concerning whether there should be a roll-in, the Member Systems were in general 9 agreement that a roll-in should only take place during a base rate proceeding. 10

As with a roll-in to its wholesale base rates, EKPC believes that the corresponding adjustment to retail base rates should be performed in conjunction with a base rate proceeding and not as part of a two-year surcharge review. The amount of the roll-in each Member System receives as a result of the change in wholesale base rates would be costof-service based.

A final reason is related to the disclosure of the cost of environmental compliance to retail 16 EKPC's currently approved environmental compliance plan contains 14 customers. 17 projects and the monthly surcharge filings reflect the investment costs and operating 18 expenses associated with those projects. The monthly cost of environmental compliance 19 will be known to EKPC even if there is a roll-in of the surcharge revenue requirement into 20 wholesale base rates. As there to date has been no roll-in of the environmental surcharge 21 into base rates, the Member Systems' monthly surcharge pass-through factors serve as a 22 means to disclose to the retail customer the cost of environmental compliance for the 23 approved projects. However, if there were a roll-in, a significant portion of the EKPC 24

1 monthly surcharge factor would be collected through wholesale base rates and the corresponding Member Systems' monthly surcharge pass-through factors would be 2 reduced. The monthly surcharge pass-through factors would no longer easily disclose to 3 retail customers the full cost of environmental compliance for the approved projects. 4 Several of the Member Systems believe it is important that retail customers be aware of 5 the full cost of environmental compliance for the approved projects and the impact this 6 compliance cost has on the monthly retail bill. Consequently, until an acceptable method 7 8 can be developed to facilitate transparency with regard to full cost of environmental compliance, EKPC and the Member Systems believe roll-in should not be undertaken as 9 part of the two-year review proceeding. 10

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.

17 Q. Does this conclude your testimony?

18 A. Yes it does.

BEFORE THE PUBLIC SERVICE COMMISSION

In re the Matter of:

AN EXAMINATION BY THE PUBLIC SERVICE)
COMMISSION OF THE ENVIRONMENTAL)
SURCHARGE MECHANISM OF EAST KENTUCKY)
POWER COOPERATIVE, INC. FOR THE TWO-) CASE NO.
YEAR BILLING PERIOD ENDING) 2017-00326
JUNE 30, 2017, AND THE PASS THROUGH)
MECHANISM FOR ITS SIXTEEN MEMBER)
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.

State at Large Kentucky My Commission Expires Nov 30, 2017

Subscribed and sworn before me on this 2% day of September 2017.

#500144 Notary Public GWYN M. WILLOUGHBY Notary Public

COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN EXAMINATION BY THE PUBLIC SERVICE)	
COMMISSION OF THE ENVIRONMENTAL)	
SURCHARGE MECHANISM OF EAST KENTUCKY)	
POWER COOPERATIVE, INC. FOR THE TWO-)	CASE NO.
YEAR BILLING PERIOD ENDING)	2017-00326
JUNE 30, 2017, AND THE PASS THROUGH)	
MECHANISM FOR ITS SIXTEEN MEMBER)	
DISTRIBUTION COOPERATIVES)	

RESPONSES TO COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION TO EAST KENTUCKY POWER COOPERATIVE, INC. DATED AUGUST 31, 2017

EAST KENTUCKY POWER COOPERATIVE, INC.

PSC CASE NO. 2017-00326

PUBLIC SERVICE COMMISSION REQUEST DATED 08/31/17

East Kentucky Power Cooperative, Inc. ("EKPC") hereby submits responses to the information requests contained in Appendix B to the Order of the Public Service Commission ("PSC") in this case dated August 31, 2017. Each response with its associated supportive reference materials is individually tabbed.

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN EXAMINATION BY THE PUBLIC SERVICE)	
COMMISSION OF THE ENVIRONMENTAL)	
SURCHARGE MECHANISM OF EAST KENTUCKY)	
POWER COOPERATIVE, INC. FOR THE TWO-)	CASE NO.
YEAR BILLING PERIOD ENDING)	2017-00326
JUNE 30, 2017, AND THE PASS THROUGH	Ĵ	
MECHANISM FOR ITS SIXTEEN MEMBER	Ĵ	
DISTRIBUTION COOPERATIVES	Ĵ	

CERTIFICATE

STATE OF KENTUCKY)) COUNTY OF CLARK)

Mark Horn, being duly sworn, states that he has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to the Public Service Commission Staff's Requests for Information contained in Appendix B in the above-referenced case dated August 31, 2017, and that the matters and things set forth therein are true and accurate to the best of his knowledge, information and belief, formed after reasonable inquiry.

Mark Horn

Subscribed and sworn before me on this 28^{H} day of September, 2017.

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

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN EXAMINATION BY THE PUBLIC SERVICE)	
COMMISSION OF THE ENVIRONMENTAL)	
SURCHARGE MECHANISM OF EAST KENTUCKY)	
POWER COOPERATIVE, INC. FOR THE TWO-)	CASE NO.
YEAR BILLING PERIOD ENDING)	2017-00326
JUNE 30, 2017, AND THE PASS THROUGH)	
MECHANISM FOR ITS SIXTEEN MEMBER)	
DISTRIBUTION COOPERATIVES)	

CERTIFICATE

STATE OF KENTUCKY)) COUNTY OF CLARK)

Isaac S. Scott, being duly sworn, states that he has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to the Public Service Commission Staff's Requests for Information contained in Appendix B in the above-referenced case dated August 31, 2017, and that the matters and things set forth therein are true and accurate to the best of his knowledge, information and belief, formed after reasonable inquiry.

State at Large Kentucky My Commission Expires Nov 30, 2017

Subscribed and sworn before me on this 28^{H} day of September, 2017.

Notary Public **GWYN M. WILLOUGHBY** Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN EXAMINATION BY THE PUBLIC SERVICE)	
COMMISSION OF THE ENVIRONMENTAL)	
SURCHARGE MECHANISM OF EAST KENTUCKY)	
POWER COOPERATIVE, INC. FOR THE TWO-)	CASE NO.
YEAR BILLING PERIOD ENDING)	2017-00326
JUNE 30, 2017, AND THE PASS THROUGH)	
MECHANISM FOR ITS SIXTEEN MEMBER)	
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 Requests for Information contained in Appendix B in the above-referenced case dated August 31, 2017, and that the matters and things set forth therein are true and accurate to the best of his knowledge, information and belief, formed after reasonable inquiry.

Run J. St

Subscribed and sworn before me on this 27^{th} day of September, 2017.

Notary Public **GWYN M. WILLOUGHBY** Notary Public State at Large Kentucky

My Commission Expires Nov 30, 2017

PSC Request 1 Page 1 of 1

EAST KENTUCKY POWER COOPERATIVE, INC. PSC CASE NO. 2017-00326 ENVIRONMENTAL SURCHARGE MECHANISM RESPONSE TO INFORMATION REQUEST

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 08/31/17 REQUEST 1

Isaac S. Scott

RESPONSIBLE PARTY:

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 two-year 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 to Request 1 included on the attached CD. As shown in the response, EKPC is not proposing any additional over- or under-recovery to be recognized for the two-year review. Please note that the calculations for the first 12 months of the review period reflect corrected monthly surcharge report filings. The corrections were addressed in the testimony and data responses submitted in Case Nos. 2016-00144 and 2016-00335.

PSC Request 2 Page 1 of 3

EAST KENTUCKY POWER COOPERATIVE, INC. PSC CASE NO. 2017-00326 ENVIRONMENTAL SURCHARGE MECHANISM RESPONSE TO INFORMATION REQUEST

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 08/31/17 REQUEST 2 RESPONSIBLE PARTY: Isaac S. Scott

Request 2. This question is addressed to EKPC and the Member Cooperatives. For each of the 16 Member Cooperatives, prepare a summary schedule showing the Member Cooperative's pass-through revenue requirement for the months corresponding with the two-year review. Include the two months subsequent to the billing period included in the applicable review period. Include a calculation of any additional over- or under-recovery amount the distribution cooperative believes needs to be recognized for the two-year 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 response to Request 2 included on the attached CD. 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.

EKPC and the Member Cooperatives have been requested to prepare a summary schedule showing the Member Cooperative's pass-through revenue requirement for the months corresponding with the two-year review. In previous two-year reviews, EKPC prepared responses that combined the individual six-month revenue schedules into a single schedule and presented the applicable over- or under-recovery amount for each Member Cooperative. As noted in Mr. Scott's direct testimony, this is the first two-year review since the adoption of the revised methodology approved in Case No. 2015-00281. The revised methodology focuses on previously authorized amortizations of over- or under-recoveries outstanding as of the beginning of the review period and documents how the amortization flowed through the Member Cooperatives' revenue requirement for the applicable six-month review period. Given the format structure under the current methodology, it would be difficult to consolidate the format utilized into a single schedule for each Member Cooperative as was previously done.

As an alternative to a single consolidated schedule for each Member Cooperative, EKPC has prepared Excel spreadsheets for each Member Cooperative composed of four "tabs". The tabs correspond to the current and three previous surcharge reviews initiated by the Commission. For the three previous surcharge reviews, the tab contains the appropriate six-month schedule that was filed for that review case. The fourth tab contains the six-month schedule for the current review case and includes the determination of the proposed over- or under-recovery. This presentation shows the interconnection between the four calculations of over- and under-recovery for the entire two-year review period. Reviewed together, EKPC believes this approach

is responsive to and provides the information requested. EKPC requests that the Commission accept this presentation approach.

Please note that rounding differences in the amortization amounts that first appear on the "Previous 2016-00335" tab were addressed in Case No. 2016-00335 when the Commission adopted EKPC's proposed treatment for rounding differenced encountered in that review and all subsequent reviews. Please see pages 5 and 6 of the Commission's May 11, 2017 Order in Case No. 2016-00335.

Please note that Line 1c on the schedules provided on the "Previous 2017-00071" tab showed a zero over- or under-recovery from Case No. 2016-00335. At the time the original schedule was submitted, Case No. 2016-00335 was in process and the Commission had not issued a final Order determining the applicable over- or under-recovery. The entry was included in order to account for all surcharge review cases and did not affect the over- or under-recovery determination for that particular six-month review case.

PSC Request 3 Page 1 of 1

EAST KENTUCKY POWER COOPERATIVE, INC. PSC CASE NO. 2017-00326 ENVIRONMENTAL SURCHARGE MECHANISM RESPONSE TO INFORMATION REQUEST

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 08/31/17 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 purchases of SO_2 or NO_x emission allowances were made during the period of June 1, 2015 through May 31, 2017.

PSC Request 4

Page 1 of 10

EAST KENTUCKY POWER COOPERATIVE, INC. PSC CASE NO. 2017-00326 ENVIRONMENTAL SURCHARGE MECHANISM RESPONSE TO INFORMATION REQUEST

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 08/31/17 REQUEST 4 RESPONSIBLE PARTY: Isaac S. Scott

Request 4. This question is addressed to EKPC. Refer to Form 2.5, Operating and Maintenance Expenses, for the December 2016 to May 2017 expense months. 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 10 of this response.

East Kentucky Power Cooperative, Inc. Environmental Surcharge Operating and Expense Month over Month Analysis For the Expense Period December 2016 - May 2017

501010 - SP03	Fuel Coal Gilbert	Nov	Dec	Jan	Feb	Mar	Apr		Мау
400-2610	Expense Dollars	\$ 76,633	\$ 104,355	\$ 41,100	\$ 62,518	\$ 117,737	\$ 100,414	\$	1,225
	Expense Dollars Change		\$ 27,722	\$ (63,256)	\$ 21,418	\$ 55,219	\$ (17,323)	\$	(99,188)
	Percent Change		36.17%	-60.62%	52.11%	 88.33%	-14.71%	L	-98.78%

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	\$ 57,908	\$ 117,220	\$ 125,106	\$ 73,146	\$ 27,034	\$ 17,494	\$ 119,837
	Expense Dollars Change		\$ 59,312	\$ 7,886	\$ (51,960)	\$ (46,112)	\$ (9,540)	\$ 102,343
	Percent Change		102.43%	6.73%	-41.53%	-63.04%	-35.29%	585.02%

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	\$ 66,447	\$	-	\$ (0)	\$ -	\$ -	\$ -	\$ -
	Expense Dollars Change		\$	(66,447)	\$ (0)	\$ 0	\$ -	\$ -	\$ -
	Percent Change			-100.00%	0.00%	0.00%	0.00%	0.00%	0.00%

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

512000 - CPxx	Mtc of Cooper (Unit 2 AQCS)	Nov	Dec	Jan	Feb	 Mar	Apr	<u> </u>	May
	Expense Dollars	\$ 42,895	\$ 78,496	\$ 27,024	\$ 4,599	\$ 150,802	\$ 365,071	\$	37,271
	Expense Dollars Change		\$ 35,601	\$ (51,472)	\$ (22,425)	\$ 146,203	\$ 214,269	\$	(327,800)
	Percent Change		83.00%	-65.57%	-82.98%	3178.76%	142.09%	l	-89.79%

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

December16-

Project 03350- EKPC Payroll & Benefits decreased \$4.3k, Accruals decreased \$0.3k Project 03351- Contractor payments increased \$27.8k, EKPC Payroll & Benefits increased \$2.2k, Materials increased \$0.2k, Accruals increased \$10k

January17-

Project 03350- Contractor payments increased \$0.6k, EKPC Payroll & Benefits decreased \$2.1k, Materials increased \$0.5k, Accruals increased \$7.3k Project 03351- Contractor payments decreased \$5.5k, EKPC Payroll & Benefits decreased \$2.2k, Accruals decreased \$0.8k Adjustment to accruals to match actual resulted in a decrease of \$49.1k.

February17-

Project 03350- Contractor payments increased \$1k, EKPC Payroll & Benefits increased \$0.2k, Materials increased \$0.8k, Accruals decreased \$8.1k Project 03351- Contractor payments increased \$3k, EKPC Payroll & Benefits increased \$5.7k, Materials increased \$5.9k, Accruals decreased \$5.6k Adjustment to accruals to match actual resulted in a decrease of \$25.3k.

March17-

Project 03350- Contractor payments increased \$0.9k, EKPC Payroll & Benefits decreased \$1.1k, Materials decreased \$1.3k, Accruals increased \$1.1k Project 03351- Contractor payments increased \$2.6k, EKPC Payroll & Benefits decreased \$4.3k, Materials decreased \$5.8k, Accruals decreased \$5.6k Adjustment to accruals to match actual resulted in an increase of \$159.7k.

East Kentucky Power Cooperative, Inc. Environmental Surcharge Operating and Expense Month over Month Analysis For the Expense Period December 2016 - May 2017

April17-

Project 03350- Contractor payments decreased \$2.2k, EKPC Payroll & Benefits increased \$4.3k, Materials increased \$2.2k, Project 03351- Contractor payments decreased \$5.6k, EKPC Payroll & Benefits increased \$3.8k, Materials decreased \$0.1k, Accruals increased \$5.6k Adjustment to accruals to match actual resulted in an increase of \$206,3k.

May17-

Project 03350- Contractor payments increased \$8.4k, EKPC Payroll & Benefits increased \$6k, Materials decreased \$2k, Accruals decreased \$6.7k Project 03351- EKPC Payroll & Benefits decreased \$3.3k, Materials increased \$0.3k, Adjustment to accruals to match actual resulted in a decrease of \$330.5k.

51200	0 - SP01	Mtce of Boiler Plant Spurlock 1	Nov	Dec	Jan	Feb	Mar	Apr	May
		Expense Dollars	\$ 38,742	\$ 94,596	\$ 13,679	\$ 20,773	\$ 20,861	\$ 10,700	\$ 17,602
	1	Expense Dollars Change		\$ 55,854	\$ (80,917)	\$ 7,094	\$. 88	\$ (10,161)	\$ 6,903
		Percent Change		144.17%	-85.54%	51.86%	0.42%	-48.71%	64.51%

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

December16-

Project 03330- Contractor payments decreased \$220.7k, EKPC Payroll & Benefits increased \$5.8k, Materials increased \$5.2k, Accruals increased \$22k Project 03501- Contractor payments decreased \$32.7k, EKPC Payroll & Benefits increased \$8.7k, Materials increased \$7.4k, Accruals increased \$43.9k Adjustment to accruals to match actual resulted in an increase of \$15.2k.

January17-

Project 03330- Contractor payments decreased \$0.2k, EKPC Payroll & Benefits decreased \$2.1k, Materials decreased \$4k, Accruals decreased \$2.2k Project 03501- Contractor payments increased \$31.4k, EKPC Payroll & Benefits decreased \$1.4k, Materials increased \$7k, Accruals increased \$10.6k Adjustment to accruals to match actual resulted in a decrease of \$120k.

February17-

Project 03330- Contractor payments decreased \$0.4k, EKPC Payroll & Benefits decreased \$0.6k, Materials decreased \$1.2k, Accruals increased \$0.7k Project 03501- Contractor payments increased \$7.8k, EKPC Payroll & Benefits increased \$0.8k, Materials decreased \$0.8k, Accruals increased \$1.5k Adjustment to accruals to match actual resulted in a decrease of \$0.7k.

April17-

Project 03330- EKPC Payroll & Benefits increased \$0.8k, Accruals increased \$0.1k

Project 03501- Contractor payments increased \$27.9k, EKPC Payroll & Benefits increased \$13.5k, Materials increased \$13.7k, Accruals decreased \$7.5k Adjustment to accruals to match actual resulted in a decrease of \$38.3k.

May17-

Project 03330- EKPC Payroll & Benefits increased \$4.9k, Accruals increased \$2k

Project 03501- Contractor payments decreased \$29.6k, EKPC Payroll & Benefits decreased \$11.8k, Materials decreased \$13.7k, Accruals increased \$11.3k Adjustment to accruals to match actual resulted in an increase of \$43.8k.

512000 - SP02	Mtce of Boiler Plant Spurlock 2	Nov	Dec	Jan	Feb	Маг	Apr		May
	Expense Dollars \$	\$ 369,506	\$ 133,506	\$ 97,259	\$ 27,895	\$ 16,516	\$ 51,309	\$	23,684
	Expense Dollars Change		\$ (236,000)	\$ (36,247)	\$ (69,364)	\$ (11,379)	\$ 34,793	\$	(27,625)
_	Percent Change	-	-63.87%	-27.15%	-7 <u>1.32%</u>	 -40.79%	210.67%	_	-53.84%

East Kentucky Power Cooperative, Inc.

Environmental Surcharge Operating and Expense Month over Month Analysis For the Expense Period December 2016 - May 2017

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

December16-

Project 03330- Contractor payments increased \$315.7k, EKPC Payroll & Benefits decreased \$15.9k, Materials increased \$4.5k, Accruals decreased \$615.4k Project 03501- Contractor payments increased \$126.7k, EKPC Payroll & Benefits decreased \$4.3k, Accruals decreased \$58.6k Adjustment to accruals to match actual resulted in an increase of \$11.3k.

January17-

Project 03330- Contractor payments increased \$46.8k, EKPC Payroll & Benefits increased \$1.5k, Materials decreased \$0.5k, Accruals decreased \$22.9k Project 03501- Contractor payments decreased \$108.9k, EKPC Payroll & Benefits increased \$3.1k, Materials increased \$0.7k, Accruals increased \$10.2k Adjustment to accruals to match actual resulted in an increase of \$33.8k.

February17-

Project 03330- Contractor payments decreased \$362.9k, EKPC Payroll & Benefits decreased \$2.5k, Materials decreased \$0.1k, Accruals increased \$334.8k Project 03501- Contractor payments decreased \$17.8k, EKPC Payroll & Benefits decreased \$3.2k, Materials increased \$0.8k, Accruals increased \$13.4k Adjustment to accruals to match actual resulted in a decrease of \$31.8k.

March17-

Project 03330- Contractor payments increased \$16k, EKPC Payroll & Benefits increased \$7.1k, Materials increased \$4.8k, Accruals increased \$0.8k Project 03501- Contractor payments increased \$0.6k, EKPC Payroll & Benefits decreased \$0.9k, Materials decreased \$0.8k, Accruals decreased \$6.2k Adjustment to accruals to match actual resulted in a decrease of \$32.8k.

April17-

Project 03330- Contractor payments decreased \$23,3k, EKPC Payroll & Benefits decreased \$1.9k, Materials decreased \$3.6k, Accruals increased \$0.2k Project 03501- Contractor payments increased \$18.4k, EKPC Payroll & Benefits increased \$1k, Materials decreased \$0.5k, Accruals increased \$0.3k Adjustment to accruals to match actual resulted in an increase of \$44.2k.

May17-

Project 03330- Contractor payments increased \$3.3k, EKPC Payroll & Benefits decreased \$4.3k, Materials increased \$0.2k, Accruals decreased \$2.9k Project 03501- Contractor payments decreased \$14.8k, EKPC Payroll & Benefits decreased \$2.7k, Materials decreased \$0.3k, Accruals increased \$1.2k Adjustment to accruals to match actual resulted in a decrease of \$7.3k.

512000 - SP03	Maintenance of Boiler Plant Gilbert	Nov	Dec	Jan	Feb	Mar	Apr	May
	Expense Dollars	283,204	866,558	378,081	235,717	147,365	894,908	3,353,806
	Expense Dollars Change		583,354	(488,477)	(142,364)	(88,352)	747,542	2,458,899
	Percent Change		205.98%	-56.37%	-37.65%	-37.48%	507.27%	274.77%

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

December16-

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

January17-

Project 03206- Contractor payments decreased \$19.7k, EKPC Payroll & Benefits increased \$0.7k, Materials decreased \$28.5k, Accruals decreased \$30.1k Project 03350- Contractor payments decreased \$47.2k, EKPC Payroll & Benefits decreased \$49.8k, Materials decreased \$471.3k, Accruals decreased \$115.8k Adjustment to accruals to match actual resulted in an increase of \$273.2k.

East Kentucky Power Cooperative, Inc.

Environmental Surcharge Operating and Expense Month over Month Analysis For the Expense Period December 2016 - May 2017

February17-

Project 03206- Contractor payments increased \$9.9k, EKPC Payroll & Benefits increased \$16k, Materials increased \$6.4k, Accruals decreased \$2.8k Project 03350- Contractor payments increased \$23.5k, EKPC Payroll & Benefits increased \$5.4k, Materials increased \$0.9k, Accruals decreased \$13.5k Adjustment to accruals to match actual resulted in a decrease of \$188.2k.

March17-

Project 03206- Contractor payments increased \$140.8k, EKPC Payroll & Benefits decreased \$8.5k, Materials increased \$62.9k, Accruals increased \$42.4k Project 03350- Contractor payments decreased \$5.8k, EKPC Payroll & Benefits decreased \$0.9k, Materials decreased \$0.7k, Accruals increased \$6.8k Adjustment to accruals to match actual resulted in a decrease of \$325.4k.

April17-

Project 03206- Contractor payments increased \$283k, EKPC Payroll & Benefits increased \$13.8k, Materials decreased \$35.6k, Accruals increased \$306.5k Project 03350- Contractor payments increased \$27.4k, EKPC Payroll & Benefits decreased \$1.8k, Materials increased \$3.7k, Accruals increased \$17.7k Adjustment to accruals to match actual resulted in an increase of \$132.8k.

May17-

Project 03206- Contractor payments increased \$860.1k, EKPC Payroll & Benefits increased \$99.6k, Materials decreased \$6.1k, Accruals decreased \$520.7k Project 03350- Contractor payments increased \$311k, EKPC Payroll & Benefits increased \$20.7k, Materials increased \$20k, Accruals increased \$29.6k Adjustment to accruals to match actual resulted in an increase of \$1,644.7k.

512000 - SP04	Maintenance of Boiler Plant Spurlock 4	Nov	Dec	Jan	Feb	Mar	Apr	May
	Expense Dollars	- 249,154	147,950	93,885	238,226	1,559,903	1,502,253	166,702
	Expense Dollars Change		(101,204)	(54,065)	144,341	1,321,677	(57,650)	(1,335,551)
	Percent Change		-40.62%	-36.54%	153.74%	554.80%	-3.70%	-88.90%

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

December16-

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

January17-

Project 03206- Contractor payments decreased \$66.6k, EKPC Payroll & Benefits increased \$5.3k, Materials increased \$43.5k, Accruals increased \$15.4k Project 03350- Contractor payments increased \$42.4k, EKPC Payroll & Benefits decreased \$2.9k, Materials decreased \$22.6k, Accruals increased \$11.6k Adjustment to accruals to match actual resulted in a decrease of \$80.2k.

February17-

Project 03206- Contractor payments increased \$12.7k, EKPC Payroll & Benefits decreased \$8.9k, Materials decreased \$18.6k, Accruals increased \$18k Project 03350- Contractor payments increased \$20.1k, EKPC Payroll & Benefits decreased \$3.1k, Materials decreased \$15.2k, Accruals decreased \$5.2k Adjustment to accruals to match actual resulted in an increase of \$126.7k.

March17-

Project 03206- Contractor payments increased \$914.5k, EKPC Payroll & Benefits increased \$22.6k, Materials increased \$88.8k, Accruals increased \$162.9k Project 03350- Contractor payments increased \$68.2k, EKPC Payroll & Benefits increased \$13.2k, Materials increased \$8.3k, Accruals decreased \$5.4k Adjustment to accruals to match actual resulted in an increase of \$48.6k.

East Kentucky Power Cooperative, Inc. Environmental Surcharge Operating and Expense Month over Month Analysis For the Expense Period December 2016 - May 2017

May17-

Project 03206- Contractor payments decreased \$718.9k, EKPC Payroll & Benefits decreased \$139.1k, Materials decreased \$29.6k, Accruals decreased \$131.8k Project 03350- Contractor payments decreased \$177.9k, EKPC Payroll & Benefits decreased \$90.7k, Materials decreased \$11.3k, Accruals decreased \$120.8k Adjustment to accruals to match actual resulted in an increase of \$84.5k.

512000 - SP21	Mtce of Boiler Plant Scrubber 1	Nov	Dec	Jan		Feb	 Mar	_	Apr	May
	Expense Dollars	\$ 180,867	\$ 187,551	\$ 112,815	\$	3,569	\$ 107,614	\$	103,810	\$ 256,475
	Expense Dollars Change		\$ 6,684	\$ (74,736)	\$ ('	109,246)	\$ 104,045	\$	(3,804)	\$ 152,665
	Percent Change		3.70%	-39.85%		-96.84%	2915.51%		-3.54%	147.06%

January17-

Project 03521- Contractor payments decreased \$18.8k, EKPC Payroll & Benefits decreased \$6.3k, Materials decreased \$1.9k, Accruals decreased \$133k Adjustment to accruals to match actual resulted in an increase of \$85.3k.

February17-

Project 03521- Contractor payments increased \$31k, EKPC Payroll & Benefits increased \$7.8k, Materials decreased \$5.9k, Accruals increased \$12.1k Adjustment to accruals to match actual resulted in a decrease of \$154.2k.

March17-

May17-

Project 03521- Contractor payments increased \$5.4k, EKPC Payroll & Benefits increased \$6.6k, Materials decreased \$14.2k, Accruals decreased \$206k Adjustment to accruals to match actual resulted in an increase of \$152.7k.

512000 - SP22	Mtce of Boiler Plant Scrubber 2	Nov	Dec	;	Jan		Feb	Mar	A	\pr	 May
	Expense Dollars	\$ 677,992	\$ 209	,215	\$ 88,96	0 \$	402,622	\$ 196,317	\$ 1	45,033	\$ 49,463
	Expense Dollars Change		\$ (468	(,777) \$	\$ (120,25	6) \$	313,663	\$ (206,305)	\$ (51,285)	\$ (95,570)
	Percent Change		-69	.14%	-57.48	%	352.59%	-51.24%	-	26.12%	-65.90%

December16-

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

January17-

Project 03521- Contractor payments decreased \$169.4k, EKPC Payroll & Benefits increased \$3.7k, Materials increased \$20.6k, Accruals increased \$63.9k Adjustment to accruals to match actual resulted in a decrease of \$39.1k.

February17-

Project 03521- Contractor payments decreased \$29.1k, EKPC Payroll & Benefits decreased \$2.7k, Materials decreased \$71.8k, Accruals increased \$16.8k Adjustment to accruals to match actual resulted in an increase of \$400.5k.

March17-

Project 03521- Contractor payments increased \$4.2k, EKPC Payroll & Benefits increased \$4.7k, Materials increased \$42.7k, Accruals increased \$24.2k Adjustment to accruals to match actual resulted in a decrease of \$206.3k.

Project 03521- Contractor payments decreased \$9.7k, EKPC Payroll & Benefits decreased \$3k, Materials decreased \$1.5k, Accruals decreased \$27.6k Adjustment to accruals to match actual resulted in an increase of \$145.8k.

East Kentucky Power Cooperative, Inc.

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Environmental Surcharge Operating and Expense Month over Month Analysis For the Expense Period December 2016 - May 2017

April17-

Project 03521- Contractor payments decreased \$21.6k, EKPC Payroll & Benefits increased \$1.2k, Materials increased \$8.2k, Accruals decreased \$101.5k Adjustment to accruals to match actual resulted in an increase of \$62.4k.

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May17-

Project 03521- Contractor payments decreased \$3.8k, EKPC Payroll & Benefits decreased \$10.8k, Materials decreased \$8.9k, Accruals increased \$203k Adjustment to accruals to match actual resulted in a decrease of \$275.1k.

Air Permit Fees

50621	Misc Stm Pwr Env - Dale	Nov	/	Dec		Jan	Feb	Mar		Apr		May
	Expense Dollars	\$	-	\$ -	\$	-	\$ -	\$ -	\$		\$	-
	Expense Dollars Change			\$ -	\$	-	\$ -	\$ -	\$	-	\$	-
	Percent Change			0.00%		0.00%	0.00%	0.00%		0.00%		0.00%
					_		_					
50631	Misc Stm Pwr Env - Cooper	Nov	1	Dec		Jan	Feb	Mar		Apr	[May
	Expense Dollars	\$	-	\$ 28,745		1,250	\$ 151	\$ 60	\$	4,575	\$	4,981
	Expense Dollars Change			\$ 28,745	\$	(27,495)	\$ (1,099)	\$ (91)	\$	4,515		406
	Percent Change			0.00%		-95.65%	-87.92%	-60.44%		0.00%		0.00%
50645	Misc Stm Pwr Env - Spurlock	Nov	,	Dec		Jan	Feb	 Mar	Γ	Apr	F	May
	Expense Dollars	\$	738	\$ 37,140	\$	4,790	\$ -	\$ 50,879	\$	89,727	\$	12,166
	Expense Dollars Change			\$ 36,402	\$	(32,350)	\$ (4,790)	\$ 50,879	\$	38,848	\$	(77,561)
	Percent Change			4934.32%		-87,10%	-100.00%	0.00%	1	76.36%		-86.44%

Air permit fees paid for Dale, Cooper and Spurlock for calendar 2017 emissions.

Operating Expense- Ammonia

506001 - CPxx	Misc Stm Pwr Exp - Cooper	Nov	Dec		Jan	Feb	Mar	Apr	 May
	Expense Dollars	\$ 3,158	\$ 39,976	\$	18,993	\$ 9,664	\$ 24,466	\$ 24,466	\$ 39,320
	Expense Dollars Change		\$ 36,818	\$	(20,983)	\$ (9,330)	\$ 14,802	\$ -	\$ 14,854
	Percent Change		1165.91%	·	-52.49%	-49.12%	153.17%	0.00%	60.71%

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	\$-	\$ 369,815	\$ 149,693	\$ 40,597	\$ 284,854	\$ - '	\$ 115,171
	Expense Dollars Change		\$ 369,815	\$ (220,121)	\$ (109,097)	\$ 244,257	\$ (284,854)	\$ 115,171
	Percent Change		0.00%	-59.52%	-72.88%	601.67%	0.00%	0.00%

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 December 2016 - May 2017

Operating Expense- Ammonia

506001 - SP01	Misc Stm Pwr Exp - Spurlock 1	Νον	Dec		Jan		Feb		Mar		Apr	May
	Expense Dollars	\$ 49,928	\$ 34,992	\$	45,907	\$	50,377	\$	50,214	\$	71,757	\$ 45,849
Ì	Expense Dollars Change		\$ (14,936)	\$	10,915	\$	4,471	\$	(163)	\$	21,542	\$ (25,907)
	Percent Change		-29.92%		31.19%		9.74%		-0.32%		42.90%	 -36.10%

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	\$ 1,848	\$ 42,033	\$	37,774	\$	25,220	\$	27,507	\$	-	\$ 30,448
	Expense Dollars Change		\$ 40,185	\$	(4,259)	\$	(12,554)	\$	2,287	\$	(27,507)	\$ 30,448
	Percent Change		2174.86%		-10.13%		-33.23%		9.07%		-100.00%	 0.00%

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

Operating Expense- Ammonia and Limestone

506001 - SP03	Misc Steam Power Expense- Gilbert	Nov		Dec		Jan		Feb		Mar		Apr		May
	Ammonia Expense	\$ 14,702	\$	23,148	\$	(2,982)	\$	16,069	\$	28,176	\$	14,151	\$	2,570
	Limestone Expense	\$ 182,729	\$	305,364	\$	1,710	\$	234,212	\$	374,043	\$	193,712	\$	69,142
	Limestone Tons Used	14,450	1	22,478		134	İ –	18,075		28,756		14,882		5,309
	Total Expense Dollars	\$ 197,431	\$	328,512	\$	(1,272)	\$	250,281	\$	402,219	\$	207,863	\$	71,712
	Expense Dollars Change		\$	131,081	\$	(329,784)	\$	251,553	\$	151,938	\$	(194,355)	\$	(136,152)
	Percent Change		•	66.39%		-100.39%	-	19774.16%		60.71%		-48.32%		-65.50%

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.

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

January- Limestone expenses decreased by \$303.7k and Ammonia expenses decreased by \$26.1k Unit Outage 01/01-01/09, 01/11-01/31

February- Limestone expenses increased by \$232.5k and Ammonia expenses increased by \$19.1k

March- Limestone expenses increased by \$139.8k and Ammonia expenses increased by \$12.1k

April- Limestone expenses decreased by \$180.3k and Ammonia expenses decreased by \$14k

May- Limestone expenses decreased by \$124.6k and Ammonia expenses decreased by \$11.6k

East Kentucky Power Cooperative, Inc. Environmental Surcharge Operating and Expense Month over Month Analysis For the Expense Period December 2016 - May 2017

Operating Expense- Limestone and Magnesium

506001 - SP21	Misc Stm Pwr Exp- Spurlock 1	Nov	Dec	Jan	Feb	Mar	Apr		May
	Magnesium Expense	\$ 8,008	\$ 16,270	\$ 49,551	\$ 30,571	\$ 15,494	\$ 14,799	\$	7,803
	Limestone Expense	\$ 83,382	\$ 54,550	\$ 85,331	\$ 82,298	\$ 69,115	\$ 96,089	\$	59,092
	Limestone Tons Used	8,564	5,597	8,567	8,147	6,822	9,489		5,836
	Expense Dollars	\$ 91,390	\$ 70,820	\$ 134,882	\$ 112,869	\$ 84,610	\$ 110,888	\$	66,895
	Expense Dollars Change		\$ (20,570)	\$ 64,062	\$ (22,013)	\$ (28,259)	\$ 26,279	\$	(43,993)
	Percent Change		-22.51%	90.46%	-16.32%	-25.04%	31.06%		-39.67%

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.

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

January- Limestone expenses increased by \$30.8k and Ammonia expenses increased by \$33.3k

February- Limestone expenses decreased by \$3k and Ammonia expenses decreased by \$19k

March-Limestone expenses decreased by \$13.2k and Ammonia expenses decreased by \$15.1k

April- Limestone expenses increased by \$27k and Ammonia expenses decreased by \$0.7k

May- Limestone expenses decreased by \$37k and Ammonia expenses decreased by \$7k

Operating Expense-Limestone and Magnesium

506001 - SP22	Misc Stm Pwr Exp- Spurlock 2	Nov		Dec		Jan		Feb		Mar		Apr		May
	Magnesium Expense	\$ 25,229	\$	71,326	\$	59,071	\$	48,688	\$	35,820	\$	4,116	\$	61,902
	Limestone Expense	\$ 8,247	\$	- 182,624	\$	181,329	\$	104,742	\$	99,458	\$	-	\$	109,742
	Limestone Tons Used	847		18,738		18,206		10,369		9,818		-		10,839
	Expense Dollars	\$ 33,476	\$	253,950	\$	240,399	\$	153,430	\$	135,278	\$	4,116	\$	171,644
	Expense Dollars Change		\$	220,474	\$	(13,550)	\$	(86,969)	\$	(18,152)	\$	(131,162)	\$	167,528
	Percent Change			658.61%		-5.34%		-36.18%		-11.83%		-96.96%		4070.29%

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.

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

January- Limestone expenses decreased by \$1.3k and Ammonia expenses decreased by \$12.3k

February- Limestone expenses decreased by \$76.6k and Ammonia expenses decreased by \$10.4k

March- Limestone expenses decreased by \$5.3k and Ammonia expenses decreased by \$12.9k

April- Limestone expenses decreased by \$99.5k and Ammonia expenses decreased by \$31.7k

May- Limestone expenses increased by \$109.7k and Ammonia expenses increased by \$57.8k

East Kentucky Power Cooperative, Inc. Environmental Surcharge Operating and Expense Month over Month Analysis For the Expense Period December 2016 - May 2017

Operating Expense- Ammonia and Limestone

506001 - SP04	Misc Stm Pwr Exp- Spurlock 4	Nov	Dec		Jan		Feb		Mar		Apr		-	May
	Ammonia Expense	\$ 12,823	\$	25,562	\$	19,477	\$	4,774	\$	(388)	\$	8,607	\$	27,782
	Limestone Expense	\$ 171,856	\$	367,216	\$	370,719	\$	120,772	\$	59,661	\$	156,497	\$	394,793
	Limestone Tons Used	13,590		27,030		28,954		9,347		4,588		12,025		30,323
	Expense Dollars	\$ 184,679	\$	392,777	\$	390,196	\$	125,546	\$	59,274	\$	165,104	\$	422,575
	Expense Dollars Change		\$	208,098	\$	(2,581)	\$	(264,650)	\$	(66,272)	\$	105,830	\$	257,471
	Percent Change			112.68%		-0.66%		-67.82%		-52.79%		178.55%		155.94%

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.

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

February- Limestone expenses decreased by \$249.9k and Ammonia expenses decreased by \$14.7k Unit Outage- 02/11-02/26

March- Limestone expenses decreased by \$61.1k and Ammonia expenses decreased by \$5.2k Unit Outage- 03/04-03/14, 03/18-03/31

April- Limestone expenses increased by \$96.8k and Ammonia expenses increased by \$9k Unit Outage- 04/01-04/15

"May- Limestone expenses increased by \$238.3k and Ammonia expenses increased by \$19.2k

EAST KENTUCKY POWER COOPERATIVE, INC. PSC CASE NO. 2017-00326 ENVIRONMENTAL SURCHARGE MECHANISM RESPONSE TO INFORMATION REQUEST

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 08/31/17 REQUEST 5 RESPONSIBLE PARTY: Thomas 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, 2017:

a. The debt issuances directly related to projects in the approved compliance plan and corresponding outstanding balances of each debt issuance.

b. The debt cost for each debt issuance directly related to the projects in the approved compliance plan and whether the debt cost is a fixed or variable rate.

c. EKPC's calculation of the weighted average debt cost and the rate of return resulting from multiplying the weighted average debt cost by a 1.50 Times Interest Earned Ratio. Include all supporting calculations showing how the weighted average debt cost was determined.

d. Provide all schedules and supporting calculations and documentation in Excel spreadsheet format with all cells and formulas intact and unprotected.

Responses 5a-d. Please see the response to Request 5 on the attached CD. EKPC is proposing a weighted average cost of debt of 4.050% based on the debt cost for each debt issuance directly related to the projects in the environmental compliance plan as of May 31, 2017. 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 6.075%.

PSC Request 6 Page 1 of 5

EAST KENTUCKY POWER COOPERATIVE, INC. PSC CASE NO. 2017-00326 ENVIRONMENTAL SURCHARGE MECHANISM RESPONSE TO INFORMATION REQUEST

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 08/31/17 REQUEST 6 RESPONSIBLE PARTY: Isaac S. Scott

Request 6. This question is addressed to EKPC. KRS 278.183(3) provides that during the two-year review, the Commission shall, to the extent appropriate, incorporate surcharge amounts found just and reasonable into the existing base rates of the utility.

Request 6a. Provide the surcharge amount that EKPC believes should be incorporated into its existing base rates. Include all supporting calculations, work papers, and assumptions.

Response 6a. As stated in Mr. Scott's direct testimony, EKPC does not believe that any surcharge amounts should be incorporated into its existing base rates. However, EKPC has provided a calculation of the estimated roll-in amount, as shown on the spreadsheets provided in the attached CD. The total estimated roll-in (revenue requirement) is \$114,776,570 and EKPC has further estimated that \$73,191,825 of the total would be assigned to demand and \$41,584,745 would be assigned to energy. Please note that this demand and energy assignment assumes the entire return on environmental compliance rate base would be assigned to demand. A cost-of-

service study would likely assign the components of the environmental compliance rate base to both demand and energy. Likewise, the return on environmental compliance rate base would likely be assigned to demand and energy as well.

To determine this estimated roll-in, EKPC used the environmental compliance rate base as shown in the monthly surcharge report for the expense month of May 31, 2017, the last expense month included in the two-year review. This rate base was multiplied by the rate of return that was authorized as of May 31, 2017, which was 6.059%, to calculate the dollar return on rate base. Pollution control operating expenses reflect the actual balances for the twelve month period ending May 31, 2017. There were no proceeds from the sale of by-products or emission allowances for the twelve months ending May 31, 2017 to include in the calculations. The sum of the dollar return on rate base and pollution control operating expenses was multiplied by the Member System allocation ratio for May 31, 2017 of 99.30% to recognize that only the portion of the surcharge applicable to Member sales would be rolled into base rates. This adjusted surcharge revenue requirement constitutes the estimated roll-in amount.

In preparing this response, EKPC has utilized the same approach it followed when it responded to Request 6a of the Commission Staff's First Data Request in Case No. 2012-00486.

Request 6b. The surcharge factor reflects a percentage of revenue approach, rather than a per-kWh approach. Taking this into consideration, explain how the surcharge amount should be incorporated into EKPC's base rates. Include any analysis that EKPC believes supports its

PSC Request 6 Page 3 of 5

position. Provide all schedules in Excel spreadsheet format with all cells and formulas intact and unprotected.

Response 6b. The environmental costs included in EKPC's revenue requirement represent both investment costs and energy costs. Because both types of costs are present, a rollin of the surcharge into base rates is more complicated than the roll-in performed in a two-year fuel adjustment clause proceeding, where only energy costs are involved. EKPC believes that the most appropriate approach for incorporating surcharge amounts into its base rates is through a traditional cost of service study performed during a base rate proceeding. EKPC has not performed a cost of service study in conjunction with this surcharge review proceeding. Absent a cost of service study, EKPC would propose allocating a portion of the revenue requirement to demand and a portion to energy, as shown in the response to Request 6a. EKPC has assigned the dollar return on compliance rate base and depreciation expense to the demand portion. The portion assigned to energy reflects the pollution control operating expenses minus the depreciation expense.

<u>Request 6c.</u> Provide the Base Period Jurisdictional Environmental Surcharge Factor ("BESF") that reflects all environmental surcharge amounts previously incorporated into existing base rates and the amount determined in part (a). Include all supporting calculations, work papers, and assumptions.

Response 6c. EKPC's BESF as of May 31, 2017 was zero, as established by the Commission in Case No. 2009-00317. In the response to Request 6a, EKPC has provided a calculated amount of a base rate roll-in. If the Commission were to require EKPC to roll-in its environmental surcharge into base rates, based on the Member System base rate revenues for the twelve months ending May 31, 2017, the BESF would be 15.14%. However, EKPC notes that it would need to recalculate the BESF based on the most recent twelve month revenue information following the Order in this proceeding. EKPC believes this recalculation is consistent with the approach followed by Louisville Gas and Electric Company and Kentucky Utilities Company when recalculating its BESF.

Request 6d. Does EKPC believe that there will need to be modifications to either the surcharge mechanism or the monthly surcharge reports, other than a revision to BESF, as a result of incorporating additional environmental surcharge amounts into EKPC's existing base rates? If so, provide a detailed explanation of the modifications and provide updated monthly surcharge reports.

<u>Response 6d.</u> Although EKPC does not support incorporating the environmental surcharge revenue requirement into base rates as part of this proceeding, such a roll-in would not require the need to modify the surcharge mechanism or monthly surcharge reports utilizing the approved base/current mechanism.

While a roll-in of the environmental surcharge revenue requirement into EKPC's wholesale base rates would not require a modification to the surcharge mechanism or monthly surcharge reports, such a roll-in would require the Member Systems to modify their retail base rates accordingly. No mechanism to accomplish a retail base rate change due to an environmental surcharge roll-in was established in conjunction with the approval of the environmental surcharge for EKPC or the pass-through mechanism for the Member Systems.

<u>Request 6e.</u> Provide all schedules in Excel spreadsheet format with all cells and formulas intact and unprotected.

Response 6e. The CD attached to this response includes all schedules in Excel spreadsheet format with all cells and formulas intact and unprotected.

PSC Request 8 Page 1 of 2

EAST KENTUCKY POWER COOPERATIVE, INC. PSC CASE NO. 2017-00326 ENVIRONMENTAL SURCHARGE MECHANISM RESPONSE TO INFORMATION REQUEST

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION DATED 08/31/17 REQUEST 8

RESPONSIBLE PARTY: Isaac S. Scott

Request 8. This question is addressed to EKPC. Refer to the monthly environmental surcharge reports for the review period, Form 1.0 and footnote 3 of this Order. Explain in detail the billing cycle for environmental compliance costs. Include in your discussion an explanation of expense, service, and billing periods for EKPC to the Member Coops to their member customers.

Response 8. For clarity purposes, EKPC will use the surcharge expense month of May 2017 as the example in this explanation.

The process for billing the May 2017 environmental costs begins with EKPC personnel compiling and assembling all the applicable cost information. This was done between June 10 and 19, 2017, for the May 2017 expense month. EKPC's surcharge factor and the Member Cooperatives' pass-through factors were calculated during this processing period. EKPC submitted the monthly surcharge report for the May 2017 expense month to the Commission on June 20, 2017. The monthly surcharge report includes both the EKPC surcharge factor for the Member Cooperatives' pass-through factors. The EKPC surcharge factor for the Member Cooperatives' pass-through factors.

May 2017 expense month was applied for service rendered on and after June 1, 2017. Pursuant to the KRS 278.183, filing EKPC's surcharge factor with the Commission on June 20, 2017 means the factor could be applied to Member Cooperative bills after June 30, 2017. The Member Cooperative bills for June 2017 service were prepared and issued on July 5, 2017. EKPC has only one billing cycle.

Please note that EKPC is not involved in how its Member Cooperatives bill their member customers. Like EKPC's surcharge factor, the Member Cooperative passthrough factors for the May 2017 expense month were submitted to the Commission on June 20, 2017. It is EKPC's general understanding that the Member Cooperatives applied the passthrough factor associated with the May 2017 expense month beginning with the first billing cycle after June 30, 2017. In other words, the Member Cooperatives began billing the pass-through factor associated with the May 2017 expense month in July 2017. For a more specific description of the Member Cooperatives' billing of the pass-through factor, please see the Member Cooperatives' responses to Request No. 4 of the Commission Staff's Second Request for Information dated November 30, 2016 in Case No. 2016-00335.