

**Frost
Brown Todd** LLC
ATTORNEYS

March 29, 2010

Mr. Jeff Derouen
Executive Director
Kentucky Public Service Commission
P.O. Box 615
Frankfort, KY 40602

RECEIVED

MAR 29 2010

PUBLIC SERVICE
COMMISSION

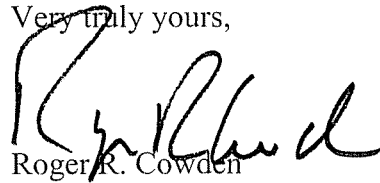
Re: Case No. 2010-00083

Dear Mr. Derouen:

Please find enclosed for filing with the Commission in the above-referenced case, an original and ten copies of the Application of East Kentucky Power Cooperative, Inc. for Approval of an Amendment to Its Environmental Compliance Plan and Environmental Surcharge.

If you have any questions or require additional information, please contact me.

Very truly yours,



Roger R. Cowden

Cc: Hon. Dennis Howard, Office of the Attorney General
Hon. Michael L. Kurtz, Kentucky Industrial Utility Customers, Inc.

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

RECEIVED
MAR 29 2010
PUBLIC SERVICE
COMMISSION

In the Matter of:

THE APPLICATION OF EAST KENTUCKY)
POWER COOPERATIVE, INC., FOR APPROVAL) CASE NO.
OF AN AMENDMENT TO ITS ENVIRONMENTAL) 2010-00083
COMPLIANCE PLAN AND ENVIRONMENTAL)
SURCHARGE)

APPLICATION

1. Comes now East Kentucky Power Cooperative, Inc. (“Applicant”), by and through counsel, pursuant to KRS 278.183 and related sections, and for its Application requesting that the Public Service Commission (“Commission”) enter an Order approving the amendment to its environmental surcharge compliance plan and environmental surcharge, respectfully pleads as follows:

2. The Applicant’s mailing address is P.O. Box 707, Winchester, Kentucky 40392-0707.

3. A copy of Applicant’s restated Articles of Incorporation and all amendments thereto were filed with the Commission in PSC Case No. 90-197, the Application of East Kentucky Power Cooperative, Inc. for a Certificate of Public Convenience and Necessity to Construct Certain Steam Service Facilities in Mason County, Kentucky.

4. A copy of the resolution from Applicant’s Board of Directors approving the filing of this Application is attached to the Direct Testimony of Ann F. Wood, as Exhibit AFW-2.

5. Attached hereto, in the form of prepared testimony and exhibits thereto, is EKPC's Amended Environmental Compliance Plan regarding costs incurred in complying with the Federal Clean Air Act at EKPC's coal-fired generating units, and

with federal and state environmental requirements applicable to coal combustion wastes and by-products from coal-fired generating units. This Amended Environmental Compliance Plan includes the following:

A. Applicant's Exhibit 1- The prepared testimony of Ann F. Wood, EKPC's Manager of Regulatory Services, which presents an overview of the Application, the current Environmental Compliance Plan, the proposed Amended Environmental Compliance Plan, how the proposed changes in the Amended Environmental Compliance Plan will be implemented on a monthly basis, and an outline of the billing impact of the proposed changes at both the wholesale and retail level.

B. Applicant's Exhibit 2- The prepared testimony of Craig Johnson, EKPC Senior Vice-President of Production, which discusses the proposed amendments to the Environmental Compliance Plan. Projects proposed are: the addition of the Spurlock 2 scrubber isolation valve and switchyard transformers; the addition of the Spurlock 1 scrubber isolation valve and switchyard transformers; the addition of Spurlock 4 ash silos; the construction of the Spurlock landfill area C expansion and sediment pond construction; and, Spurlock 2 ductwork replacement.

C. Applicant's Exhibit 3- The prepared testimony of Mary Jane Warner, EKPC Project Manager, which discusses the compliance plan amendment addition relating to the Cooper Air Quality Control System.

6. On February 24, 2010, EKPC, pursuant to KRS §278.183 (2), gave notice to the Commission of its intent to file an Application for an Approval of an Amendment to its Environmental Compliance Plan and Environmental Surcharge. Attached hereto as Applicant's Exhibit 4 is a copy of the notice sent to the Commission and to EKPC's member distribution cooperatives, pursuant to 807 KAR 5:011 Section 8 (2).

WHEREFORE, Applicant respectfully requests the Commission to approve its proposed amended environmental compliance plan and the recovery of the associated compliance costs through the environmental surcharge, effective for service rendered on and after October 1, 2010.

Respectfully submitted,



Roger R. Cowden, Esq.
Frost Brown Todd
250 West Main Street
Lexington, KY 40507
Phone: 859-231-0000

VERIFICATION

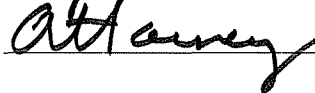
The undersigned, pursuant to KRS 278.183, hereby verifies that all of the information contained in the foregoing Application is true and correct to the best of my knowledge, opinion and belief.

East Kentucky Power Cooperative, Inc.

BY: _____



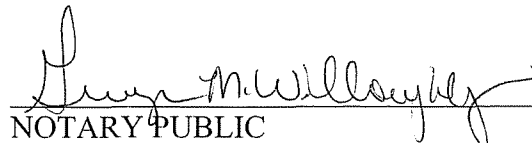
ITS: _____



COMMONWEALTH OF KENTUCKY

COUNTY OF CLARK

The foregoing Verification was signed, acknowledged and sworn to before me this 25th of March 2010 by Roger R. Cowden of East Kentucky Power Cooperative, Inc., a Kentucky corporation, on behalf of the corporation.



NOTARY PUBLIC

MY COMMISSION EXPIRES NOVEMBER 30, 2013
NOTARY ID #409352

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

**THE APPLICATION OF EAST KENTUCKY POWER)
COOPERATIVE, INC. FOR APPROVAL OF AN)
AMENDMENT TO ITS ENVIRONMENTAL) CASE NO.
COMPLIANCE PLAN AND ENVIRONMENTAL) 2010-00083
SURCHARGE)**

**DIRECT TESTIMONY OF ANN F. WOOD
ON BEHALF OF EAST KENTUCKY POWER COOPERATIVE, INC.**

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

A. My name is Ann F. Wood and my business address is East Kentucky Power Cooperative (“EKPC”), 4775 Lexington Road, Winchester, Kentucky 40391. I am the Manager of Regulatory Services for EKPC.

Q. Please state your education and professional experience.

A. I received a B.S. Degree in Accounting from Georgetown College in 1987. After graduation I accepted an audit position with Coopers & Lybrand in the Lexington office. My responsibilities ranged from performing detailed audit testing to managing audits. In October 1995, I started working for Lexmark International, Inc. as an analyst. In May 1997, I joined EKPC and held various management positions in the accounting and internal auditing areas. In August 2008, I became Manager of Regulatory Services at EKPC. I am a certified public accountant in Kentucky.

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

1 A. As Manager of Regulatory Services, I am responsible for managing all filings
2 with the Public Service Commission (“Commission.”) I report directly to the
3 Senior Vice President of Power Supply.

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

5 A. The purpose of my testimony is to briefly describe the current Environmental
6 Compliance Plan (“Plan”) and to outline the proposed additions to the Plan, to
7 describe how the proposed change in the Plan will be implemented on a monthly
8 basis, and to outline the bill impacts of the proposed change at the wholesale and
9 retail level.

10 **Q. Are you sponsoring any exhibits in this proceeding?**

11 A. Yes. I am sponsoring Exhibit AFW-1, which reflects the addition of three new
12 projects and three amendments to existing projects into EKPC’s Plan, Exhibit
13 AFW-2, which provides the Board Resolution authorizing EKPC to amend its
14 Plan, Exhibit AFW-3, which provides sample copies of the monthly surcharge
15 reporting formats which reflect the inclusion of the additional projects, and
16 Exhibit AFW-4, which provides the documentation for the estimated revenue
17 increases associated with the approval of the proposed change to EKPC’s Plan.

18 **Q. Would you please provide a brief description of EKPC’s current
19 Environmental Compliance Plan?**

20 A. Yes. EKPC currently has 10 projects in its Environmental Compliance Plan.
21 Projects 1-4 were approved by the Commission in Case No. 2004-00321, and
22 Projects 5-10 were approved by the Commission in Case No. 2008-00115. These
23 projects are:

- 1 Project 1: Pollution Control Facilities used at the Gilbert Unit
- 2 Project 2: Spurlock Unit 1 Precipitator
- 3 Project 3: Spurlock Unit 1 Selective Catalytic Reduction (SCR)
- 4 Project 4: Spurlock Unit 2 SCR.
- 5 Project 5: Low NOx burners at Dale Station
- 6 Project 6: Low NOx burners at Spurlock Unit 1
- 7 Project 7: Scrubber at Spurlock Unit 2
- 8 Project 8: Scrubber at Spurlock Unit 1
- 9 Project 9: Pollution Control Facilities at the new Spurlock 4 generating unit
- 10 Project 10: Continuous Emission Monitoring Equipment for particulate matter at
- 11 the Spurlock units and Mercury Monitoring Equipment at the Dale units, Spurlock
- 12 units and Cooper units.

13 **Q. What are the additions and amendments to the Environmental Compliance**
14 **Plan as proposed by EKPC?**

15 A. The additions and amendments are listed below.

16 Project 7 Amended: Addition of Spurlock 2 Scrubber Isolation Valve and
17 Inclusion of Switchyard Transformers

18 Project 8 Amended: Addition of Spurlock 1 Scrubber Isolation Valve and
19 Inclusion of Switchyard Transformers

20 Project 9 Amended: Addition of Spurlock 4 Ash Silos Construction

21 Project 11 New: Air Quality Control System (“AQCS”) at Cooper Unit 2

22 Project 12 New: Spurlock Landfill Area C Expansion and Sediment Pond
23 Construction

1 Project 13 New: Duct Work Replacement on Spurlock 2

2 **Q. Has EKPC received a Certificate of Public Convenience and Necessity**
3 **(CPCN) for any of the newly proposed projects?**

4 A. Yes. The Company received a CPCN from the Commission for the Cooper
5 AQCS in Case No. 2008-00472.

6 **Q. Were CPCNs granted for the other new projects?**

7 A. No. The other new projects are necessary enhancements or upgrades to existing
8 equipment or facilities.

9 **Q. Are there any other changes to EKPC's Environmental Compliance Plan?**

10 A. Yes. For the existing Spurlock Scrubber 1 and 2 projects, EKPC added an
11 isolation valve to each of the scrubbers. Additionally, in Commission Case No.
12 2008-00115, the proceeding in which the Commission approved the inclusion of
13 both scrubber projects into the environmental compliance plan, EKPC did not
14 overtly request the inclusion of related switchyard upgrades. Lastly, the Spurlock
15 4 ash silos construction is an addition to the environmental controls portion of that
16 unit.

17 **Q. Why aren't these changes set forth as separate projects?**

18 A. The function of the original projects has not changed and equipment is being
19 added to meet continuing requirements of the Federal Clean Air Act. EKPC
20 considers these to be enhancements of existing facilities, rather than new projects.

21 **Q. Why is EKPC requesting the inclusion of switchyard upgrades?**

22 A. From January 2009 to September 2009, EKPC had recorded the Spurlock 2
23 scrubber in "lump sums" by project to account 10600, Completed Construction

1 Not Classified. In October 2009, Stanley Consultants provided EKPC with a
2 listing of retirement units on the scrubber. Upon receiving the listing of
3 retirement units, EKPC became aware of certain switchyard improvements that
4 were necessary to operate the scrubber which were included in the “lump sums”
5 recorded in account 10600. EKPC had not specifically identified and listed these
6 switchyard improvements as components to the Spurlock 2 scrubber in its last
7 environmental compliance plan amendment (Case No. 2008-00115).

8 Consequently, in its November 2009 monthly environmental surcharge filing,
9 EKPC reduced its revenue requirement to remove the recovery of any costs to
10 date associated with the switchyard improvements.

11 While these switchyard improvements are classified as transmission plant versus
12 production plant, they are necessary for the operation of the Spurlock 2 scrubber
13 and the investment in the improvements would not have been made absent the
14 installation of the scrubber. Given this relationship to the scrubber, EKPC
15 believes it is reasonable to include these switchyard improvements in its
16 environmental compliance plan and provide for the recovery of the associated
17 costs through the surcharge mechanism.

18 **Q. Are any of these new projects considered “replacements” for existing, similar**
19 **type projects?**

20 A. Yes. Project 13, the Spurlock 2 duct work project, is a duct work replacement.
21 This project replaces ductwork that was originally a component of the original
22 Spurlock 2 scrubber, built in the early 1980s. This original scrubber was retired
23 from EKPC’s books prior to the filing of its most recent base rate increase (Case

1 No. 2008-00409). Therefore, no costs associated with the duct work are being
2 recovered through existing rates. There would be no Base Environmental
3 Surcharge Factor (“BESF”) implications associated with this replacement.

4 **Q. Did the EKPC Board of Directors authorize the Company to file for approval**
5 **of the amended compliance plan?**

6 A. Yes. Exhibit AFW-2 provides the Board resolution.

7 **Q. Would you please describe how the proposed changes in the environmental**
8 **compliance plan and surcharge tariff sheets will be incorporated into the**
9 **monthly surcharge computation?**

10 A. Yes. As shown in Exhibit AFW-1, three new projects and three amendments to
11 existing projects will be included in the Environmental Compliance Plan. Of the
12 three amended projects, the switchyard additions associated with the Spurlock
13 Units 1 and 2 scrubbers have been completed and are in service. The monthly
14 surcharge computation will include expenses for depreciation, insurance, taxes,
15 O&M, and return for these projects upon approval by the Commission. The three
16 new projects and the remaining amendments to existing projects are currently
17 under construction. Until completed, EKPC is seeking a return component only
18 on the monthly Construction Work In Progress (CWIP) balance. Upon
19 completion, EKPC will begin recovery of depreciation, return, insurance, taxes
20 and O&M costs. Exhibit AFW-3 reflects the changes required in the monthly
21 surcharge filing formats. Please note that no revisions are necessary to EKPC’s
22 tariff sheet.

1 **Q. What is the proposed Times Interest Earned Ratio (TIER) to be used in the**
2 **rate of return computation?**

3 A. EKPC is proposing to maintain the use of a 1.35X TIER to be applied to the
4 average debt cost used to finance the Commission-approved environmental
5 compliance projects.

6 **Q. Have you calculated the rate of return to be used in the monthly surcharge**
7 **computation?**

8 A. Yes. In Case No. 2009-00317, the two-year review of the Environmental
9 Surcharge, EKPC recommended the use of the average debt cost of the ten
10 existing environmental compliance plan projects as of 5/31/09. The average debt
11 cost of 4.482%, multiplied by a 1.35X TIER, yields a proposed rate of return of
12 6.051%. On January 28, 2010, the Commission issued its Order in Case No.
13 2009-00317 that included, among other things, the approval of EKPC's
14 recommended rate of return.

15 **Q. Would the average debt rate eventually change and be based on the**
16 **financing for the 13 environmental compliance projects?**

17 A. Yes. However, EKPC believes that it should not change until these new projects
18 are completed and permanent financing is in place.

19 **Q. Are changes to the Environmental Surcharge Tariff Sheets for each of the**
20 **Member Systems required?**

21 A. No. The proposed changes at wholesale will not affect the existing language in
22 the surcharge tariff sheets of each Member System. Increases in EKPC's

1 environmental surcharge factor will be flowed through to Member Systems in the
2 same manner as currently calculated.

3 **Q. Have you estimated the impact of these proposed changes at the wholesale
4 and retail levels?**

5 A. Yes. There are two aspects to EKPC's proposed changes:

- 6 (1) The effect of recognizing a return on CWIP prior to the commercial
7 operation of projects presently under construction, and,
8 (2) The full effect of inclusion of these projects in the Environmental
9 Compliance Plan once they become operational.

10 **Q. What is the estimated effect of the first item, the recognition of a return on
11 CWIP?**

12 A. Based on an effective date of October 1, 2010, and the current projected dates of
13 completion for the projects under construction, it is estimated that EKPC will
14 increase surcharge revenues by approximately \$1.2 million for the October
15 through December 2010 period and an additional \$12 million for calendar 2011.

16 **Q. Have you determined the estimated effect of all projects once they become
17 operational?**

18 A. Yes. Exhibit AFW-4, page 1 of 2 provides the support for this calculation. As
19 shown in the exhibit, EKPC has estimated that the annual effect of including these
20 projects in the environmental compliance plan is an increase of approximately
21 \$62 million, or about 9% at wholesale. This would result in an increase of about
22 6.7% at retail.

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

1 A. Yes, it does.

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

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)

Case No. 2010-00083

AFFIDAVIT

STATE OF KENTUCKY)
)
COUNTY OF CLARK)

Ann F. Wood, being duly sworn, states that she has read the foregoing prepared testimony and that she 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 her knowledge, information and belief.

Ann F. Wood

Subscribed and sworn before me on this 24th day of March, 2010.

Greg M. Wilcox
Notary Public

MY COMMISSION EXPIRES NOVEMBER 30, 2013
NOTARY ID #409352

**EAST KENTUCKY POWER COOPERATIVE, INC
ENVIRONMENTAL COMPLIANCE PLAN
PURSUANT TO ENVIRONMENTAL SURCHARGE LAW**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Project	Pollutant or Waste/By-Product To be Controlled	Control Facility	Generating Station	Environmental Regulation	Environmental Permit	Actual or Scheduled Completion	Actual (A) or Estimated (E) Project Cost
1.	Fly Ash/Particulate NOx & SO2	Boiler SNCR Baghouse Flash Dry Absorber	Gilbert	401 KAR Ch. 45 CAAA Sec.404 40 CFR Part 72 401 KAR 50:035 CAAA Sec 407 40 CFR Part 76	081-0005 V-97-050 Rev. 1	2005	\$69.6 M (A)
2.	Particulate	Precipitator	Spurlock 1	401 KAR 61.015	V-95-050 (Revision 1)	2003	\$24.3 (A)
3.	NOx	SCR	Spurlock 1	CAAA Sec. 407 40 CFR Part 76	V-97-050	2003	\$84.4 M (A)
4.	NOx	SCR	Spurlock 2	CAAA Sec. 407 40 CFR Part 76	V-97-050	2002 Fall 2007 & Spring 2008	\$47.2 (A)
5.	NOx	Low NOx Burner	Dale	CAN.06-cv-00211 40 CFR Part 76.7 Title IV-A, 42 USC 7651-7651o, Sect 502, 401KAR51:160	V-04-038	Fall 2007	\$2.0 M (A)
6.	NOx	NOx Reduction Equipment	Spurlock 1	40 CFR Part 76.7 CAN 04-34-KSF	V-06-007	Spring 2009	\$3.09 M (A)
7.	SO2	Scrubber	Spurlock 2	CAN 04-34-KSF CAAA Sec 405	V-97-050 Rev. 1	Oct. 2008	\$194.1 M (A)
		Switchyard Improvements				In Svce	\$8.396 M (A)
		Isolation Valve	Spurlock 2 Scrubber	40CFR Part 76.7 CAN 04-34-KSF CAAA Sec 405 CAAA Sec 404	V-06-007, Rev 2	Fall 2010	\$634,000 (E)
8.	SO2	Scrubber	Spurlock 1	CAN 04-34-KSF CAAA Sec 404	V-97-050 Rev. 1	Spring 2009	\$145.8 M (A)
		Switchyard Improvements				In Svce	\$1.26 M (A)
		Isolation Valve	Spurlock 1 Scrubber	40CFR Part 76.7 CAN 04-34-KSF CAAA Sec 405 CAAA Sec 404	V-06-007, Rev 2	Spring 2011	\$507,000 (E)
9.	Fly Ash/Particulate NOx & SO2	Boiler SNCR Baghouse Flash Dry Absorber	Spurlock 4	401 KAR Ch. 45 CAAA Sec.404 40 CFR Part 72 401 KAR 50:035 CAAA Sec.407 40 CFR Part 76	V-06-007	April 2009	\$84.8 M (A)
		Ash Silos	Spurlock 4	401 KAR 63.010	V-06-007	Summer 2010	\$12.0 M (E)

**EAST KENTUCKY POWER COOPERATIVE, INC
ENVIRONMENTAL COMPLIANCE PLAN
PURSUANT TO ENVIRONMENTAL SURCHARGE LAW**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Project	Pollutant or Waste/By-Product To be Controlled	Control Facility	Generating Station	Environmental Regulation	Environmental Permit	Actual or Scheduled Completion	Actual (A) or Estimated (E) Project Cost
10.	PM & Mercury CEMS	Stack Emissions Monitoring	Spurlock Dale Cooper	40 CFR Part 60 App. B, PS 11, & App. F Proced. 2. CD para 97-102. 40 CFR 75	CAN 04-34-KSF	Spring 2010	\$3.7 M (E)
11	NOx and SO2, Particulate Matter	Air Quality Control System	Cooper 2	Consent Decree CAN 04-34-KSF KY BART SIP	V-05-082 R1	Summer 2012	\$324 M (E)
12	Coal Combustion by-products (CCB)	Landfill Area C Expansion and Sediment Pond Construction	Spurlock 1, 2, 4, Gilbert; Spur 1, 2 Scrubbers	Clean Water Act (CWA) Section 404	KPDES No. KY0022250	Fall 2010	\$6.5 M (E)
13	SOx, H2SO4, Mercury	Replacement of Retired Ductwork	Spurlock Unit #2	CFR Title 40, Part 51 CFR Title 40, Part 52 (New Source Review)	V-06-007	Spring 2010	\$2,100,500 (E)

FROM THE MINUTE BOOK OF PROCEEDINGS
OF THE BOARD OF DIRECTORS OF
EAST KENTUCKY POWER COOPERATIVE, INC.

At a special meeting of the Board of Directors of East Kentucky Power Cooperative, Inc. held via teleconference at the Headquarters Building, 4775 Lexington Road, located in Winchester, Kentucky, on Friday, February 19, 2010, at 1:31 p. m., EST, the following business was transacted:

Authorization to File with the Public Service Commission For An Amendment To the Environmental Surcharge Compliance Plan

After review of the applicable information, a motion was made by Committee Chairman Adams, and, there being no further discussion, passed to approve the following:

Whereas, In March 2005, the Public Service Commission (the "Commission") issued an Order allowing EKPC and its Member Systems to implement an Environmental Surcharge, and contained within this Order was the Commission's approval of projects outlined in the environmental surcharge compliance plan ("Compliance Plan"); in August 2008, the Commission issued an Order allowing an amendment to the original Compliance Plan;

Whereas, EKPC is in the process of constructing the following pollution-control facilities that qualify as eligible projects under the environmental surcharge statute: Air Quality Control System ("AQCS") at Cooper Station; Isolation Valves and Switchyard Improvements relating to the Spurlock Units 1 and 2 scrubbers; Spurlock Unit 4 Ash Silo; Spurlock Landfill Area C Expansion and Sediment Pond Construction; and, Spurlock Unit 2 Duct Work Replacement;

Whereas, The environmental surcharge offers the most expedient method of cost recovery, and the filing of an amendment to the existing Compliance Plan is the first step in securing Commission approval of the recovery of the costs of these new projects;

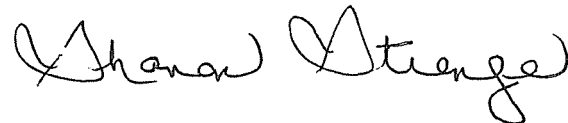
Whereas, EKPC is seeking a return on Construction Work in Progress ("CWIP") balances, as well as a recovery of costs at the commercial operation date of these projects; and

Whereas, Once these projects become fully operational in 2012, EKPC estimates that EKPC will receive an additional \$62 million in annual environmental surcharge revenues, which represents an approximate 9% increase at wholesale (an approximate 6.8% increase at retail); now, therefore, be it

Resolved, That the EKPC Board of Directors hereby authorizes management to file notice with the Commission, and subsequently file an application to amend its Compliance Plan to seek to recover the costs associated with the identified projects.

The foregoing is a true and exact copy of a resolution passed at a meeting called pursuant to proper notice at which a quorum was present and which now appears in the Minute Book of Proceedings of the Board of Directors of the Cooperative, and said resolution has not been rescinded or modified.

Witness my hand and seal on behalf of the corporate secretary, this 19th day of February 2010.

A handwritten signature in cursive script that reads "Shanan Strange".

Shanan Strange
Recording Secretary

Corporate Seal

East Kentucky Power Cooperative, Inc.
 Environmental Surcharge Report
 Plant, CWIP, Depreciation, & Taxes and Insurance Expenses

(1) Project No.	(1) Description	(2) Eligible Gross Plant in Service	(3) Eligible Accumulated Depreciation	(4) CWIP Amount Net of AFUDC	(5) Eligible Net Plant in Service (2)-(3)=(5)	(6) Monthly Depreciation Expense	(7) Monthly Tax Expense	(8) Monthly Insurance Expense
1	Gilbert							
2	Spurlock 1: Precipitator							
3	Spurlock 1: SCR							
4	Spurlock 2: SCR							
5	Dale 1 & 2: Low NOx Burners							
6	Spurlock 1: Low NOx Burners							
7	Spurlock 2: Scrubber (1)							
8	Spurlock 1: Scrubber (2)							
9	Spurlock 4: (3)							
10	Spurlock, Cooper & Dale: Stack Emissions Monitoring							
11	Cooper 2 : Air Quality Control System							
12	Spurlock 1,2, & 4; Gilbert; Spurlock 1 & 2 Scrubbers: (4)							
13	Spurlock Unit # 2: (5)							
	Total							

- (1) Switchyard Improvements; Isolation Valve
- (2) Switchyard Improvements; Isolation Valve
- (3) Ash Silos
- (4) Landfill Area C Expansion and Sediment Pond Construction
- (5) Replacement of Retired Ductwork

East Kentucky Power Cooperative, Inc.
Environmental Surcharge Report

Form 2.2

Inventories of Spare Parts, Limestone, and Lime

(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Beginning Inventory	Purchases	Other Adjustments	Utilized	Ending Inventory	Reason(s) for Adjustment
					(2)+(3)-(4)-(5)	
Spare Parts						
Limestone - Gilbert & Spurlock 4						
Limestone - Spurlock 1 & 2 Scrubbers						
Lime - Cooper AQCS						
Total						

East Kentucky Power Cooperative, Inc.
Environmental Surcharge
Operating and Maintenance Expenses

Form 2.5

Expense Type	Account Description	Amount
I Maintenance		
50144	Fuel Coal Gilbert	
50130	Fuel Coal Cooper (Unit # 2 AQCS)	
51241	Maintenance of Boiler Plant Spurlock 1	
51242	Maintenance of Boiler Plant Spurlock 2	
51244	Maintenance of Boiler Plant Gilbert	
501445	Fuel Coal Spurlock 4	
512431	Maintenance of Boiler Plant Scrubber 1	
512432	Maintenance of Boiler Plant Scrubber 2	
51245	Maintenance of Boiler Plant Spurlock 4	
512XXX	Maintenance of Cooper Unit # 2 AQCS	
	Total	=====
II Air Permit Fees		
50621	Misc Steam Power Environmental Dale	
50631	Misc Steam Power Environmental Cooper	
50645	Misc Steam Power Environmental Spurlock	
	Total	=====
III Operating Expense - Ammonia and Limestone		
50641	Misc Steam Power Expense - Spurlock 1	
50642	Misc Steam Power Expense - Spurlock 2	
50644	Misc Steam Power Expense - Gilbert	
50620	Misc Steam Power Expense - Dale	
50630	Misc Steam Power Expense - Cooper	
506XXX	Misc Steam Power Expense - Cooper Unit # 2 AQCS	
506431	Misc Steam Power Expense - Spurlock 1	
506432	Misc Steam Power Expense - Spurlock 2	
506445	Misc Steam Power Expense - Spurlock 4	
	Total	=====
	Summary - Projects 7-12	
50130	Fuel Coal Cooper (Unit # 2 AQCS)	
501445	Fuel Coal Spurlock 4	
512431	Maintenance of Boiler Plant Scrubber 1	
512432	Maintenance of Boiler Plant Scrubber 2	
51245	Maintenance of Boiler Plant Spurlock 4	
50620	Misc Steam Power Expense - Dale	
506XXX	Misc Steam Power Expense - Cooper Unit # 2 AQCS	
506431	Misc Steam Power Expense - Spurlock 1	
506432	Misc Steam Power Expense - Spurlock 2	
506445	Misc Steam Power Expense - Spurlock 4	
512XXX	Maintenance of Cooper Unit # 2 AQCS	
	Total	=====
	Summary - Project 1-6	
50144	Fuel Coal Gilbert	
51241	Maintenance of Boiler Plant Spurlock 1	
51242	Maintenance of Boiler Plant Spurlock 2	
51244	Maintenance of Boiler Plant Gilbert	
50621	Misc Steam Power Environmental Dale	
50631	Misc Steam Power Environmental Cooper	
50645	Misc Steam Power Environmental Spurlock	
50641	Misc Steam Power Expense - Spurlock 1	
50642	Misc Steam Power Expense - Spurlock 2	
50644	Misc Steam Power Expense - Gilbert	
	Total	=====
	Monthly Total	=====

**EAST KENTUCKY POWER COOPERATIVE
ESTIMATED COST RECOVERY
IMPACT OF AMENDMENT TO
ENVIRONMENTAL COMPLIANCE PLAN
IN 2010**

I. Annual Revenue Requirements - New ES Projects

(1)	(2)	(3)
Capital Costs (Millions \$)	Fixed Charge Rate	Annual Revenue Requirement (Millions \$)
<u>(1)</u>	<u>(2)</u>	<u>(Col. 1 * Col. 2)</u>
\$355.4	17.44%	\$62.0

**EAST KENTUCKY POWER COOPERATIVE
ENVIRONMENTAL SURCHARGE**

FIXED CHARGE RATE

I. Derivation of Fixed Charge Rate	AVG <u>FCR</u>
Interest	4.48
TIER (Based on 1.35)	1.57
Depreciation	5.26
Taxes & Insurance	0.19
Sub-Total	<u>11.51</u>
Fixed O & M	0.51
Sub-Total	<u>12.01</u>
Variable O & M	5.43
Total	<u><u>17.44</u></u>

1 A. I am responsible for all operations and maintenance functions at our three coal
2 fired power plants, combustion turbine plant, and landfill gas operations.

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

4 A. The purpose of my testimony is to provide a description of proposed amendments
5 to the environmental compliance projects included in EKPC's compliance plan as
6 shown in Exhibit AFW-1. I will describe the following projects:

7 A. Project No. 7 Additions: Spurlock 2 Scrubber Isolation Valve and
8 Switchyard Improvements

9 B. Project No. 8 Additions: Spurlock 1 Scrubber Isolation Valve and
10 Switchyard Improvements

11 C. Project No. 9 Addition: Spurlock 4 Ash Silos Construction

12 D. Project No. 12: Spurlock Landfill Area C Expansion and Sediment
13 Pond Construction

14 E. Project No. 13: Spurlock 2—Duct Work Replacement

15 **PROJECT No. 7 Amended: Spurlock 2 Scrubber Isolation Valve and**
16 **Switchyard Improvements**

17 **Q. Please describe the scrubber isolation valve that is being added by amended**
18 **Project No. 7, the Spurlock 2 scrubber.**

19 A. A 54-inch diameter pump discharge isolation valve is being added to each of the
20 five recycle pumps on the Unit 2 Scrubber. These isolation valves are required to
21 enable maintenance to be safely performed on the recycle pumps during unit
22 operations. Being able to perform maintenance of the pumps while the Unit is

1 “on-line” is important in avoiding unit derates and unit outages in order to
2 maintain emissions compliance while working on the recycle pumps.

3 **Q. Why are you adding this valve at this time?**

4 A. These valves were not included in the original vendor designs. The need was
5 realized after a pump repair was required and no safe method of performing the
6 maintenance was available.

7 **Q. Is this equipment required by the Consent Decree?**

8 A. No.

9 **Q. When will this equipment be installed?**

10 A. The isolation valve will be installed in the fall of 2010.

11 **Q. What is the capital cost of this project?**

12 A. The capital cost of this project is estimated to be \$634,000.

13 **Q. Please describe the switchyard improvements that are being added by
14 amended Project No. 7, the Spurlock 2 scrubber.**

15 A. Three transformers and an associated switchgear unit were added as part of
16 Spurlock 2 scrubber. An 84 MVA general service transformer, two three-winding
17 56 MVA auxiliary transformers, and an eight-unit 13,800 volt switchgear unit
18 were added. This equipment is required to provide the necessary electrical power
19 to operate the new scrubber equipment and the new Unit 2 induced draft fans.

20 **Q. Why are you proposing this addition at this time?**

21 A. The switchyard improvements for both the Spurlock Units 1 and 2 scrubbers were
22 completed prior to the commercial operation dates. These switchyard
23 improvements were not specifically requested in EKPC’s last compliance plan

1 amendment case (Case No. 2008-00115). Please see the testimony of Mrs. Wood
2 for a more in-depth discussion of this item.

3 **Q. What is the capital cost of this equipment?**

4 A. The installed cost of this equipment is \$8,396,000.

5 **PROJECT No. 8 Amended: Spurlock 1 Scrubber Isolation Valve and**
6 **Switchyard Improvements**

7 **Q. Please describe the scrubber isolation valve that is being added by amended**
8 **Project No. 8, the Spurlock 1 scrubber.**

9 A. A 54-inch diameter pump discharge isolation valve is being added to each of the
10 four recycle pumps on the Unit 1 Scrubber. These isolation valves are required to
11 enable maintenance to be safely performed on the recycle pumps during unit
12 operations. Being able to perform maintenance of the pumps while the Unit is
13 “on-line” is important in avoiding unit derates and unit outages in order to
14 maintain emissions compliance while working on the recycle pumps.

15 **Q. Why are you adding this valve at this time?**

16 A. These valves were not included in the original vendor designs. The need was
17 realized after a pump repair was required and no safe method of performing the
18 maintenance was available.

19 **Q. Is this equipment required by the Consent Decree?**

20 A. No.

21 **Q. When will this equipment be installed?**

22 A. The isolation valve will be installed in the spring of 2011.

23 **Q. What is the capital cost of this project?**

1 A. The capital cost of this project is estimated to be \$507,000.

2 **Q. Please describe the switchyard improvements that are being added by**
3 **amended Project No. 8, the Spurlock 1 scrubber.**

4 A. Two transformers were added as part of Spurlock 1 scrubber, a 15 MVA general
5 service transformer, and a 33 MVA auxiliary transformer. This equipment is
6 required to provide the necessary electrical power to operate the scrubber
7 equipment.

8 **Q. What is the capital cost of this project?**

9 A. The capital cost of this project is \$1,259,000.

10 **PROJECT No. 9 Amended: Spurlock 4 Ash Silos Construction**

11 **Q. Please describe the ash silos that are being added by amended Project No. 9,**
12 **Spurlock 4 pollution control equipment.**

13 A. Two new ash silos are being added to receive the bed and fly ash generated by
14 Unit 4.

15 **Q. Why are you adding these ash silos at this time?**

16 A. EKPC is adding these ash silos to increase the reliability of the Gilbert Unit and
17 Spurlock Unit 4. The existing bed and fly ash silos were built to serve Gilbert.
18 Currently, Unit 4 bed and fly ash is also going to the original Gilbert silos.
19 Utilizing the original silos for both the Gilbert Unit and Spurlock Unit 4 does not
20 allow for adequate downtime for needed preventative and corrective maintenance
21 activities. Both the Gilbert Unit and Spurlock Unit 4 would be at risk of forced
22 outages for maintenance activities without the additional ash silos.

23 **Q. Is this equipment required by the Consent Decree?**

1 A No.

2 **Q. When will this equipment be installed?**

3 A. The ash silos will be completed in the summer of 2010.

4 **Q. What is the capital cost of this project?**

5 A. The capital cost of this project is estimated to be \$12 million.

6 **PROJECT No. 12: Spurlock Landfill Area C Expansion and Sediment Pond**

7 **Construction**

8 **Q. Please describe the expansion of the Spurlock Landfill Area C and the**
9 **construction of the sediment pond.**

10 A. Area C is the next increment of landfill space that is required to hold the coal
11 combustion by-products and scrubber waste produced at Spurlock Station. The
12 project consists of clearing the land, constructing a liner system, extending the
13 groundwater monitoring, constructing perimeter storm water ditches, and
14 accessing roads and the sedimentation pond. This new expansion will tie into the
15 existing landfill.

16 **Q. Why are you expanding the landfill and constructing the sedimentation pond**
17 **at this time?**

18 A. Projected quantities of coal combustion by-products and scrubber waste material
19 to be landfilled will be approximately 2,300,000 tons per year. Spurlock Units 1
20 and 2 produce approximately 330,000 tons of flyash and bottom ash per year.

21 The remainder of the 2,300,000 tons comes from the Units 1 and 2 scrubber
22 operation and from Gilbert and Unit 4. Landfill Areas A and B are nearing their

1 capacity. Constructing a new sedimentation pond and the opening of Area C are
2 required in order to dispose of future waste.

3 **Q. Is this equipment required by the Consent Decree?**

4 A. No.

5 **Q. When will this equipment be installed?**

6 A. The landfill dam will be constructed in the fall of 2010.

7 **Q. What is the capital cost of this project?**

8 A. The capital cost of this project is estimated to be \$6.5 million.

9 **PROJECT No. 13: Spurlock 2 Duct Work Replacement**

10 **Q. Please describe the duct work replacement project on Spurlock Unit 2**

11 A. This is to provide replacement duct work for Unit No. 2 between the ID fans and
12 the new duct work installed for the scrubber on both A and B sides. No
13 additional O&M is expected.

14 **Q. Why are you replacing this duct work at this time?**

15 A. This section of duct work on the A and B sides is original equipment. The flue
16 gas from the combustion process exhausts through these sections of ductwork into
17 the new scrubber. The burning of higher sulfur fuel is causing the flue gas to be
18 more corrosive than in years past. This has accelerated the corrosion in these
19 sections of ductwork and it has reached the end of its useful life. Please see the
20 testimony of Mrs. Wood for a discussion of the accounting and rate-making
21 treatment for this asset.

22 **Q. When will this equipment be installed?**

23 A. The replacement duct work will be installed in the spring of 2010.

1 **Q. What is the capital cost of this project?**

2 A. The capital cost of this project is estimated to be \$2,100,500.

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

4 A. Yes.

COMMONWEALTH OF KENTUCKY

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

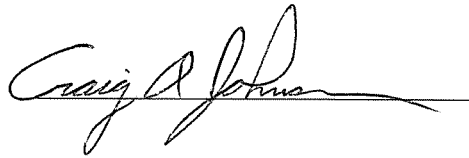
THE APPLICATION OF EAST KENTUCKY POWER)
COOPERATIVE, INC. FOR APPROVAL OF AN)
AMENDMENT TO ITS ENVIRONMENTAL)
COMPLIANCE PLAN AND ENVIRONMENTAL)
SURCHARGE)

Case No. 2010-00083

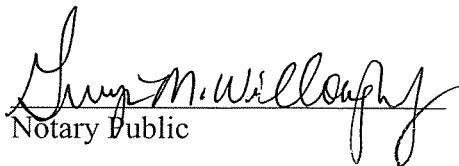
AFFIDAVIT

STATE OF KENTUCKY)
)
COUNTY OF CLARK)

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



Subscribed and sworn before me on this 24th day of March, 2010.


Notary Public

MY COMMISSION EXPIRES NOVEMBER 30, 2013
NOTARY ID #409352

1 COMMONWEALTH OF KENTUCKY

2
3 BEFORE THE PUBLIC SERVICE COMMISSION

4
5 In the Matter of:

6
7 THE APPLICATION OF EAST KENTUCKY POWER)
8 COOPERATIVE, INC. FOR APPROVAL OF AN)
9 AMENDMENT TO ITS ENVIRONMENTAL) CASE NO.
10 COMPLIANCE PLAN AND ENVIRONMENTAL) 2010-00083
11 SURCHARGE)

12
13 _____
14 DIRECT TESTIMONY OF MARY JANE WARNER
15 ON BEHALF OF EAST KENTUCKY POWER COOPERATIVE, INC.
16 _____

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

18 A. My name is Mary Jane Warner, East Kentucky Power Cooperative, Inc., 4775
19 Lexington Road, Winchester, Kentucky 40391. I am the Manager of
20 Engineering in the Construction Division of East Kentucky Power Cooperative,
21 Inc.

22 Q. Please state your education and professional experience.

23 A. I have a Bachelor of Science degree in Civil Engineering from the University
24 of Kentucky, College of Engineering and I am a Licensed Professional
25 Engineer in Kentucky. I have over 29 years of experience in the design,
26 construction and management of electric supply system facilities and projects.

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

28 A. I am currently assigned as the Project Manager for the addition of an Air
29 Quality Control System (“AQCS”) at EKPC’s John Sherman Cooper
30 Generating Station. The duties associated with that role are the management

1 and oversight of all aspects of the project associated with design and
2 construction.

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

4 A. The purpose of my testimony is to provide a description of the Cooper AQCS,
5 which is one of the environmental compliance plan projects included in
6 EKPC's compliance plan amendment in Exhibit AFW-1.

7 **Q. Would you please describe the new Cooper AQCS?**

8 A. The pollution control system to be added for Cooper Generating Unit #2
9 consists of a Selective Catalytic Reduction system using aqueous ammonia
10 injection and catalyst, a dry Circulating Fluidized Bed Flue Gas
11 Desulphurization unit using hydrated lime reagent, and a pulse jet fabric filter.
12 Several ancillary systems will be added to manage ash and the reagent
13 materials. Modifications of the existing plant facilities are required to add draft
14 fans, a new air heater, boiler adjustments, and to expand various electrical and
15 control systems to incorporate the new equipment.
16 The project is required as a result of a Consent Decree (CD) between EKPC
17 and the Environmental Protection Agency, entered in the United States District
18 Court, Eastern District of Kentucky, Central Division, Lexington, dated
19 September 24, 2007. The combined systems are designed to achieve
20 compliance with the specific requirements set forth in the CD for control of
21 SO₂ and NO_x. In order to meet Best Available Retrofit Technology for the
22 Kentucky State Implementation Plan amended November 2009 by the Division

1 of Air Quality, EKPC has included a pulse jet fabric filter to control Particulate
2 Matter.

3 On May 1, 2008, EKPC received a Certificate of Public Convenience and
4 Necessity (CPCN) for the Cooper AQCS from the Kentucky Public Service
5 Commission as a result of Case No. 2008-00472.

6 **Q. Will a new transformer or any other switchyard equipment be necessary**
7 **to accommodate the operation of the AQCS?**

8 A. Yes. EKPC will add a new transformer and circuit breakers to the switchyard
9 as part of this project. EKPC requests environmental cost recovery of these
10 items, which are included in the total project cost.

11 **Q. What is the cost of this project?**

12 A. The estimated construction cost is \$324 million.

13 **Q. When is the project completion date?**

14 A. The Cooper AQCS is scheduled to be completed and placed into service in
15 June 2012.

16 **Q. Have you identified the anticipated operation and maintenance (“O&M”)**
17 **cost of the Cooper AQCS?**

18 A. The estimated annual operating cost for the Cooper AQCS is \$58,933,000.
19 The TIER and interest rate assumptions for this Application are discussed in
20 the testimony of Mrs. Wood. Note that the Cooper AQCS TIER and interest
21 rate assumptions included in this Application have been updated; therefore,
22 they vary from those used to develop the cost estimate included in the CPCN
23 proceeding (Case No.2008-00472 – Exhibit 6.)

1 Q. Does this conclude your testimony?

2 A. Yes.

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

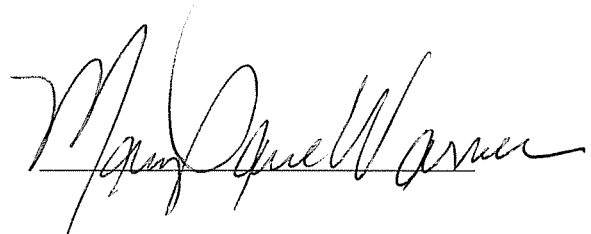
THE APPLICATION OF EAST KENTUCKY POWER)
COOPERATIVE, INC. FOR APPROVAL OF AN)
AMENDMENT TO ITS ENVIRONMENTAL)
COMPLIANCE PLAN AND ENVIRONMENTAL)
SURCHARGE)

Case No. 2010-00083

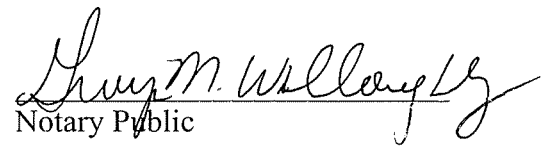
AFFIDAVIT

STATE OF KENTUCKY)
)
COUNTY OF CLARK)

Mary Jane Warner, being duly sworn, states that she has read the foregoing prepared testimony and that she 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 her knowledge, information and belief.



Subscribed and sworn before me on this 24th day of March, 2010.


Notary Public

MY COMMISSION EXPIRES NOVEMBER 30, 2013
NOTARY ID #409352

**Frost
Brown Todd** LLC
ATTORNEYS

February 24, 2010

Mr. Jeff Derouen
Executive Director
Kentucky Public Service Commission
P.O. Box 615
Frankfort, KY 40602

RECEIVED

FEB 24 2010

PUBLIC SERVICE
COMMISSION

Re: East Kentucky Power Cooperative's Notice of Intent to File an Amendment to Its
Environmental Surcharge Compliance Plan

Dear Mr. Derouen:

East Kentucky Power Cooperative, Inc. ("EKPC") hereby gives notice pursuant to KRS
278.183 of its intent to file an Application for an Approval of an Amendment to its
Environmental Compliance Plan and Environmental Surcharge. EKPC plans to file this
Application on or after March 26, 2010.

We respectfully request that the following parties representing EKPC be included on the
Commission's Service List:

Roger Cowden
Frost Brown Todd, LLC
250 West Main Street, Suite 2800
Lexington, KY 40507-1749

Ann F. Wood
East Kentucky Power Cooperative, Inc.
P.O. Box 707
Winchester, Kentucky 40392-0707

If you have any questions or require additional information, please contact me.

Very truly yours,


Roger Cowden

Cc: Hon. Dennis Howard, Office of the Attorney General
Hon. Michael L. Kurtz, Kentucky Industrial Utility Customers, Inc.

MEMORANDUM

TO: Member System CEO's

FROM: Anthony S. Campbell *Anthony S. Campbell*

DATE: February 24, 2010

SUBJECT: Notice of Amendment to EKPC Environmental Compliance Plan

On Wednesday, February 24, EKPC gave notice to the Commission of its intent to file an Application for an Approval of an Amendment to its Environmental Compliance Plan and Environmental Surcharge. EKPC plans to file this Application on or after Friday, March 26.

The amendment will enable EKPC to recover costs associated with installing and operating nearly \$355 million in equipment designed to reduce pollution. If approved, we would begin recovering these costs in stages around the time that the equipment becomes operational.

The new compliance projects consist of the following:

- Spurlock 2 Scrubber Isolation Valve and Switchyard Improvements
- Spurlock 1 Scrubber Isolation Valve and Switchyard Improvements
- Spurlock 4 Ash Silo
- Air Quality Control System at Cooper 2
- Spurlock Landfill Area C Expansion and Sediment Pond Construction
- Spurlock 2 Duct Work Replacement

If approved, once the projects become fully operational in 2012, the request is expected to amount to an increase of about 9.02 percent in the environmental surcharge for all customer classes at wholesale, and would be passed through as an approximate 6.7 percent retail increase, which would be an estimated \$4.77 on the average residential bill. The increase would be phased in as projects are built and begin operation. The PSC has until September to rule on EKPC's request.

These projects are necessary in order for our power plants to meet increasingly stringent environmental standards.