EAST KENTUCKY POWER COOPERATIVE

2008-00115

RECEIVED

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PUBLIC SERVICE COMMISSION

March 28, 2008

HAND DELIVERED

Ms. Stephanie L. Stumbo
Executive Director
Public Service Commission
Post Office Box 615
211 Sower Boulevard
Frankfort, KY 40602

Dear Ms. Stumbo:

Please find enclosed for filing with the Commission an original and ten copies of the Application of East Kentucky Power Cooperative, Inc., to amend the Environmental Compliance Plan and the Environmental Surcharge approved in PSC Case No. 2004-00321 on March 17, 2005. As noted in the Application, EKPC hereby notifies the Commission, pursuant to KRS §278.183 (2) of its intent to implement such amended Environmental Compliance Plan effective for service rendered on or after May 1, 2008.

Very truly yours,

Charles A. Lile
Corporate Counsel

Enclosures

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P.O. Box 707, Winchester,
Kentucky 40392-0707

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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.)))	2008-00115

APPLICATION

1. Applicant, East Kentucky Power Cooperative, Inc., hereinafter referred to as "EKPC", Post Office Box 707, 4775 Lexington Road, Winchester, Kentucky 40392-0707, hereby files this Application for approval of an amendment to its environmental compliance plan, and its Rate ES- Environmental Surcharge, of its wholesale electric tariff, which was originally approved by the Commission on March 17, 2005.

2. This Application is made pursuant to KRS §278.183 and related sections.

3. A copy of Applicant's restated Articles of Incorporation and all amendments thereto were filed with the Public Service Commission (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 EKPC Board Resolution approving the filing of this Application is attached to the Direct Testimony of David G. Eames, as Exhibit DGE-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 David G. Eames, EKPC Chief Financial Officer, which presents an overview of the Application, the current Environmental Compliance Plan, the proposed Amended Environmental Compliance Plan, the proposed changes to EKPC's wholesale rate ES- Environmental Surcharge, and the reasons for the timing of this Application.

B. Applicant's Exhibit 2- The prepared testimony of Craig Johnson, EKPC Vice-President of Production, which discusses the amendments to the Amended Environmental Compliance Plan, the cost effectiveness of the Amended Environmental Compliance Plan, the pollution control equipment that has been installed at the Dale Generating Station in Clark County, the upgrade of the NOx reduction equipment at the Spurlock 1 generating station in Mason County, the replacement of the original scrubber at the Spurlock 2 generating station, the addition of a new scrubber at the Spurlock 1 generating station, the pollution control equipment that will be installed at the new Spurlock 4 generating station and the installation of continuous emission monitoring equipment for particulate matter at Spurlock station as well as the installation of continuous emission monitoring equipment for mercury at Spurlock, Dale and Cooper Stations.

C. Applicant's Exhibit 3- The prepared testimony of Ann Wood, EKPC Manager of Accounting, which discusses EKPC's accounting for Construction Work in Progress ("CWIP") and allowance for funds used during construction ("AFUDC") as they relate to EKPC's Amended Environmental Compliance Plan, and EKPC's proposed changes to its wholesale tariff ES – Environmental Surcharge.

D. Applicant's Exhibit 4- The prepared testimony of William A. Bosta, EKPC Manager of Pricing, which describes how the proposed changes in the Amended Environmental Compliance Plan will be implemented on a monthly basis, sponsorship of and a discussion of the proposed changes to EKPC's wholesale tariff Rate ES – Environmental Surcharge and the impact on EKPC's member distribution cooperatives, and to outline the billing impact of the proposed changes at both the wholesale and retail level.

6. EKPC, pursuant to KRS §278.183 (2), hereby gives notice to the Commission of its intent to implement such changes to its compliance plans for service rendered on and after May 1, 2008, and to begin the recovery on that date of the costs documented in this Application associated with qualifying Federal Clean Air Act and coal waste/by-product disposal compliance at its coal-fired generating units. Attached hereto as Applicant's Exhibit 5 is a copy of the notice sent 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 beginning May 1, 2008.

Respectfully submitted,

DAVID A. SMART

CHARLES A. LILE

ATTORNEYS FOR EAST KENTUCKY POWER COOPERATIVE, INC.

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(EnvSchgAmdApp)

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BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

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DIRECT TESTIMONY OF DAVID G. EAMES
ON BEHALF OF EAST KENTUCKY POWER COOPERATIVE, INC.

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

A. My name is David G. Eames, East Kentucky Power Cooperative (EKPC), 4775 Lexington Road, Winchester, Kentucky 40391. I am Chief Financial Officer for EKPC.

Q. Please state your education and professional experience.

A. I received a Bachelor's degree in Engineering from Northeastern University in 1971 and a Master's degree in Business Administration in 1976 from the University of Michigan. I am a licensed professional engineer and a certified public accountant in the Commonwealth of Kentucky. In addition, I have attended and participated in several seminars and supplemental training courses over the years. I have been employed by EKPC since January 1979 and have occupied my current position within the EKPC organization since September 1985.

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

A. I am responsible for all aspects of finance, accounting, internal auditing and performance management at EKPC.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to briefly describe the current Environmental Compliance Plan (Plan) and to outline the proposed additions to the Plan. I will also describe the proposed change to EKPC's Environmental Surcharge Tariff, outline the reasons for the timing of this filing and introduce the Company's witnesses who are sponsoring evidence in support of the proposed changes.

Q. Are you sponsoring any exhibits in this proceeding?

A. Yes. I am sponsoring Exhibit DGE-1, which reflects the inclusion of six new projects into EKPC's Environmental Compliance Plan, and Exhibit DGE-2, the Board Resolution authorizing EKPC to amend its Environmental Compliance Plan.

Q. Would you please provide a brief description of EKPC's current Environmental Compliance Plan?

A. Yes. In September 2004, EKPC filed for approval of an Environmental Compliance Plan consisting of four projects. These are:

Project 1: Pollution Control Facilities used at the Gilbert Unit

Project 2: Spurlock Unit 1 Precipitator

Project 3: Spurlock Unit 1 Selective Catalytic Reduction (SCR)

Project 4: Spurlock Unit 2 SCR.

EKPC received approval of its Environmental Compliance Plan in March 2005 and implemented an environmental surcharge in July 2005.

Q. What are the additions to the Environmental Compliance Plan as proposed by EKPC?

A. EKPC is in the midst of a significant effort to build facilities to meet the requirements of the Federal Clean Air Act. All of these projects are either under construction or have been completed. There are six additional projects:

Project 5: Low NOx burners at Dale Station

Project 6: Low NOx burners at Spurlock Unit 1

Project 7: Scrubber at Spurlock Unit 2

Project 8: Scrubber at Spurlock Unit 1

Project 9: Pollution Control Facilities at the new Spurlock 4 generating unit

Project 10: Continuous Emission Monitoring Equipment for particulate matter at the Spurlock units and Mercury Monitoring Equipment at the Dale units, Spurlock units and Cooper units.

Q. Has EKPC received a Certificate of Public Convenience and Necessity (CPCN) for these projects?

A. The Company received a CPCN from the Commission for the Spurlock Unit 2 scrubber in Case No. 2005-00417, which was subsequently amended and granted in Case No. 2007-00375; a CPCN for the Spurlock Unit 1 scrubber was awarded in Case No. 2006-00132; and a CPCN for the Spurlock Unit 4 generating unit was granted in Case No. 2004-00423, and was subsequently reaffirmed in Case No. 2006-00564. All three of these projects are currently under construction. The Spurlock Unit 2 scrubber is expected to be in service by October 2008 and is replacing the original scrubber placed in service in the early 1980's; the Spurlock

Unit 1 scrubber is expected to be in service by May 2009 and Spurlock Unit 4 is expected to be in service by April 2009.

Q. Were CPCNs granted for the other projects?

A. No. All of the other projects are relatively small items that came about as a result of the acceptance by the Federal District Court of the Consent Decrees agreed to by EKPC and the Environmental Protection Agency (EPA) in lawsuits filed by EPA. These projects do not add new functions to the generating plants involved, but represent either replacements or upgrades to existing equipment, or new monitoring enhancements for existing systems. These projects do not involve large expenditures, and represent ordinary extensions of existing facilities.

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

A. No other new projects are proposed. However, for the existing SCR projects, EKPC added a layer of catalyst to the existing facility at Spurlock Unit 1, and intends to add one and a half layers of catalyst to the existing facility at Spurlock Unit 2. These additions will enable EKPC to meet the year-around NOx reduction requirements set forth in the EPA Consent Decree. In addition, the ammonia injection system for the SCRs will be enhanced.

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

A. The addition of the catalysts and enhancement of the ammonia injection system will further reduce the emissions levels at these generating units. The function of the original projects has not changed and equipment is being added to meet continuing requirements of the Federal Clean Air Act and the aforementioned

Consent Decrees. EKPC considers these to be enhancements of existing facilities, rather than new projects.

Q. Does the filing propose any changes to the Environmental Surcharge Tariff?

A. Yes. EKPC's current Environmental Surcharge Tariff allows for recovery of costs associated with Construction Work in Progress (CWIP). However, the language in the tariff does not explicitly exclude the Allowance for Funds Used During Construction (AFUDC). The change to a listing of "CWIP net of AFUDC" is consistent with the practice of other utilities and the requirements of the statute. In addition, EKPC proposes to change the Tariff to reflect a 1.35X TIER, to be consistent with the Commission's decision to award EKPC that TIER in its base rate case order of December 5, 2007 in Case No. 2006-00472. The proposed tariff change will enable EKPC to recover these costs through the environmental surcharge prior to the operation date of the projects. EKPC will receive a return using a 1.35X TIER as applied to the net CWIP balance for these projects upon approval of the Compliance Plan changes by the Commission. Finally, EKPC proposes that the tariff sheet be modified to reflect a change in the Base Environmental Surcharge Factor ("BESF"), to reflect the replacement of the existing Spurlock Unit 2 scrubber, which is currently recovered in base rates.

Q. Why is EKPC requesting approval of the proposed amendment to the Plan at this time?

A. The Commission pointed out in its Order of December 5, 2007 in Case No. 2006-00472 that EKPC needed to look closely at the potential to amend its

Environmental Compliance Plan. On Pages 48 and 49 of the Order, the Commission stated:

"... it is essential that EKPC utilize all available options to provide for timely recovery of costs. The Commission believes that EKPC should immediately review all of its environmental compliance projects and activities and, to the extent appropriate, file an application with the Commission to amend the compliance plan approved in 2005 to include eligible compliance projects and include the approved projects in its surcharge mechanism."

EKPC concurs with the Commission's statement and this filing reflects the Company's intention to meet this suggestion. Approval of EKPC's proposed change to earn a return on CWIP net of AFUDC, in the Environmental Surcharge Tariff will enable EKPC to recover an estimated additional $3 million in surcharge revenue during 2008 and an estimated additional $4 million in 2009, compared to implementing and recovering costs through the surcharge beginning with the installation date of the two scrubbers and the portion of Spurlock 4 attributable to costs eligible for recovery under the environmental surcharge. Once all of the new projects are operating and eligible for recovery of all related costs, EKPC is expected to recover about $64 million annually. The proposed changes to the Plan will help EKPC improve its financial position and help EKPC procure funding for these projects and future projects as well.

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

A. Yes. Exhibit DGE-2 provides the Board resolution. It should be noted that Project 10, Particulate Matter and Mercury CEMS, was not included in the attached Board Resolution, but inclusion of those items in this Application has been approved by EKPC's President and Chief Executive Officer, and is scheduled for ratification by the Board of Directors in April. I will supplement Exhibit DGE-2 with the additional Board resolution upon Board ratification.

Q. Would you please identify EKPC's witnesses in this proceeding and briefly describe the content of their testimony?

A. Yes. There are three other witnesses in this proceeding:

(1) Craig A. Johnson, Vice-President of Production, will describe the new projects, identify the timetable for construction and outline the anticipated costs.

(2) Ann F. Wood, Manager of Accounting, will describe EKPC's accounting practices with regard to CWIP and AFUDC, and will explain the need to amend the language in the Environmental Surcharge Tariff. In addition, Ms. Wood will provide the CWIP balance as of January 31, 2008 for the projects currently under construction.

(3) William A. Bosta, Manager of Pricing, will identify how the proposed changes will be applied on a monthly basis to the surcharge calculation. He will sponsor the proposed changes to EKPC's tariff sheet and will provide the estimated bill impact of the proposed environmental compliance plan changes.

Q. Does this conclude your testimony?

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 THE ENVIRONMENTAL COMPLIANCE PLAN	))))

AFFIDAVIT

STATE OF KENTUCKY)
)
COUNTY OF CLARK)

David G. Eames, 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.

David G Eames

Subscribed and sworn before me on this 26th day of March, 2008.

Peggy S. Griffin
Notary Public

My Commission expires: December 8, 2009

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	$14.8 (A)
3.	NOx	SCR	Spurlock 1	CAAA Sec. 407 40 CFR Part 76	V-97-050	2003 Fall 2007	$73.4 M (A) Add. $2.1 M (E)
4.	NOx	SCR	Spurlock 2	CAAA Sec. 407 40 CFR Part 76	V-97-050	2002 Fall 2007 & Spring 2008	$45.2 M (A) Add. $2.4 M (E)
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	$3.5 M (E)
7.	SO2	Scrubber	Spurlock 2	CAN 04-34-KSF CAAA Sec 405	V-97-050 Rev. 1	Oct. 2008	$207.4 M (E)
8.	SO2	Scrubber	Spurlock 1	CAN 04-34-KSF CAAA Sec 404	V-97-050 Rev. 1	Spring 2009	$172.9 M (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 (E)
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 2009	$3.7 M (E)

Resolution

MARCH

AUTHORIZATION TO FILE WITH THE PUBLIC SERVICE COMMISSION FOR AN AMENDMENT TO THE ENVIRONMENTAL COMPLIANCE PLAN

Whereas, The Environmental Surcharge statute was made effective on July 14, 1992, as a means to allow recovery of costs incurred to meet Federal Clean Air Act requirements at coal-fired generating plants;

Whereas, EKPC received approval to implement an environmental surcharge by Order of the Kentucky Public Service Commission (the "Commission") of March 17, 2005 and EKPC and its Member Systems implemented the surcharge beginning in July 2005;

Whereas, EKPC is in the process of constructing scrubbers at Spurlock Units 1 & 2, replacing Low NOx burners at Spurlock Unit 1, is installing pollution-control equipment at its new Spurlock Unit 4, and has installed Low NOx burners at Dale Units 1 & 2, in order to comply with requirements of the Federal Clean Air Act;

Whereas, The costs associated with these projects are subject to recovery under the Environmental Surcharge statute;

Whereas, The Commission, in its Order making permanent a $19 million annual rate increase on December 5, 2007, urged EKPC to "utilize all available options to provide for timely recovery of costs"; and

Whereas, The approval of this amendment to the Environmental Compliance Plan would result in EKPC recovering additional costs associated with meeting Federal Clean Air Act requirements, and will increase annual revenues by an estimated $67 million; now, therefore, be it

Resolved, That the EKPC Board of Directors hereby authorizes management to file with the Commission an application to amend its Environmental Compliance Plan, to seek to recover the costs associated with the identified projects, needed for EKPC to meet the requirements of the Federal Clean Air Act.

COMMONWEALTH OF KENTUCKY

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DIRECT TESTIMONY OF CRAIG A. JOHNSON ON BEHALF OF EAST KENTUCKY POWER COOPERATIVE, INC.

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

A. My name is Craig A. Johnson, East Kentucky Power Cooperative, Inc., 4775 Lexington Road, Winchester, Kentucky 40391. I am the Vice President of Production in the Generation and Transmission Operations Division of East Kentucky Power Cooperative, Inc.

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

A. I received a Bachelor's degree in Engineering from West Virginia Institute of Technology in 1984 and a Master's of Science degree in Engineering in 1989 from the University of Kentucky. I am a licensed professional engineer in the Commonwealth of Kentucky. In addition, I have attended and participated in several seminars and supplemental training courses over the years. I have been employed by EKPC since September 1989 and have occupied my current position within the EKPC organization since May 2007.

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

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

Q. What is the purpose of your testimony?

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

A. Project No. 3 Addition: SCR Modifications for Spurlock 1

B. Project No. 4 Addition: SCR Modifications for Spurlock 2

C. Project No. 5: Dale 1 and 2 Low NOx Burners

D. Project No. 6: Spurlock 1 Low NOx Burners

E. Project No. 7: Spurlock 2 – Wet FGD Scrubber

F. Project No. 8: Spurlock 1 – Wet FGD Scrubber

G. Project No. 9: Spurlock 4 – Pollution Control Equipment

H. Project No. 10: Spurlock, Cooper, & Dale: Particulate Matter and Continuous Emission Monitoring Equipment

Q. Are you sponsoring any exhibits?

A. Yes. I am sponsoring one exhibit in this proceeding. This exhibit was prepared by me or under my supervision.

PROJECT No. 3 Amended: SCR Modifications for Spurlock 1

Q. Please describe the equipment that is being upgraded by amended Project No. 3, SCR modifications for Spurlock 1.

A. Unit 1 has an SCR for the reduction of NOx as described in the original Project No. 3. The SCR system was designed to operate only during the ozone period, which occurs from May through September. The SCR was originally designed so that the box could house a total of three layers of catalyst. Unit 1 SCR had two layers of catalyst installed initially. The recent Consent Decree approved by the Federal Court in EKPC's litigation with EPA mandates that the SCR for Unit 1 operate year around. In order to achieve the NOx levels set forth by the consent decree, an additional layer of catalyst has been added bringing the total number of layers to three in the existing SCR box. This also required that the ammonia injection system for Unit 1, which had been designed to operate during the May-September ozone period, be modified for year around operation.

Q. Why are you upgrading the NOx reduction equipment at this time?

A. The Consent Decree with EPA mandates that the NOx emission rate be no greater than 0.12 lbs./MMBtu for Unit 1 and 0.10 lbs./MMBtu for Unit 2 with a combined average for both units of 0.10 lbs./MMBtu. The new NOx emission rates are computed on a 30-day rolling average, which includes emissions produced during startups and shutdowns. There are times when the SCR cannot be in service due to manufacturer's recommendations. This requires that we normally operate each unit considerably lower than the permit limit in order to achieve compliance during times of startups and shutdown or equipment maintenance. The replacement of the existing low NOx burners on Unit 1 with the latest in low NOx burner technology (Project No. 6), the improved common

ammonia injection system and extra catalyst in each SCR, will ensure that the stringent NOx emission rates can be achieved.

Q. When was this equipment installed?

A. The equipment was installed in fall of 2007.

Q. What is the capital cost of this project?

A. The capital cost of this project is $2.1 million.

PROJECT No. 4 Addition: SCR Modifications for Spurlock 2

Q. Would you please describe the equipment that is being added to Project No. 4?

A. Unit 2 has an SCR for the reduction of NOx as described in the original Project No. 4. The SCR system was designed to operate only during the ozone period, which occurs from May through September. The SCR was originally designed so that the box could house a total of three layers of catalyst. Unit 2 SCR had one and a half layers of catalyst installed initially. The consent decree with EPA mandates that the SCR for Unit 2 operate year around. In order to achieve the NOx levels set forth by the consent decree, an additional one and a half layer of catalyst will be added, bringing the total number of layers to three in the existing SCR box. This also required that the ammonia injection system for Unit 2, which had been designed to operate during the May-September ozone period, be modified for year around operation.

Q. Why are you modifying the NOx reduction equipment at this time?

A. The consent decree with the EPA mandates that EKPC meet certain NOx emission levels on a year around basis.

Q. What is the installation schedule for this modification?

A. The ammonia injection system was upgraded in the fall of 2007. The additional catalyst will be installed in spring of 2008.

Q. What is the capital cost of this project?

A. The capital cost of this project is estimated to be $2.4 million.

PROJECT No. 5: Dale 1 and 2 Low NOx Burners

Q. Would you please describe the construction of the low NOx burner at Dale Station Unit 1 and Unit 2, Project No. 5 ?

A. Dale Station Units 1 and 2 are identical wall fire pulverized coal boilers. There are four burners on each boiler where the coal is introduced into the furnace for combustion. New low NOx burners are being installed with the addition of Over Fired Air ports ("OFA"). The new low NOx burners with the OFA ports have reduced NOx emissions from these two units by approximately 50 percent.

Q. Why is this equipment being installed at this time?

A. The low NOx burners were installed to meet the requirements of the Clean Air Act. Dale Station Units 1 and 2 were originally not classified as having to meet the emission requirements of the Clean Air Act. The recent settlement and consent decree with EPA has resulted in these two units being subject to the conditions of the Clean Air Act. The low NOx burners have been added to meet the annual NOx emission limit of 0.46 lbs./MMBTU.

Q. When was this equipment installed?

A. The equipment was installed in fall of 2007.

Q. What is the capital cost of this project?

A. The capital cost of this project is $2.0 million.

PROJECT No. 6: Spurlock 1 Low NOx Burners

Q. Would you please describe the equipment that is being upgraded by Project No. 6, Low NOx Burners replacement on Spurlock 1?

A. Spurlock 1 is a 325 MW net wall fired pulverized coal boiler. There are 24 coal burners. These are an early vintage of low NOx burner and are capable of achieving a NOx emission rate of approximately 0.5 lbs./MMBtu out of the boiler. These existing burners will be replaced with new Low NOx Burners.

Q. When were the original burners installed on Unit 1?

A. The original burners were installed in 1995.

Q. Why are you upgrading the NOx reduction equipment at this time?

A. The project will allow EKPC to meet the requirements of the Federal Clean Air Act and consent decree. Installation of this equipment is expected to result in a NOx emission rate from the boiler of 0.42 lbs./mmbtu.

Q. Would you describe the current installation and construction of the project?

A. The existing 24 burners will be removed and replaced with new low NOx burners.

Q. What is the cost of this replacement project?

A. The cost of the new 24 low NOx burners is estimated to be $3.5 million.

Q. What is the cost of the existing low NOx burners?

A. Mr. Bosta describes the cost and rate treatment of the equipment being replaced.

Q. When is the projected completion date?

A. The low NOx burners are expected to be installed during the Unit 1 spring outage in 2009.

PROJECT No. 7: Spurlock 2 – Wet FGD Scrubber

Q. Is this project an addition to or a replacement of the original Wet FGD scrubber ("scrubber") at Spurlock 2?

A. This project is a replacement to the original scrubber.

Q. Would you please discuss the original scrubber?

A. The original scrubber utilized calcium oxide ("lime") as the reagent feed material for the removal of sulfur dioxide ("SO_2") from the flue gas. It was placed into service in 1982. The scrubber was designed to remove 90 percent of the SO_2 from the flue gas. The purchase of low sulfur fuel was determined to be a more cost effective way of achieving the SO_2 emission limit in the air permit.

Q. Would you describe the new scrubber?

A. The new scrubber will utilize limestone as the reagent feed material for the removal of SO_2 from the flue gas. This will allow EKPC to burn a higher sulfur fuel. The scrubber has been designed to remove 98% of the SO_2 from the flue gas. This project was granted a CCN in Case No. 2005-00417. The new scrubber will ensure future compliance with the Clean Air Act and Clean Air Interstate Rule (CAIR) regulations governing SO_2, sulfur trioxide, and mercury removal. The consent decree with EPA mandates the year around operation of this

scrubber. In addition to the new scrubber, the CCN granted the construction of a wet ESP for the reduction of acid mists typically found in the form of sulfur trioxide in the flue gas.

Q. What is the cost of this project?

A. The estimated construction cost is $207.4 million.

Q. What is the cost of the existing scrubber?

A. Ms. Wood and Mr. Bosta address the cost of the existing scrubber as well as the rate treatment of that replacement.

Q. What is the project completion date?

A. The scrubber is scheduled to be completed and placed into service in October 2008.

PROJECT No. 8: Spurlock 1 – Wet FGD Scrubber

Q. Would you please describe the new scrubber?

A. The new scrubber is similar to the new Spurlock 2 scrubber and will utilize limestone as the reagent feed material for the removal of SO_2 from the flue gas. This will allow EKPC to burn a higher sulfur fuel. The scrubber has been designed to remove 98% of the SO_2 from the flue gas. This project was granted a CCN in Case No. 2006-00132 and the new scrubber will ensure future compliance with the CAA and CAIR regulations governing SO_2, sulfur trioxide and mercury removal. The consent decree with EPA mandates the year around operation of a scrubber. In addition to the new scrubber, the CCN granted the

construction of a wet ESP for the reduction acid mists typically found in the form of sulfur trioxide in the flue gas.

Q. What is the cost of this project?

A. The estimated construction cost is $172.9 million.

Q. When is the project completion date?

A. The scrubber is scheduled to be completed and placed into service in the spring of 2009.

PROJECT No. 9: Spurlock 4 – Pollution Control Equipment

Q. Would you please describe the pollution control equipment for which EKPC is seeking recovery?

A. Unit 4 is located at Spurlock Station and is a 268 Megawatt Circulating Fluidized Bed ("CFB") Boiler and is the sister unit to the Gilbert Unit, which went into commercial operation at Spurlock Station in March of 2005. This unit is currently under construction and is 60% complete. EKPC expects this unit to be commercial by April 2009.

Q. What are the major components of this equipment?

A. As a CFB, there are certain pieces of equipment that are essential to reducing NOx and SO_2. Shown below is a list of the major components that are unique to the CFB technology:

- Circulating Fluidized Bed ("CFB") Boiler: Steam generating unit that utilizes combustion technology that limits the formation of NOx and allows the removal of SO_2. The CFB technology takes the place of a wet FGD scrubber

for SO_2 removal and an SCR for NOx removal in a typical pulverized coal boiler.

- Cyclone Separator System: Component of the CFB that separates and returns 99% of the solids in the combustion gas back to the furnace.
- Fluid Bed Heat Exchangers ("FBHE"): Component of the CFB that allows the proper control of combustion temperature over a wide load range.
- Fluid Bed Ash Coolers ("FBAC"): Component of the CFB that aids in controlling the furnace differential pressure and cools the bed ash to safe handling temperatures.
- Fluidizing Air System: Supplies combustion air and transport air to the CFB.
- Refractory: Special lining system on the inside surface of the CFB components to help protect from solid particle erosion and also serves as insulation to the metal.
- Boiler limestone injection system: Silos inside the boiler house feed mills that pulverize the limestone so that it can be injected into the CFB for control of SO_2.
- Fly ash and bed ash removal system: Used to convey ash and scrubber particles away from the Circulating Fluidized Bed ("CFB") boiler to the collection silos.
- Selective Non-Catalytic Reduction ("SNCR"): Secondary reduction of NOx by use of anhydrous ammonia injection.
- Limestone reclaim system: Consists of a conveyor that transports the limestone from a storage pile to the two silos located inside the boiler house.

- Baghouse and Flash Drier Absorber ("FDA"): The baghouse is used to remove the particulates out of the combustion flue gas. The FDA is a dry flue gas desulphurization process based on the reaction between SO_2 and dry hydrated lime, calcium hydroxide, $Ca(OH)_2$, in humid conditions. It is the secondary SO_2 removal system for Unit 4.
- Coal and limestone dust collection system: Collects fugitive dust from the coal and limestone handling system.

Exhibit CAJ-1 shows the capital cost for each of the aforementioned emission reduction components.

Q. How is this equipment identical to the pollution control equipment at Gilbert Station described in Case No. 2004-00321?

A. Unit 4 is identical in design to the Gilbert Unit. All of the pollution control equipment for Gilbert as described in Case No. 2004-00321 has been incorporated and functions in the same way as the pollution control equipment in Unit 4.

Q. What is the cost of this equipment?

A. As shown in Exhibit CAJ-1, the estimated cost of the Unit 4 pollution control equipment is $84.8 million.

Q. Have you identified the anticipated operation and maintenance ("O&M") cost of the pollution control equipment?

A. Yes. Exhibit CAJ-1 shows the estimated annual O&M cost of $5.7 million. This estimate was derived from analyzing actual experience at the Gilbert unit.

PROJECT 10 - Spurlock, Cooper, & Dale: Particulate Matter and Continuous Emission Monitoring Equipment

Q. Would you please describe the Continuous Emissions Monitoring Systems equipment ("CEMS") that monitors particulate matter emissions at Spurlock Units 1,2, and 4?

A. The CEMS that will be installed at Spurlock 1 and 2 will monitor SO_2, NOx, stack gas flow, CO_2, and particulate matter emissions. The CEMS that will be installed at Spurlock 1 and 2 scrubber inlets will monitor SO_2 and CO_2 emissions. This equipment is required in order to monitor SO2, NOX, CO2, Stack Flow, and Particulate Emissions associated with the installation of new scrubbers at Spurlock 1 and 2. The CEMS that will be installed at Spurlock 4 will monitor SO2, NOx, CO_2, CO, stack gas flow, particulate matter emissions, and opacity.

Q. Would you please discuss the mercury monitoring program equipment?

A. EKPC plans to install monitoring equipment in order to measure mercury stack emissions from Spurlock 1, Spurlock 2, Gilbert, Spurlock 4, Dale, and Cooper Stations.

Q. Why is this equipment being installed?

A. The CEMS at Spurlock 2 is being installed in order to comply with the Acid Rain Program, the Clean Air Interstate Rule, existing mercury monitoring requirements under the Clean Air Mercury rules, and the mercury monitoring requirements of the consent decree.

The CEMS at Spurlock 1, Gilbert, and Spurlock 4 as well as Dale and Cooper is being installed in order to comply with the Acid Rain Program, the Clean Air

Interstate Act, and existing mercury monitoring requirements of the Clean Air Act.

Q. What is the estimated cost of this project?

A. The estimated cost of this pollution monitoring equipment is $3.7 million.

Q. When do you anticipate that this equipment will be operational?

A. EKPC anticipates that this equipment will be operational by the spring of 2009.

Q. Does this conclude your testimony?

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 THE ENVIRONMENTAL	)
COMPLIANCE PLAN	)

AFFIDAVIT

STATE OF KENTUCKY)
)
COUNTY OF CLARK)

Craig A. Johnson, 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.

Craig A. Johnson

Subscribed and sworn before me on this 27th day of March, 2008.

Peggy S. Duffy
Notary Public

My Commission expires: December 8, 2009

Project No. 9
Unit 4 – Pollution Control Equipment being installed

Item	Original Cost ($ x 1000)	Pollutant
CFB Boiler Pollution Control Components		
Cyclone Separator System	3,348	NOx and SO_2
Fluid Bed Heat Exchangers	9,308	NOx and SO_2
Fluid Bed Ash Coolers	2,970	NOx and SO_2
Fluidizing Air System	3,086	NOx and SO_2
Refractory Lining System	12,459	NOx and SO_2
Boiler Limestone Injection System	7,706	NOx and SO_2
	38,877	**Total for CFB Components**
Fly ash and bed ash removal system	**10,143**	**Fly ash & bed ash/particulate**
Selective Non Catalytic Reduction (SNCR)	**1,286**	**NOx**
Limestone reclaim system	**1,000**	**SO_2**
Baghouse and Flash Drier Absorber (FDA)	**32,155**	**SO_2 and Particulate**
Coal and limestone dust collection systems	**1,286**	**Fugitive dust/particulate**
	84,747	**Total capital cost for pollution control equipment**

Estimated O&M costs associated with the above equipment

Boiler Pollution Control Components	**1,000**	**NOx and SO_2**
Baghouse, FDA and SNCR	**499**	**Particulate & SO_2**
Ammonia for SNCR	**290**	**NOx**
Limestone	**3,100**	**SO_2**
Disposal of Ash	**810**	**Particulate & SO_2**
	5,699	**Total Estimated O&M Cost**

Exhibit CAJ-1

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.))

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, East Kentucky Power Cooperative ("EKPC"), 4775 Lexington Road, Winchester, Kentucky 40391. I am the Manager of Accounting 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 as Manager of Internal Auditing. In February 2002, I became Manager of Accounting and Materials Management at EKPC. In May 2007, I became Manager of Accounting. I am a certified public accountant in Kentucky.

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

A. As Manager of Accounting, I am responsible for all aspects of general accounting, payroll, and plant accounting. I am also responsible for preparation of the monthly Fuel Adjustment Clause filings and manage those cases before the Commission. I report directly to the Chief Financial Officer.

Q. Are you sponsoring any exhibits?

A. Yes, I am sponsoring two exhibits. Exhibit AFW -1 details the Construction Work in Process (CWIP) balance as of January 31, 2008 for the three projects currently under construction, as discussed in Mr. Eames' testimony. Mr. Bosta uses this information in computing the estimated bill impact of the proposed change to the Environmental Surcharge tariff sheet. Exhibit AFW-2 shows the derivation of the Net Book Value for the Spurlock 2 scrubber, along with associated fixed and variable costs, as of and for the test year ended September 30, 2006, the last month of the test year in EKPC's Case 2006-00472. These amounts are reflected in EKPC's base rates and, as explained by Mr. Bosta, must be included in the environmental surcharge calculation as an increase in the "BESF" factor.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to present and explain EKPC's accounting for CWIP and allowance for funds used during construction (AFUDC) as they relate to EKPC's environmental surcharge compliance plan. I will also address the proposed change to EKPC's tariff. Note that the terms "AFUDC" and "capitalization of interest during construction" are used interchangeably. Finally, I will sponsor the net book value of the existing scrubber at Spurlock 2 as of

September 30, 2006 (end of test year in Case 2006-00472) as well as the associated on-going costs of the existing Spurlock Unit 2 scrubber for the test year ending September 30, 2006.

Q. What is EKPC's policy of capitalizing interest during construction?

A. EKPC has an administrative policy that addresses capitalization of interest during construction. EKPC capitalizes interest during construction on projects that take longer than one year to complete and cost in excess of $100,000.

Q. Do the projects that EKPC proposes to include in its amended environmental surcharge compliance plan qualify for capitalization of interest during construction?

A. Yes. Three of the projects (Projects No. 7, 8, and 9) qualify. Specifically, the construction of Spurlock Unit 4 and the Spurlock Units 1 and 2 scrubbers qualifies for capitalization of interest during construction. As indicated by Mr. Eames and Mr. Johnson, these projects will be completed at various times during the next eighteen months.

Q. How does EKPC calculate AFUDC and account for AFUDC?

A. Because EKPC incurs no specific new borrowings related to projects under construction, the rate used to capitalize interest is the weighted average rate of interest of all EKPC borrowed funds. This rate is computed at the end of every month and applied to the previous month's ending balance for the applicable project. The product derived from multiplying the rate by the project balance is added to CWIP.

Q. How does EKPC treat AFUDC for income statement purposes?

A. In accordance with generally accepted accounting principles and the RUS Uniform System of Accounts, EKPC records AFUDC in account 419.1, Allowance for Funds Used During Construction.

Q. Does EKPC include a return component on CWIP in the environmental surcharge tariff?

A. Yes. The current tariff reflects this component in the Environmental Compliance Rate Base definition. This tariff was approved by the Commission in its Order of March 17, 2005 in EKPC's original environmental surcharge application.

Q. Does EKPC propose to modify the language in the Rate ES tariff?

A. Yes. EKPC plans to modify the Rate ES tariff to further define "CWIP" as "CWIP net of AFUDC."

Q. Why is EKPC proposing this change?

A. The proposed tariff change recognizes that EKPC should receive a return on the actual construction costs only, as EKPC is recognizing AFUDC on the income statement during the construction period. Applying a rate of return to the CWIP balance including AFUDC would appear to be double counting. This change will allow EKPC to apply the rate of return to the proper CWIP balance during the period of construction.

Q. Have you calculated the CWIP net of AFUDC balance for the proposed projects?

A. Yes. Exhibit AFW-1 shows the amounts as of January 31, 2008. Mr. Bosta uses this information to derive the estimated impact of the inclusion of a return on CWIP net of AFUDC, for these projects.

Q. Have you determined the net book value at September 30, 2006 of the existing Spurlock 2 scrubber as well as the depreciation, taxes, insurance, operation and maintenance costs, and return for the twelve months ended September 30, 2006, the test year in Case No. 2006-00472?

A. Yes. Exhibit AFW-2 shows this information. Mr. Bosta uses this information to determine the new BESF factor.

Q. Does that conclude your testimony?

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 THE ENVIRONMENTAL	)
COMPLIANCE PLAN	)

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 26th day of March, 2008.

Peggy S. Griffin
Notary Public

My Commission expires: December 8, 2009

Exhibit AFW-1

EKPC CWIP BALANCES AT 1/31/08

Acct	Project Description	CWIP project balance net of AFUDC @ 1/31/08	AFUDC charged to project through 1/31/08	CWIP total project balance @ 1/31/08
10720	Spurlock Unit 4	$349,834,863	$26,301,142	$376,136,005
10720	Spurlock 1 Scrubber	$64,216,302	$1,591,873	$65,808,175
10720	Spurlock 2 Scrubber	$144,494,623	$5,936,021	$150,430,643

The schedule below reflects the net book value of the Spurlock 2 scrubber as of September 30, 2006, along with the associated fixed and variable expenses for the test year then ended.

Account	Cost	Accumulated Depreciation	Net Book Value
31143	$ 10,792,450	$ 7,582,712	$ 3,209,738
31243	$ 73,237,311	$ 51,432,984	$ 21,804,327
31543	$ 6,655,832	$ 4,675,097	$ 1,980,735
31643	$ 188,118	$ 188,118	$ -
	$ 90,873,711	$ 63,878,911	$ 26,994,800

Depreciation Expense*	$ 755,099
Operation & Maintenance Expense	$ 7,459
Property Tax and Insurance	$ 380,471

*Considers the annualized impact of the depreciation study effective January 1, 2006.

RATE OF RETURN
TEST YEAR ENDING 9/30/06

	Debt @ 9/30/06	Interest Expense for the Test Year Ended 9/30/06	Cost of Debt/ Rate of Return
	$1,623,249,558	$ 91,153,506	
Debt Issues Relating to Existing Environmental Projects			
HO-720	$ 24,274,566	$ 1,082,646	
HO-725	$ 24,313,058	$ 1,171,646	
HO-730	$ 24,132,052	$ 1,194,537	
HO-750	$ 24,341,052	$ 1,239,203	
HO-755	$ 24,346,893	$ 1,253,622	
HO-760	$ 24,338,419	$ 1,232,741	
HO-765	$ 24,332,922	$ 1,219,323	
HO-770	$ 26,294,644	$ 1,353,911	
HO-810*	$ 7,446,724	$ 353,273	
HO-815*	$ 7,447,441	$ 359,339	
HO-820*	$ 7,448,492	$ 368,402	
HO-825*	$ 3,722,976	$ 173,416	
HO-830*	$ 3,722,237	$ 167,389	
HO-835*	$ 3,723,188	$ 175,176	
HO-840*	$ 3,721,457	$ 161,214	
HO-845*	$ 2,828,278	$ 122,295	
HO-855*	$ 4,466,522	$ 199,564	
HO-860*	$ 4,466,533	$ 199,654	
HO-870*	$ 4,468,168	$ 213,087	
HO-885	$ 6,472,753	$ 316,518	
HO-890*	$ 2,250,000	$ 120,263	
HO-895*	$ 1,500,000	$ 79,995	
	$ 260,058,374	$ 12,757,212	
Debt Excluding Surcharge Projects	$1,363,191,184	$ 78,396,294	5.75%
Rate of Return at a 1.35X TIER			7.76%

*Represents the pollution control portion (15%) of the total Gilbert project.

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.))

DIRECT TESTIMONY OF WILLIAM A. BOSTA ON BEHALF OF EAST KENTUCKY POWER COOPERATIVE, INC.

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

A. My name is William A. Bosta, East Kentucky Power Cooperative (EKPC), 4775 Lexington Road, Winchester, Kentucky 40391. I am Manager of Pricing for EKPC.

Q. Please state your education and professional experience.

A. I have a Bachelor's Degree in Economics from Virginia Tech, Blacksburg, Virginia, and a Master's Degree in Industrial Management from Lynchburg College, Lynchburg, Virginia. My professional career began as an Economist with the engineering consulting firm of Hayes, Seay, Mattern & Mattern in Roanoke, Virginia. I then worked in the rates and regulatory area for two AEP subsidiaries, Appalachian Power Company in Roanoke, Virginia and Indiana Michigan Power Company in Ft. Wayne, Indiana. In 1993, I accepted a position in Regulatory Affairs at Kentucky Utilities Company in Lexington, Kentucky and was subsequently promoted to Director of Regulatory Management for LG&E Energy in Louisville, Kentucky following the merger of KU Energy and LG&E

Energy in 1998. In May 2001, I was offered an opportunity to join the EKPC system as Pricing Manager and in June 2001 I assumed my current position.

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

A. As Pricing Manager, I am responsible for rate and regulatory matters and issues at EKPC and provide support services for all sixteen Member Systems on these issues. I report directly to the Senior Vice President of Power Supply.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to describe how the proposed change in the Environmental Compliance Plan will be implemented on a monthly basis, to sponsor the proposed changes to EKPC's Environmental Surcharge Tariff and to outline the bill impacts of the proposed change at the wholesale and retail level.

Q. Are you sponsoring any exhibits in this proceeding?

A. Yes. I am sponsoring Exhibit WAB-1, which reflects the proposed changes in the EKPC Environmental Surcharge Tariff Sheet. I am also sponsoring Exhibit WAB-2, which shows the derivation of the new Base Environmental Surcharge Factor ("BESF"). Finally, Exhibit WAB-3 provides the documentation for the estimated bill impacts of the approval of the proposed change to EKPC's Environmental Compliance Plan.

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

A. As shown in Exhibit DGE-1, six new projects will be included in the Environmental Compliance Plan. Of the six new projects, only one of these

(Project 5), Low NOx burners at Dale Units 1 & 2, has been completed and is in service. The monthly surcharge computation will include the depreciation, insurance, taxes, return and O&M expenses for this project upon approval by the Commission. The other five projects are currently under construction. Until completed, EKPC is seeking a return component only on the monthly Construction Work In Progress (CWIP) balance net of the Allowance for Funds Used During Construction (AFUDC). Upon completion, EKPC will begin recovery of depreciation, return, insurance, taxes and O&M costs. The need to change the wording in the Tariff Sheet to "CWIP Net of AFUDC" is explained in detail by Ms. Wood. Exhibit WAB-1 shows the change in the language in the Tariff.

Q. How will the enhancements to the SCR's (Project No's. 3 & 4) be treated?

A. As explained in the testimony of Mr. Johnson, the enhancements consist of additional layers of catalysts as well as improvements to the ammonia injection system. Upon completion of these projects, the capital cost for these projects will increase and will be subject to a return. In addition, on-going costs for deprecation, taxes, insurance and operation and maintenance will be included.

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

A. EKPC is proposing the use of a 1.35X TIER to be applied to the average debt cost used to finance the Commission-approved environmental compliance projects. The 1.35X TIER was approved by the Commission in its Order of December 5, 2007 in EKPC's most recent base rate case, Case No. 2006-00472. The 1.35X

TIER was awarded in recognition of EKPC's on-going total company financial condition. As a result, EKPC believes it is equally applicable to other cost recovery mechanisms such as the environmental surcharge. Exhibit WAB-1 shows the proposed change to the rate of return in the surcharge tariff sheet.

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

A. EKPC, in Case No. 2007-00378, the two-year review of the Environmental Surcharge, recommended use of the average debt cost of the four original environmental compliance plan projects as of 5/31/07. Using the average debt cost of 4.876%, multiplied by a 1.35X TIER, yields a proposed rate of return of 6.58%. This would be EKPC's proposed rate of return following the Commission's approval of this proposed compliance plan and TIER, but would be subject to the decision established by the Commission in the current Two-Year review case, No. 2007-00378, which is pending.

Q. Would the average debt rate eventually change and be based on the financing for the ten environmental compliance projects?

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

Q. Are any of these new projects considered "replacements" for existing, similar type projects?

A. Yes. There are two projects, No. 6, Low NOx burners at Spurlock Unit 1, and No. 7, Spurlock 2 Scrubber, which are replacements. The original Low NOx burners at Spurlock Unit 1, which were installed in 1995, were expensed at the

time of implementation. As a result, there is no capital-related cost to be considered for replacement purposes. For operation and maintenance costs, EKPC does not intend to seek recovery of such costs through the surcharge as it very difficult to isolate the level of maintenance cost on the Low NOx burners due to the configuration of the burners to the boiler. Consequently, there is no replacement cost aspect to the operation and maintenance cost component. Mr. Johnson provides a description of both the existing and the new scrubbers at Spurlock Unit 2. Costs associated with the existing scrubber were recognized in EKPC's base rates approved in Case No. 2006-00472. As a result, the environmental surcharge calculation must be reduced as the existing scrubber cost is already being recovered through base rates. This is accomplished by including such costs in the Base Environmental Recovery Factor ("BESF") in the on-going environmental surcharge calculation. Exhibit WAB-1 shows the new BESF of 1.05% in the Environmental Surcharge Tariff Sheet. This factor consists of the existing BESF factor of 0.51%, plus the 0.54% BESF factor associated with replacement of the Spurlock 2 scrubber. Exhibit WAB-2 provides the derivation of the new BESF factor. Ms. Wood is sponsoring the cost of the existing Spurlock 2 scrubber included in base rates.

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

A. No. The proposed changes at wholesale will not affect the existing language in the surcharge tariff sheets of each Member System. Increases in EKPC's environmental surcharge factor will be flowed through to Member Systems in the same manner as currently calculated.

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

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

(1) The effect of recognizing a return on CWIP net of AFUDC, prior to the commercial operation of projects presently under construction, and,

(2) The full effect of inclusion of these projects in the Environmental Compliance Plan once they become operational.

Q. What is the estimated effect of the first item, the recognition of a return on CWIP Net of AFUDC?

A. Exhibit WAB-3 provides the support for the calculation. Based on an effective date of October 1, 2008, and the current projected dates of completion for Projects 8 and 9, it is estimated that EKPC will increase surcharge revenues by approximately $3 million for the October through December 2008 period and an additional $4 million for the period of January through June of 2009.

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

A. Yes. Exhibit WAB-3 provides the support for this calculation. As shown in the exhibit, EKPC has estimated that the annual effect of including these projects in the environmental compliance plan is an increase of approximately $64 million, or about 9% at wholesale. This would result in an increase of about 6% at retail.

Q. Does this conclude your testimony?

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 THE ENVIRONMENTAL COMPLIANCE PLAN	))))

AFFIDAVIT

STATE OF KENTUCKY)
)
COUNTY OF CLARK)

William A. Bosta, 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.

William A. Bosta

Subscribed and sworn before me on this 27th day of March, 2008.

Peggy L. Duffy
Notary Public

My Commission expires: December 8, 2009

For All Counties Served
P.S.C. No. 31
Original Sheet No. 24
Canceling P.S.C. No. 30
Original Sheet No. 24

EAST KENTUCKY POWER COOPERATIVE, INC

RATE ES – ENVIRONMENTAL SURCHARGE

APPLICABILITY

Applicable to all sections of this rate schedule and this rate schedule shall apply to each Member System.

AVAILABILITY

This rate schedule shall apply to EKPC rate sections A, B, C, E, and G and all special contracts with rates subject to adjustment upon the approval of the Commission.

RATE

The Environmental Surcharge shall provide for monthly adjustments based on a percent of revenues equal to the difference between the environmental compliance costs in the base period and in the current period based on the following formula:

$CESF = E(m) / R(m)$ $MESF = CESF - BESF$

MESF = Monthly Environmental Surcharge Factor
CESF = Current Environmental Surcharge Factor
BESF = Base Environmental Surcharge Factor of 1.05% I

where E(m) is the total of each approved environmental compliance plan revenue requirement of environmental costs for the current expense month and R(m) is the revenue for the current expense month as expressed below.

Definitions

(1) $E(m) = [(RB/12)(RORB) + OE - BAS + (Over)Under\ Recovery$

where:

(a) RB is the Environmental Compliance Rate Base, defined as electric plant in service for applicable environmental projects adjusted for accumulated depreciation, CWIP net of AFUDC, cash working capital, spare parts and limestone inventory, emission allowance inventory; T

(b) RORB is the Rate of Return on the Environmental Compliance Rate Base, designated as the average cost of debt for environmental compliance plan projects approved by the Commission plus application of a times-interest-earned ratio of 1.35; I

DATE OF ISSUE _____ DATE EFFECTIVE: Service rendered on and after _____

ISSUED BY _____ TITLE President & Chief Executive Officer

Issued by authority of an Order of the Public Service Commission of Kentucky in Case No. _____ Dated _____

For All Counties Served
P.S.C. No. 31
Original Sheet No. 25
Canceling P.S.C. No. 30
Original Sheet No. 25

EAST KENTUCKY POWER COOPERATIVE, INC

(c) OE is the Monthly Pollution Control Operating Expenses, defined as the average of the twelve month operating and maintenance expense; depreciation expense, property taxes, insurance expense, emission allowance expense, and consulting fees. O&M expense for the pollution-control related equipment at the Gilbert generating unit will be recovered by including an average of the monthly expense as the Unit begins operation;
(d) BAS is the net proceeds from By-Products and Emission Allowance Sales, and;
(e) (Over) or Under recovery amount as amortized from prior six-month period.

(2) Total E(m) is multiplied by the Member System Allocation Ratio to arrive at Net E(m). The Member System Allocation Ratio is based on the ratio of the 12-month total revenue from sales to Member Systems to which the Surcharge will be applied, ending with the current expense month, divided by the 12-month total revenue from sales to Member Systems and off-system sales.

(3) The revenue R(m) is the average monthly revenue, including base revenues and automatic adjustment clause revenues less Environmental Cost Recovery Surcharge revenues, for EKPC for the twelve months ending with the current expense month.

(4) The current expense month (m) shall be the second month preceding the month in which the Environmental Surcharge is billed.

DATE OF ISSUE _____ DATE EFFECTIVE: Service rendered on and after _____

ISSUED BY _____ TITLE President & Chief Executive Officer

Issued by authority of an Order of the Public Service Commission of Kentucky in
Case No._____ Dated _____

Derivation of BESF Factor for Existing Spurlock Unit 2 Scrubber

		$ Amount		Total $	Source
1.	Depreciation Expense			755,099	Exhibit AFW-2
2.	Oper & Mtce			7,459	Exhibit AFW-2
3.	Property Tax & Insurance			380,471	Exhibit AFW-2
Return on Rate Base					
4	Rate Base				
	Spurlock 2 Scrubber	26,994,800			Exhibit AFW-2
			26,994,800		
5	Cash Working Capital (1/8 of O&M)		932		Line 2 * 1/8
	Total Rate Base		26,995,732		
	Apply Rate of Return		7.76%		Exhibit AFW-2 (5.75% * 1.35 TIER)
6	Total Return on Rate Base			2,094,869	
7	Total Costs			3,237,898	Line 1+2+3+6
8	Calculation of % of Member System Revenues to total revenues including off-system sales.				
	Member Sys Rev		597,766,544	99.13%	September 2006 ES Filing
	Off System Sales Revenue		5,275,336	0.87%	September 2006 ES Filing
			603,041,880	100.00%	
	Total Costs Incl Rate of Return		3,237,898		
	Exclusion of Off-System Sales		99.13%		
	Revenue Requirement		3,209,573		
	Member Sys Revenue		597,766,544		September 2006 ES Filing Form 3.0, Excludes ES Revenues
9	Rev Req / Mbr Sys Revenues BESF for Existing Spurlock 2 Scrubber		**0.54%**		Line 7 / Line 8
10	Existing BESF		**0.51%**		Monthly ES Calculation
11	**New BESF**		**1.05%**		Line 9 + Line 10

ESTIMATE OF REVENUES FROM CWIP NET OF AFUDC	Capital Cost (Millions $)	Amount at end of Test Year (Millions $)	Net Cap. Cost (Millions $)	Return	Annual (Millions $)	Monthly (Millions $)	2008 Effective 10/01/2008 (Millions $)	2009 Effective 01/01/2009 (Millions $)	
1. Spur 2 Scrubber - Completion date of October 1, 2008 (Project 7)							**$0.00**		(Completed at time of ES Compliance Plan regulatory approval)
2. Spur 1 Scrubber - Completion date of May 1, 2009 (Project 8)									
Forecasted Cost	$172.9								
Exclude AFUDC	$158.1								
1/31/08 Net CWIP	$64.2								
Amount Remaining	$93.9								
Months Remaining	15								
Per Month Amount	$6.3								
Months through September 2008	8								
Additional CWIP	$50.1								
CWIP Balance for Oct	$114.3	$1.4	$112.9	0.0658	$7.43	$0.62			
CWIP Balance for Nov	$120.5	$1.4	$119.1	0.0658	$7.84	$0.65			
CWIP Balance for Dec	$126.8	$1.4	$125.4	0.0658	$8.25	$0.69			
TOTAL							**$1.96**		(October through December)
CWIP Balance for Jan	$133.1	$1.4	$131.7	0.0658	$8.66	$0.72			
CWIP Balance for Feb	$139.3	$1.4	$137.9	0.0658	$9.08	$0.76			
CWIP Balance for Mar	$145.6	$1.4	$144.2	0.0658	$9.49	$0.79			
CWIP Balance for Apr	$151.8	$1.4	$150.4	0.0658	$9.90	$0.82			
								$3.09	(January through April)
3. Spur 4 Pollution Control Facilities - Completion Date of April 1, 2009 (Project 9)									
Forecasted Cost	$570.0								
Exclude AFUDC	$512.4								
1/31/08 Net CWIP	$349.8								
Amount Remaining	$162.6								
Months Remaining	14								
Per Month Amount	$11.6								
Months through September 2008	8								
Additional CWIP	$92.9								
CWIP Balance for Oct	$442.7	$179.8	$262.9	0.0658	$17.30	$1.44			
CWIP Balance for Nov	$454.3	$179.8	$274.5	0.0658	$18.06	$1.51			
CWIP Balance for Dec	$465.9	$179.8	$286.1	0.0658	$18.83	$1.57			
TOTAL							**$4.52**		
Pollution-Control Portion							**15%**		
TOTAL							**$0.68**		(October through December)
CWIP Balance for Jan	$477.6	$179.8	$297.8	0.0658	$19.59	$1.63			
CWIP Balance for Feb	$489.2	$179.8	$309.4	0.0658	$20.36	$1.70			
CWIP Balance for Mar	$500.8	$179.8	$321.0	0.0658	$21.12	$1.76			
TOTAL								**$5.09**	(January through March)
Pollution Control Portion								**15%**	
TOTAL								**$0.76**	
GRAND TOTAL							**$2.64**	**$3.86**	

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 $)
(1)	(2)	(Col. 1 * Col. 2)
$474.3	14.30%	$67.8

II. Amount Included in Existing Base Rates for Spurlock Unit No. 2 Scrubber

(1)	(2)	(3)
BESF Factor	Annual Revenues From Members in 2010 Excl. Surcharge (Millions $)	Amount Recovered in Base Rates (Millions $)
(1)	(2)	(Col. 1 * Col. 2)
0.54%	$696.3	$3.8

III. Estimated Annual Cost Recovery Impact (Section I minus Section II)	(Millions $)
	$64.0

EAST KENTUCKY POWER COOPERATIVE

MEMORANDUM

TO: Managers of Member Systems

FROM: Robert M. Marshall

DATE: March 28, 2008

SUBJECT: Notice of Amendment to EKPC Environmental Compliance Plan

On Friday, March 28, EKPC will file a request with the Public Service Commission (PSC) requesting approval to amend our Environmental Compliance Plan. The amendment will enable EKPC to recover costs associated with installing and operating nearly $475 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:

- Low NOx burners at Dale Station
- Replacement of Low NOx burners at Spurlock Unit 1
- Scrubber at Spurlock Unit 2
- Scrubber at Spurlock Unit 1
- Pollution Control Facilities at the new Spurlock 4 generating unit
- Continuous Emission Monitoring Equipment for particulate matter at the Spurlock units and Mercury Monitoring Equipment at the Dale units, Spurlock units and Cooper units.

If approved, the request is expected to amount to an increase by 2010 of about 9 percent in the environmental surcharge for all customer classes at wholesale, and would be passed through as a 6 to 7 percent retail increase, which would be an estimated $4.50 to $5 on the average residential bill. The increase would be phased in as projects are built and begin operation. The PSC has until October to rule on EKPC's request. A copy of the Application is attached for your information.

These projects are necessary in order for our power plants to meet increasingly stringent air quality standards under the Federal Clean Air Act.

wab/pg

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