EAST KENTUCKY POWER COOPERATIVE

September 17, 2004

HAND DELIVERED

Ms. Elizabeth O'Donnell
Executive Director
Public Service Commission
211 Sower Boulevard
Frankfort, KY 40602

Re: PSC Case No. 2004-00321

Dear Ms. O'Donnell:

Please find enclosed for filing with the Commission an original and ten copies of the Application of East Kentucky Power Cooperative, Inc., ("EKPC") for Approval of an Environmental Compliance Plan and Authority to Implement an Environmental Surcharge.

Very truly yours,

Charles A. Lile
Senior Corporate Counsel

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A Touchstone Energy Cooperative

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF EAST KENTUCKY POWER COOPERATIVE, INC., FOR APPROVAL OF AN ENVIRONMENTAL COMPLIANCE PLAN AND AUTHORITY TO IMPLEMENT AN ENVIRONMENTAL SURCHARGE	)))))	**CASE NO. 2004-00321**

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 environmental compliance plan and the implementation of an environmental surcharge to recover qualifying costs of compliance with federal, state and local environmental requirements.

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 hereto as Applicant's Exhibit 1.

5. Attached hereto, in the form of prepared testimony and exhibits thereto, is EKPC's Compliance Plan regarding costs incurred in complying with the Federal Clean

Air Act at EKPC's coal and gas-fired generating units, and with federal and state environmental requirements applicable to coal combustion wastes and by-products from coal-fired generating units. This Compliance Plan includes the following:

A. The prepared testimony of David G. Eames, EKPC Vice-President for Finance and Planning, designated as Applicant's Exhibit 2, which presents an overview of the Application, the relevant environmental compliance projects, and EKPC's proposed approach to the initial surcharge and the subsequent billing procedures and periodic reviews.

B. The prepared testimony of Robert Hughes, EKPC Manager of Environmental Affairs, designated as Applicant's Exhibit 3, which describes EKPC's plans for environmental compliance, and the various federal, state and local environmental laws and regulations which have resulted in the compliance costs that EKPC desires to recover through the environmental surcharge.

C. The prepared testimony of Craig Johnson, EKPC Senior Engineer in charge of plant construction at the Gilbert Unit, designated as Applicant's Exhibit 4, which discusses the cost-effectiveness of EKPC's compliance plans, and the pollution control equipment that is being installed in the Gilbert Generating Unit at Spurlock Station, in Mason County, Kentucky, and which has been, or will be, installed at the other Spurlock Station Units and at EKPC's combustion turbine units at Smith Station, in Clark County, Kentucky.

D. The prepared testimony of Ann Wood, EKPC Manager of Accounting and Materials Management, designated as Applicant's Exhibit 5, which discusses costs recorded by EKPC in relation to the subject pollution control facilities, and EKPC's

proposed procedures for addressing the accounting and reporting requirements of the environmental surcharge.

E. The prepared testimony of Frank Oliva, EKPC Manager of Finance, Planning and Risk Management, designated as Applicant's Exhibit 6, which discusses the determination of a reasonable return on the compliance-related capital expenditures, based on EKPC's cost of debt and an appropriate TIER, and EKPC's emission allowance strategy.

F. The prepared testimony of William A. Bosta, EKPC Manager of Pricing, designated as Applicant's Exhibit 7, which describes the mechanics of EKPC's proposed environmental surcharge, discusses the impact of the surcharge on EKPC's member distribution cooperatives as well as the methodology for implementing the surcharge at retail, and includes the proposed addition to EKPC's Wholesale Electric Power Tariff, designated as Rate Schedule ES, containing the terms and conditions of the proposed surcharge as applied to individual rate classes.

6. EKPC believes that it is entitled, pursuant to KRS §278.183, to the recovery 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, and those associated with Federal Clean Air Act compliance at EKPC's combustion turbine units.

7. EKPC's member distribution cooperatives, Big Sandy RECC, Blue Grass Energy Cooperative Corporation, Clark Energy Cooperative, Cumberland Valley Electric, Farmers RECC, Fleming-Mason Energy, Grayson RECC, Inter-County Energy Cooperative, Jackson Energy Cooperative, Licking Valley RECC, Nolin RECC, Owen Electric Cooperative, Salt River Electric, Shelby Energy Cooperative, South Kentucky

RECC and Taylor County RECC, are filing a simultaneous joint Application for the pass-through of the environmental surcharge granted to EKPC by the Commission in this case.

WHEREFORE, Applicant respectfully requests the Commission to approve its proposed environmental compliance plan and authorize the implementation of the proposed environmental surcharge, effective for service rendered beginning April 1, 2005.

Respectfully submitted,

DALE W. HENLEY

CHARLES A. LILE

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(859) 744-4812

(EnvSchgApp)

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AUGUST

Resolution

ENVIRONMENTAL SURCHARGE APPLICATION

Whereas, The Environmental Surcharge Statute was placed in effect on January 1, 1993, as a means to allow recovery of costs incurred to meet Federal Clean Air Act requirements;

Whereas, Due to extensive expenditures to meet stringent NO_X emission requirements, management proposes to file an Application for approval of an Environmental Compliance Plan with the Public Service Commission to allow recovery of over $200 million in capital expenditures and an expected annual outlay of about $15 million for operating and related costs;

Whereas, EKPC expects that the Environmental Surcharge will be approximately 9 percent at inception and is subject to fluctuation on a monthly basis; and

Whereas, The Operations, Services and Support Committee has reviewed the facts surrounding the proposed filing and recommends that it be approved; now, therefore, be it:

Resolved, That the EKPC Board of Directors allow management to file with the Public Service Commission for approval of an Environmental Surcharge in order to maintain financial stability and meet TIER requirements.

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF EAST KENTUCKY POWER COOPERATIVE, INC., FOR APPROVAL OF AN ENVIRONMENTAL COMPLIANCE PLAN AND AUTHORITY TO IMPLEMENT AN ENVIRONMENTAL SURCHARGE	)))))	**) CASE NO. 2004-00321**

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 Vice-President of Finance and Planning 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, resource planning, pricing, and strategic planning and technology applications.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to present an overview of EKPC's Application for Approval of a Compliance Plan to meet federal, state and local environmental requirements and a proposed tariff sheet to recover costs associated therewith. Eames Exhibit 1 outlines the nine compliance projects for which EKPC is seeking approval. I will also describe how EKPC proposes to recover the costs of meeting these requirements. The proposed Rate Schedule ES provides the basis for cost recovery on a month-by-month basis.

Q. Is EKPC requesting that the Commission approve a specific factor with its filing?

A. No. EKPC is asking the Commission to approve its proposed Compliance Plan and Rate Schedule ES. If the Commission approves Rate Schedule ES, EKPC would calculate an environmental surcharge factor beginning with the first expense month following Commission approval. With our filing date of September 17, 2004, we would expect that the first expense month would be March 2005.

Q. Please list EKPC's witnesses who will provide detailed testimony in support of the environmental Compliance Plan.

A. (1) Mr. Robert E. Hughes, Manager of Environmental Affairs, will explain the various environmental regulatory requirements imposed on EKPC, the

environmental permit process and will document how EKPC is satisfying those requirements; and

(2) Mr. Craig Johnson, Senior Engineer and the Manager of the Gilbert generating plant construction, will describe the technical aspects and cost-effectiveness of EKPC's environmental Compliance Plan and the related capital costs of each project, will provide a description of the major pollution control projects being undertaken by EKPC currently and during the next year to comply with environmental requirements, and will provide a status report of the progress of construction as well as an estimate of the projected costs for those projects.

Q. Please list EKPC's witnesses who will provide detailed testimony supporting the proposed Rate Schedule ES.

A. (1) Ms. Ann Wood, Manager of Accounting and Materials Management, will present and explain EKPC's booked costs associated with those environmental facilities and equipment already in place as identified by Mr. Johnson. Ms. Wood will also provide a description of the operating and maintenance expense baseline to be used by EKPC.

(2) Mr. Frank Oliva, Manager of Finance, Planning and Risk Management, will explain EKPC's emission allowance strategy and the basis for EKPC's proposed rate of return on rate base; and

(3) Mr. William A. Bosta, Manager of Pricing, will describe the mechanics of the environmental surcharge, how the surcharge will be calculated, and how the surcharge will be calculated and implemented by EKPC's Member Systems.

Q. Why is EKPC filing for an Environmental Surcharge now?

A. The purpose of the Environmental Surcharge is to allow recovery of the costs of complying with the federal Clean Air Act as amended and other applicable local, state, and federal environmental regulations. As shown in Eames Exhibit 1, EKPC has already incurred a significant level of costs to meet these environmental requirements. While EKPC has been able to avoid seeking recovery of such costs for a number of years, the magnitude has simply reached the point where we must seek recovery in order to maintain financial solvency and meet the RUS times-interest-earned-ratio (TIER) requirements. Other than increases from the Fuel Adjustment Clause, this will be the first increase in rates since 1983.

Q. Discuss EKPC's plans to comply with the applicable environmental regulations.

A. EKPC's environmental Compliance Plan is summarized in Eames Exhibit 1 and is described in the testimony of Mr. Johnson and Mr. Hughes. EKPC's Compliance Plan consists of nine separate projects to comply with federal, state, or local environmental regulations. Six of these projects are already in operation and will have a net book value of approximately $123.9 million on March 31, 2005. EKPC filed a comprehensive NOx compliance plan in Case 2000-340, which outlined the anticipated strategy to meet NOx emission requirements. The Commission granted EKPC a Certificate of Convenience and Necessity (CCN) in that case for construction of Selective Catalytic Reduction (SCR) facilities at three of our generating stations. Our Compliance Plan included herein contains two SCR units.

The Commission has also issued a CCN for construction of the Gilbert Unit as well as CCN's for seven combustion turbines. Mr. Johnson will discuss the cost-effectiveness aspect of using the circulating fluidized bed process for NOx reduction compared to conventional means. He will also review the cost-effectiveness of installation of NOx reduction equipment on our CT's. Mr. Hughes will explain the environmental permit process, which also requires these projects to use the Best Available Control Technology (BACT).

Q. Why did EKPC include the pollution control related equipment for its combustion turbines in its Compliance Plan?

A. KRS 278.183(1) states that "...a utility shall be entitled to the current recovery of its costs of complying with the Federal Clean Air Act as amended..." EKPC is entitled to a reasonable return on pollution control assets associated with certain NOx reduction equipment at our combustion turbines since these assets are used to directly comply with federally mandated environmental requirements.

Q. Were any of these Compliance Plan projects built as replacements?

A. Yes. Project 2, the Spurlock 1 Precipitator, was built in 2003 as a replacement to the original precipitator. Also, the preheaters and fans for the Spurlock 1 SCR (Project 8) actually replaced existing equipment that was installed as part of the original generating station.

Q. How is EKPC handling the recovery of the costs of Project 2 and Project 8?

A. Consistent with the approach adopted by the Commission in other environmental surcharge cases, EKPC is subtracting the estimated net book value of the retired precipitator, preheaters, and fans as of the 1993 test year in EKPC Case No. 94-

336, from the net book value of the new precipitator, preheaters, and fans as of March 31, 2005.

Q. Summarize the major projects included in EKPC's Compliance Plan that are currently under construction.

A. Projects 6 and 7, the low NOx burners associated with the combustion turbines Nos. 6 and 7 at the J.K. Smith generating station, and certain environmental equipment associated with the Gilbert unit, Project 1, are still under construction. The CTs are expected to be operational by December 2004 and the Gilbert unit is scheduled to be operational in March 2005. The Gilbert project accounts for an additional $69.6 million in capital costs of EKPC's Compliance Plan at March 31, 2005. In total, the net book value for all projects at March 31, 2005, is expected to be $195.3 million.

Q. How does EKPC intend to recover the costs of its environmental Compliance Plan?

A. EKPC intends to recover the costs of its environmental Compliance Plan through Rate Schedule ES. This rate schedule is shown in Bosta Exhibit 1.

Q. Please briefly describe the costs EKPC is proposing to recover through Rate Schedule ES.

A. EKPC proposes to recover a return on the net book value of the pollution control assets included in its Compliance Plan. These include costs associated with certain pollution control equipment not included in base rates as approved by the Commission in Case No. 94-336. These costs are shown in greater detail in Wood Exhibit 1.

EKPC is also proposing to recover the operating and maintenance costs associated with complying with applicable environmental requirements. The O&M costs in specific accounts will be compared with an O&M baseline for these same accounts using calendar year 1993 dollars. In addition, EKPC will seek a recovery of property taxes, insurance, depreciation, and emission allowance expense in excess of associated cost levels from 1993. Ms. Wood describes these cost items in her testimony.

Q. What rate of return on the pollution control projects of its environmental Compliance Plan is EKPC proposing?

A. As will be explained by Mr. Oliva, EKPC is seeking a return of 5.635% based on the times-interest-earned (TIER) method. This rate is:

(1) based on a weighted average cost of debt of 4.90% as of July 31, 2004, and;

(2) multiplied by a TIER of 1.15.

The TIER of 1.15 is based on the Commission's Order in Case No. 94-336 and continues to be a reasonable TIER level given EKPC's financial condition. EKPC plans to use the 5.635% rate of return for the first six-month period of review and will apply the 1.15 TIER to an update of the weighted average cost of debt every six months thereafter. Based on a first expense month of March 2005, the next update will be based on the cost of debt in the month of August 2005, six months following March 2005.

Q. What is EKPC's estimate of the surcharge factor for March 2005?

A. An estimate of the environmental surcharge factor is contained in Bosta Exhibit 4. This exhibit includes an estimated environmental surcharge percentage using the

information from EKPC's accounting system and financial forecast. The surcharge is estimated to be 7.47% at the initial month of implementation. EKPC's accounting system is based on the RUS Uniform System of Accounts. This information is discussed in the testimony of Ms. Wood. The second source of information is based on EKPC's 20-Year Financial Forecast, which was approved by the Board of Directors of EKPC in 2003. This information is presented by Mr. Bosta in connection with his testimony and Mr. Johnson in his testimony for projects that are not yet in service. The 20-year financial forecast is prepared under my direction. As described by Mr. Bosta, the estimate of 7.47% equates to an average estimated factor of 5.23% for the retail customers of our Member Systems.

Q. Please summarize what EKPC is asking the Commission to specifically approve in this Application.

A. EKPC is asking the Commission to approve its Compliance Plan for purposes of implementing the environmental surcharge and to approve the proposed Rate Schedule ES. EKPC, on behalf of its Member Systems, is also requesting approval of the retail Environmental Surcharge Tariff Sheets of our Member Systems to enable them to implement the surcharge at the retail level.

Q. Does this conclude your testimony?

A. Yes.

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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 16th day of September, 2004.

Linda Neavill
Notary Public

My Commission expires: January 27, 2005

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

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
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	Net Book Value 3/31/05
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 (E)	$69.6 M (E)
2.	Particulate	Precipitator	Spurlock 1	401 KAR 61:015	V-95-050 (Revision 1)	2003	$24.3 M (A)	$14.3 M (E)
3.	NOx	CT Burner	JK Smth - CT 1,2,3	CAAA Sec. 407 40 CFR Part 76	C-92-066	1999	$4.4 M (A)	$3.3 M (E)
4.	NOx	CT Burner	JK Smith - CT 4	CAAA Sec. 407 40 CFR Part 76	C-92-066	2001	$0.9 M (A)	$0.8 M (E)
5.	NOx	CT Burner	JK Smith CT 5	CAAA Sec. 407 40 CFR Part 76	V-01-004	2001	$0.9 M (A)	$0.8 M (E)
6.	NOx	CT Burner	JK Smith - CT 6	CAAA Sec. 407 40 CFR Part 76	V-01-004	2004	$0.9 M (A)	$0.9 M (E)
7.	NOx	CT Burner	JK Smith - CT 7	CAAA Sec. 407 40 CFR Part 76	V-01-004	2004	$0.9 M (A)	$0.9 M (E)
8.	NOx	SCR	Spurlock 1	CAAA Sec. 407 40 CFR Part 76	V-97-050	2003	$76.7 M (A)	$68.0 M (E)
9.	NOx	SCR	Spurlock 2	CAAA Sec. 407 40 CFR Part 76	V-97-050	2002	$45.2 M (A)	$36.7 M (E)
Totals							**$223.8 M**	**$195.3 M**

EAMES EXHIBIT 1

COMMONWEALTH OF KENTUCKY

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DIRECT TESTIMONY OF ROBERT E. HUGHES
ON BEHALF OF EAST KENTUCY POWER COOPERATIVE, INC.

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

A. Robert E. Hughes, Environmental Affairs Manager, East Kentucky Power Cooperative Inc., 4775 Lexington Road, PO Box 707, Winchester, Kentucky 40392-0707.

Q. Describe you educational background.

A. I received a B.S. in Biology from the University of Kentucky in 1970 and a M.S. in Biological Sciences from the University of Kentucky in 1973.

Q. Describe your work experience.

A. During my enrollment at the University of Kentucky, I was employed during the summers at the Cooper Power Station of EKPC. Upon entering graduate school, I was employed at the University of Kentucky as a teaching assistant in the Biology Department. In October 1973, I obtained full-time employment at EKPC as a member of the Environmental Department. In 1975, I was promoted to Manager of the Environmental Department, which is my current position. I

am a past Chairman of the Kentucky Utility Information Exchange. This is an ad hoc group of the environmental staff of all electric generating companies in Kentucky who meet on a regular basis to review environmental issues. I am also a past President of the National Rural Electric Environmental Association. This is a national group that reviews environmental issues at a national level. I am also a member of a number of task forces that meet on a regular basis with the Environmental Protection Agency (EPA) on pending rulemaking proceedings. These include mercury regulations and Clean Air Transport regulations.

Q. Describe your job duties in your current position.

A. As Manager of the Environmental Affairs at EKPC, I am responsible for obtaining all approvals and permits necessary to operate the facilities to generate power. My Department is responsible for demonstrating that EKPC is in compliance with the environmental permits that have been obtained. Obtaining new regulatory permits and approvals for new power production facilities are also part of the department's responsibility

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to identify the environmental regulatory requirements associated with EKPC's Compliance Plan and to describe EKPC's plan meets those requirements. Included will be the regulatory and permit requirements for each project included in Eames Exhibit 1. I will also describe how the environmental permit process functions.

Q. Relate the pollution control projects included in EKPC's Compliance Plan to EKPC's desire to protect air quality.

A. EKPC's Business Philosophy on the environment is summarized by the following statement:

> "EKPC PRODUCES ELECTRIC POWER, WHILE DEMONSTRATING A STRONG COMMITMENT TO THE ENVIRONMENT AND BEST INDUSTRY PRACTICES. WE BELIEVE THAT ENVIRONMENTAL STEWARDSHIP AND GOOD BUSINESS PRACTICES GO HAND-IN-HAND."

The goal of the operation of our power plants is to be in compliance with all regulatory requirements in the most cost effective manner. We review the options for compliance, the cost of these options, and then develop an implementation program designed to meet state and federal standards at the lowest cost while providing operational flexibility to meet all of our power production needs.

Q. Do each of the projects listed in Eames Exhibit 1 have a Certificate of Public Convenience and Necessity?

A. Certificates for the projects were granted in various cases over the past several years. PSC Case No. 2000-340 involved the installation of the SCR's on Spurlock Station (Projects 8 & 9). PSC Case No. 2001-00053 relates to the Gilbert Unit (Project 1). PSC Case No. 92-00112 relates to CT's 1, 2, 3 (Project 3). PSC Case No. 98-00544 relates to CT 4 (Project 4). PSC Case No. 2000-00056 relates to CT 5 (Project 5). PSC Case No. 2003-00297 relates to CT's 6 & 7 (Projects 6 & 7). Project 2 is a precipitator upgrade and replacement at Spurlock Unit 1. This upgrade was necessary to coordinate the installation of the SCR in Project 8 and to meet the permit conditions for particulate matter in the operating permit.

Q. What are the wastes and/or by-products that are produced from the generation of electricity?

A. The combustion of fuels to produce electricity results in the generation of a number of by-product streams. These include the release of sulfur dioxide and nitrogen oxide gases into the atmosphere as well as particulate matter. Ash particles from both the combustion devices and the air pollution control equipment must be captured, disposed of and/or stored. The solid wastes generated and collected are either marketed or stored in on-site storage facilities. Spurlock Station and Cooper Stations use a licensed landfill while Dale Station uses an ash pond for initial disposal prior to later movement to a landfill. The NOx emissions are controlled through the use of low NOx burners, SCR operation, water injection, and boiler design depending on the unit being considered. The by-products from the SCR operation are elemental nitrogen and water, which are released into the atmosphere. The SO_2 emissions are currently being met through the use of fuel quality that provides emissions levels that meet the regulatory requirements.

Q. Please discuss the need for and process of obtaining the Environmental Permits listed in Column 6 of Eames Exhibit 1.

A. The EPA and Kentucky Division for Air Quality issue a permit to operate generating units. This permit is good for 5 years, at which time it must be reissued. This permit is called a Title V Operating Permit and is required by the Federal Clean Air Act. This permit establishes the parameters under which a facility may operate and establishes the emission limits for all air emissions.

Most importantly, it requires that the facility meet the Best Available Control Technology (BACT) and must be demonstrated to be cost-effective. The reissuance every 5 years allows the state and EPA to review the emissions levels and conditions of the permit and make modifications to the emission limits as necessary to protect the ambient air quality surrounding a facility. The permits issued by the Division for Air Quality are identified on Eames Exhibit 1, Column 6.

Q. How are the emission limitations contained in the operating permits determined?

A. The Kentucky Division for Air Quality has adopted a regulatory program (401 KAR Chapters 50-68). These standards are based upon the levels of emissions necessary to protect the public health and welfare. The standards vary from one location to another and for one type of air contaminant source to another. The permits reflect the limits necessary at each location to meet these ambient air standards. New facilities must undergo the additional BACT analysis described below to ensure that the best economical control equipment is being installed.

Q. Discuss the environmental regulations associated with the installation of environmental assets at the Gilbert generating unit (Project 1).

A. The emissions level at Gilbert is governed by the environmental regulations outlined in Eames Exhibit 1, Column 5. As mentioned above, the state/EPA permitting process requires the installation of BACT on any new air pollution source. BACT is formally defined as the lowest achievable emission reduction based on technology and considering economics. The BACT process of EPA

requires that an applicant for a construction permit demonstrates that the level of controls for air pollution is the highest level available with the consideration of the cost. EPA reviews the estimated costs of construction and operation of the control equipment and determines that the level of controls is economical for the levels of emissions necessary to protect the environment. The review of EPA must determine that no violation of any ambient air standard will occur if the facility is permitted. The BACT process is the mechanism that EPA uses to determine how clean a facility should be and whether it is cost-effective. In order to receive a permit, it must be demonstrated to EPA that these requirements are satisfied. The boiler technology (CFB), along with the installation of the SNCR for additional NOx control, the flash dry absorber for additional SO_2 control, and baghouse for the additional removal of particulate matter met the requirements of BACT for this permitting effort.

Q. Discuss why the Gilbert unit will be the cleanest coal burning generating station in the United States.

A. The BACT process requires that an applicant start with a level of emissions equal to the lowest that EPA has permitted in the past for a similar facility. Any further reduction from this baseline is based upon technology advances and improved economics. Therefore, when the Gilbert unit was permitted in 2002 it became the cleanest unit permitted. When it becomes operational it will be the cleanest coal fired unit in the United States in operation. Additional units of other utilities have been permitted since the Gilbert unit was permitted, but few, if any, are under construction. Some of these units may have received emissions limits for some

parameters equal to this unit but none have been permitted with overall lower emissions. The emissions level at Gilbert is expected to be 0.07 – 0.1 lbs NOx per MMBTU and 0.2 lbs. SO_2 per MMBTU.

Q. What are the environmental regulations applicable to the CT Low NOx burners in Projects 3, 4, 5, 6 and 7 at the J.K. Smith generating station?

A. The emissions level for these CT's is governed by the environmental requirements outlined in Eames Exhibit 1, Column 5. The CT Low NOx burners were also required to undergo the BACT analysis during the permitting process. Since the units were permitted at different times, the emission levels are different depending on the time of permitting. The pollution-control related cost for the CT's in Eames Exhibit 1 reflects the costs for complying with the EPA/BACT determination applicable in the construction permits for the CT's. The BACT process for the CT construction differs for CT 1, 2, 3, and 4 from the BACT process for CT 5, 6, and 7 since they were permitted in different time frames. However, in all cases the analysis showed that the units met BACT and were cost-effective.

Q. What are the environmental regulations applicable to the precipitator, Project 2, at Spurlock 1 generating station?

A. The environmental regulations governing the precipitator at Spurlock 1 are shown on Eames Exhibit 1, Column 5. The Federal Clean Air Act and Kentucky Air Quality regulations require, through the air quality operating permit program, that emission standards are met for particulate matter. The precipitator equipment is designed to capture particulate matter and provide compliance with the standards.

The regulations of the Natural Resources Cabinet (401 KAR 61:015, Section 4(4) and Regulation 7) require that emissions for particulate matter meet the limits contained in the operating permit, V-95-050.

Q. What are the environmental regulations applicable to the need for an SCR at both Spurlock 1 and Spurlock 2 generating stations, Projects 8 & 9?

A. The above identified projects (a part of Case No. 2000-340) are designed to reduce NOx emissions. Current regulations require a reduced NOx emission level during the EPA designated ozone season (May-September). The Kentucky Division for Air Quality provides EKPC with an allocation of NOx emissions for use during this ozone season. Beginning in 2004, EKPC is required to operate with emission levels at or below this allocation. If EKPC exceeds this allocation then additional allowances must be purchased or the standard will be violated. Operation of the SCR on Spurlock 2 actually began in 2002 and the SCR at Spurlock 1 began in 2003. This early operation allowed EKPC to receive "Early Reduction Credits"(ERC's) during this time period. These ERC's will allow the delay of construction of the SCR identified in Case No. 2000-340 for Cooper Station Unit 2. The exact schedule of this additional SCR is continually evaluated based upon the ERC's availability, the cost of purchasing the necessary allowances, and the construction costs of an additional SCR.

Q. Please describe how the fees for Environmental Permits listed in Column 6 of Eames Exhibit 1 are determined.

A. The State of Kentucky Division for Air Quality collects a fee from each utility which operates an air pollution source based on the reported level of emissions

released from the facility during the preceding year. Each utility is required to report the tons of emissions of all permitted releases. The Division then takes the total tons released from all facilities in the state, determines the revenue necessary to operate the program in the Division and then assigns a cost for each ton of allowance. Each facility is then billed for their cost through the permit fee program. These requirements are identified in the regulations of the Division for Air Quality. These air permit fees are therefore a cost related to operating an air contaminant source in the state of Kentucky.

Q. Does that 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 ENVIRONMENTAL COMPLIANCE PLAN AND AUTHORITY TO IMPLEMENT AN ENVIRONMENTAL SURCHARGE	)))))	**) CASE NO. 2004-00321**

AFFIDAVIT

STATE OF KENTUCKY)
)
COUNTY OF CLARK)

Robert E. Hughes, 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.

Robert E. Hughes

Subscribed and sworn before me on this 16th day of September, 2004.

Linda Neavill
Notary Public

My Commission expires: January 27, 2005

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF EAST KENTUCKY POWER COOPERATIVE, INC., FOR APPROVAL OF AN ENVIRONMENTAL COMPLIANCE PLAN AND AUTHORITY TO IMPLEMENT AN ENVIRONMENTAL SURCHARGE	)))))	**) CASE NO. 2004-00321**

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 Johnson, East Kentucky Power Cooperative, Inc., 4775 Lexington Road, Winchester, Kentucky 40391. I am a Senior Engineer in the Power Production Division of East Kentucky Power Cooperative, Inc. I am presently designated as the Project Manager for the Gilbert Unit currently under construction.

Q. Please provide a description of your education and work experience.

A. I have a degree of Master of Science in Mining Engineering from the University of Kentucky and a Bachelor of Science Degree in Mining Engineering from West Virginia Tech. I am a licensed professional engineer in the state of Kentucky. My professional work experience includes:

(1) Utility related work experience prior to EKPC -

Project Engineer for Fuller, Mossbarger, Scott and May, Civil Engineers, from 1986 until 1989. Worked on geotechnical investigations and landfill design.

(2) Work experience at EKPC -

1989 – Present: I am a Senior Engineer in the Power Production Division. My responsibilities at EKPC include:

(a) Landfill design, civil projects, plant upgrades & retrofits, new generation installation

(b) Perform evaluations of coal suppliers for fuel contracts.

My major work projects include:

(a) 1992: Project Manager over the Cooper Power Station Ash Handling System Retrofit

(b) 1993 to 1995: Construction Manager over the J.K. Smith Combustion Turbine Installation Units 1, 2 and 3

(c) 1998: Cooper Station Run of Mine Project

(d) 1998: Spurlock Power Station Landfill Development Project

(e) 1999: J.K. Smith Combustion Turbine Building Project

(f) 2000: Construction Manager over the J.K. Smith Combustion Turbine Installation Units 4 and 5

(g) 2001 to present: Project Manager over the E.A. Gilbert Unit. Installation of 268 MW's of coal-fired generation utilizing a Circulating Fluidized Bed Boiler

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to provide a description of the nine environmental compliance projects included in EKPC's compliance plan as shown in Eames Exhibit 1. In addition to the description, I will also show that the proposed plan represents a cost-effective approach and will provide a status report of the progress of construction of Projects 1, 6 and 7 as well as an estimate of the projected costs.

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 1

Q. Please describe the pollution control equipment currently being constructed at the Gilbert generating station.

A. The Gilbert generating unit at Spurlock Station (the "Gilbert Unit) is a 268 Megawatt Circulating Fluidized Bed ("CFB") Boiler and is one of the largest in its class of this type of boiler. The Gilbert Unit is currently under construction and is 90% complete. EKPC expects this unit to be commercial by March 2005. 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.
- New landfill development: Area being developed to receive Gilbert ash and scrubber materials.
- Selective Non-Catalytic Reduction ("SNCR"): Secondary reduction of NOx by use of anhydrous ammonia injection.

- Limestone reclaim system: Consists of an underground feeder, tunnel, and conveyors that transport 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 Gilbert.
- Coal and limestone dust collection system: Collects fugitive dust from the coal and limestone handling system.

Johnson Exhibit 1 shows the capital cost units for each of the aforementioned emission reduction components.

Q. Please describe how the fly ash and bed ash removal system will remove fly ash, bottom ash, and particulate matter at the Gilbert generating station.

A. The bed ash is removed from the main furnace by way of one of two Fluid Bed Ash Coolers ("FBAC"). The FBAC's cool the bed ash to a temperature that allows for pneumatic transport. The amount of bed ash flowing into the FBAC's is adjusted to allow for the proper differential pressure in the furnace. The correct differential pressure is a very important component of controlling the combustion temperature. Bed ash is pneumatically conveyed to the bed ash silo.

The fly ash is collected in the economizer hoppers, baghouse hoppers and at the bottom of the FDA reactor ductwork. The fly ash and scrubber particles are then pneumatically conveyed to the fly ash silo.

Q. Please explain why the landfill development at the Gilbert generating station is necessary for the removal of fly ash and particulate matter.

A. The Gilbert unit will produce approximately 405,000 tons of fly ash, bed ash and scrubber particles. This will double the amount of material that is currently landfilled from Spurlock Units 1 and 2. The additional amount of material requires that new disposal areas within the landfill be developed.

Q. Please explain how the Selective Non Catalytic Reduction (SNCR) at the Gilbert generating station will remove NOx during the generation of electricity.

A. The CFB combustion system will limit NOx formation to 0.15 lb./MMBtu. The Selective Non-Catalytic Reduction System ("SNCR") will serve as a secondary measure to further reduce NOx to 0.1 lbs./ MMBtu. The SNCR process is based on the injection of anhydrous ammonia into the combustion gas stream. The SNCR consists of an ammonia vaporizing module, control panel, metering and distribution module, piping and injectors. The injectors are located at the outlets of the cyclone separators.

Q. Please explain how the cyclone system, fluid bed heat exchangers, fluid bed ash coolers, refractory, fluidizing air system, and boiler limestone injection system act to remove NOx and SO_2 in the generation of electricity at the Gilbert generating station.

A. The new unit has a CFB. It controls SO_2 and NOx and takes the place of a wet FGD scrubber and SCR. The low combustion temperatures of CFBs (1550° – 1650°F) compared to pulverized coal boilers (about 3000°F) are conducive to low

emissions (see Figure 1 and Figure 2 below for a CFB overview). NOx emissions come from 2 sources – nitrogen in the fuel and nitrogen in the air. The latter is very temperature dependent and is virtually nil at CFB operating temperatures. Most of the surfaces of the CFB are protected from erosion by use of a refractory lining system. The refractory also serves to insulate the metal from excessive temperatures. Fluidizing air is supplied from several fans to lift the bed material and to provide the combustion air. The CFB has three cyclone separators. The solids entrained in the combustion gases leaving the main furnace enter cyclone separators where over 99% of the solids are captured. The cyclone separator diverts the solids downward into a standpipe through a seal pot back to the furnace. The combustion gases continue through the backpass of the boiler, FDA and baghouse out through the stack. Two FBHE's permit the extraction of heat from the solids circulation loop at a controlled rate while maintaining optimum furnace performance conditions for low NOx formation and for SO_2 removal regardless of the type of fuel or load. The ash flow rate through each FBHE is controlled independently by use of an ash control valve located beneath the seal pot returns under two of the three cyclone separators.

The low temperatures are also conducive to SO_2 removal by the limestone bed material. The CFB operates at a combustion temperature that calcinates the limestone into lime. The lime reacts with the sulfur inside the furnace for removal of ninety percent of the SO_2. The limestone is conveyed from an outside hopper to one of two silos located inside the boiler house. Each of the two silos

have a dedicated mill that pulverizes the limestone to a powder consistency that can be blown into the main furnace.

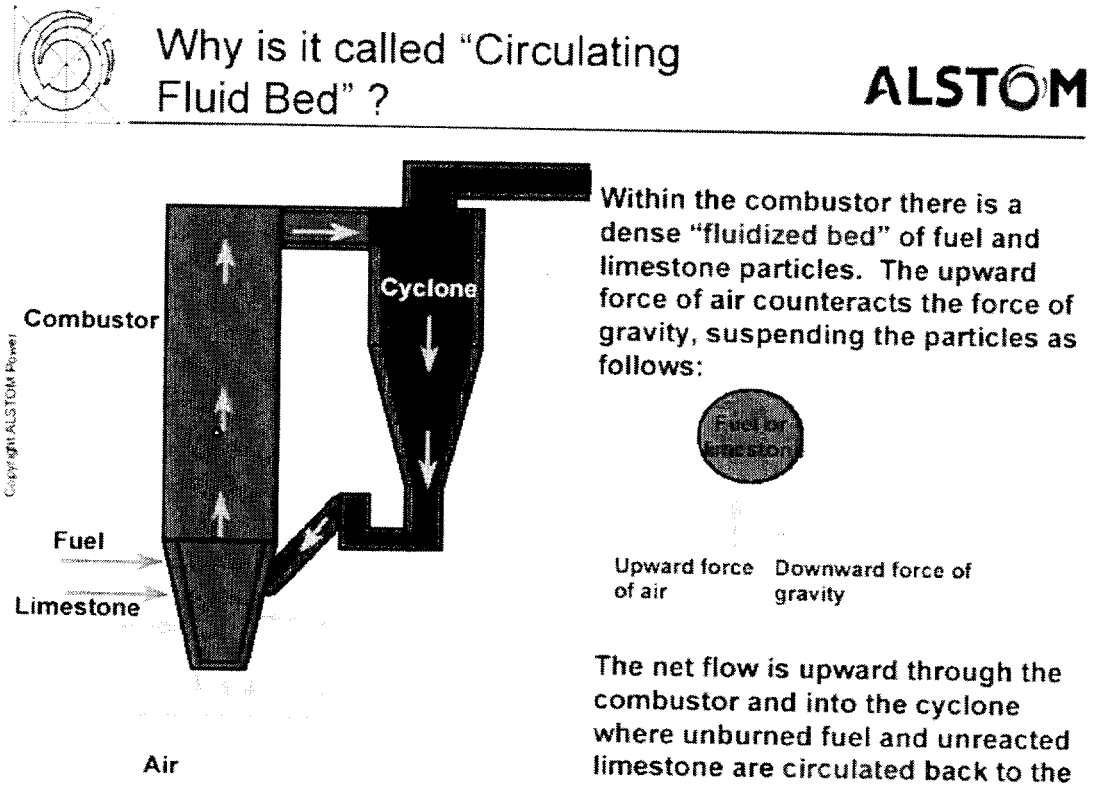

Figure 1: How a CFB works.

Q. Please explain how the coal and limestone dust collection system will remove particulate matter at the Gilbert generating station.

A. Fugitive limestone dust is collected beneath the limestone reclaim hopper. Fugitive coal dust is collected at the surge bin located inside the coal crusher building. Fugitive coal dust and limestone dust is collected by a common dust collector system where the materials are fed into the silos located inside the boiler

house. These dust collection systems work by mechanically inducing a negative airflow at the point where the fugitive dust is produced. The air is then pulled through a filter separator that separates the dust from the air. The clean air is emitted to the atmosphere and the dust is collected in a hopper. The dust collection system is a condition of the air permit.

Q. Please explain how the baghouse and Flash Drier Absorber will remove particulate matter and SO_2 at the Gilbert generating station.

A. The baghouse is located downstream of the FDA. Fly ash and reacted SO_2 (calcium sulfate) products are collected onto a fabric filter. The flue gas continues to the stack. The solid particles fall into collection hoppers and are then conveyed to the fly ash silo. The FDA is a secondary desulphurization removal unit. An additional seven to eight percent of the sulphur is removed from the flue gas. No additional limestone is required for the FDA. The FDA system uses the residual alkali (CaO) available in the CFB fly ash, which is collected by the baghouse. Fly ash from the boiler is separated from the flue gas in the baghouse and reintroduced back into the inlet duct through a re-injection mixer and FDA reactor. The fly ash is humidified by water prior to re-injection. The humidified fly ash re-activates the residual alkali thus allowing for a further sulphur removal of approximately seven to eight percent. The treated flue gas then flows to a fabric filter located in the baghouse and is collected as a dry solid particle.

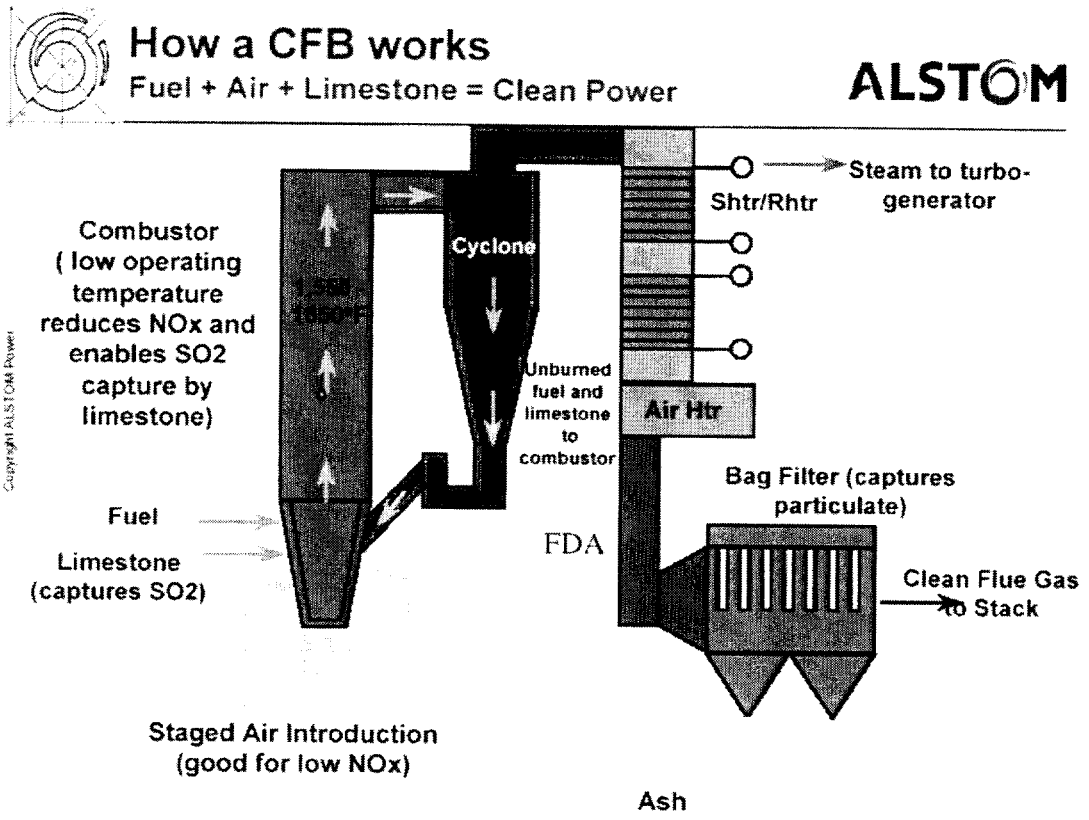

Figure 2: NOx and SO_2 Removal

Q. Please explain the role of the limestone reclaim system in the removal of SO_2 at the Gilbert generating station.

A. The limestone reclaim system consists of a below grade hopper and feeder that controls the loading rate of the unprocessed limestone onto a conveyor. This conveyor transports the product onto a common conveyor. The common conveyor feeds either crushed coal or limestone to their respective silo located inside the boiler house. The limestone is fed into the hopper with an end loader or dumped into the hopper with a truck.

Q. Is the pollution control equipment at the Gilbert generating station a reasonable means of complying with the applicable environmental regulations?

A. Yes, the CFB and its components along with the FDA remove more than 97% of SO_2. This takes the place of a wet FGD scrubber for a typical pulverized coal unit. This is considered Best Available Control Technology ("BACT") by the EPA. The CFB with a SNCR is considered BACT for the control of NOx. The baghouse is guaranteed to remove over 99% of the particulate in the flue gas. This is considered BACT by EPA.

Q. Did EKPC receive a Certificate of Convenience and Necessity to construct the Gilbert Unit including the equipment used to control emissions?

A. Yes, as indicated in Mr. Hughes' testimony, EKPC received a Certificate of Convenience and Necessity on the Gilbert Unit in October of 2001.

Q. Did EKPC receive an environmental permit to operate from the EPA and the State?

A. Yes. As described by Mr. Hughes, EKPC received a permit in 2002. Included as a condition in issuing that permit was that the Gilbert Unit represented the BACT and was cost-effective.

Q. How is the pollution control equipment at the Gilbert generating station cost-effective?

A. The CFB technology performs the same job of a wet FGD scrubber and SCR found in a typical pulverized coal unit. The current cost for a wet FGD scrubber is approximately $150 per kW and $75 per kW for a SCR. A pulverized coal

boiler would require a wet FGD scrubber and SCR to achieve the same emission levels. The baghouse is comparable to the installed cost of an electrostatic precipitator ("ESP"). The baghouse technology also allows the collection of the particles from the SO_2 removal process. As indicated in Johnson Exhibit 1, the Gilbert emission reduction equipment cost $69.6 million. By comparison, using the cost of the wet FGD scrubber ($150/kw) and an SCR ($75/kw) for a 268 MW pulverized coal unit would result in a cost of $60 million plus $25 million of the baghouse and another $9 million for an ash removal system. This $94 million in capital cost is higher than the $69.6 million for the pollution control related equipment in the CFB. In addition, a wet FGD scrubber and SCR operating on a pulverized coal unit would have an annual operation and maintenance cost of $13 million. As indicated on Johnson Exhibit 1, the operation and maintenance cost of the Gilbert pollution control equipment is $4.17 million which is considerably lower than the $13 million for a wet FGD scrubber and SCR. In summary, EKPC's approach to meeting NOx and SO_2 emission requirements is cost-effective.

Q. What is the basis for the estimated annual operating and maintenance expense estimate of $1.0 million for the boiler pollution control components?

A. The annual maintenance cost listed in Johnson Exhibit 1 includes the cyclone separator system, FBHEs, FBACs, refractory lining system, fluidizing air system and boiler limestone injection system. The annual maintenance cost for the refractory is approximately $150,000. The refractory will need to be inspected on a yearly basis and repaired where needed. This inspection requires that the boiler

be scaffolded on the interior to allow for access. The estimated cost to grind the limestone is $0.28 per ton which makes the estimated mill maintenance $67,000. The annual estimated maintenance, supervision and operation cost of $783,000 makes up the remainder of the cost for the other boiler pollution control components.

Q. What is the basis for the estimated annual operating and maintenance expense of $1.41 million for the disposal of ash, baghouse and FDA maintenance and ash system maintenance?

A. The Gilbert Unit will produce approximately 405,000 tons of material to be landfilled. The cost to landfill this material is estimated to be $2.00 per ton, resulting in an annual cost of $810,000. The estimated annual maintenance, supervision and utilities make up $300,000 for operation of the baghouse system. Finally, the annual maintenance, supervision and utilities cost of $300,000 is estimated for operation of the ash system.

Q. What is the basis for the estimated operating and maintenance expenses of $1.56 million for limestone?

A. The Gilbert Unit will use 240,000 tons of limestone per year. The cost of the limestone is estimated to be $6.50 per ton resulting in an annual cost of $1,560,000.

Q. What is the basis for the estimated annual operating and maintenance expense estimate of $200,000 for ammonia for the operation of the SNCR?

A. The SNCR is required to operate year around. The current cost of anhydrous ammonia is $375 per ton resulting in an annual estimated cost of the anhydrous ammonia of $200,000 based upon expected usage.

PROJECTS 3, 4 AND 5

Q. Please describe how the Combustion Turbine (CT) Low NOx burners and demineralized water in Projects 3, 4, and 5, at the J.K. Smith generating station reduce NOx emissions.

A. For Project 3: J.K. Smith Unit's 1, 2 and 3 are Alstom Simple Cycle 11N2s units. Demineralized water is produced from clarified river water. This water is injected into J.K. Smith CT's 1, 2 and 3 to control NOx. A special combustion burner is used to inject fuel and demineralized water at the same time. Demineralized water is used to control NOx while burning Natural Gas or Fuel Oil. This technology was considered BACT and cost-effective at the time that the air permit was granted by EPA.

For Project 4: J.K Smith Unit 4 is a General Electric Simple Cycle 7EA. Demineralized water is used to control NOx while burning Fuel Oil. GE's Dry Low NOx ("DLN") combustion system is used to control NOx while burning natural gas. The DLN system utilizes a special combustor design that controls the flame characteristics to limit the formation of NOx. Unit 4 was permitted at the same time as the units described in Project 3. It has a permit limit of 25 ppm for NOx while burning natural gas. Unit 4 and Unit 5 were constructed at the same time. It was determined by EKPC that having two identical units was the most cost effective way to purchase the two units from GE. The cost savings of adding

the DLN system to Unit 4 was achieved through spare parts savings, construction economies and training and operating economies.

For Project 5: J.K Smith Unit 5 is a General Electric Simple Cycle 7EA. Demineralized water is used to control NOx while burning Fuel Oil. GE's Dry Low NOx ("DLN") combustion system is used to control NOx while burning natural gas. The DLN system utilizes a special combustor design that controls the flame characteristics to limit the formation of NOx. The DLN system is considered BACT and cost-effective by EPA.

Q. Is EKPC's approach to control NOx for Projects 3, 4 and 5 cost-effective?

A. Yes. The alternate method for NOx reduction for these projects would be using an SCR installed on the back end of the turbine. SCRs have not been widely used in the industry for reducing NOx emissions on peaking units and would have higher O&M cost than the other control technologies. The use of an SCR on simple cycle combustion turbine is not economical for the amount of NOx emissions that could be reduced below what demineralized water injection and dry low NOx technology can achieve. An SCR on an 85 MW peaking unit would cost on the order of $50/kW or approximately $4.25 million. The pollution control equipment to reduce NOx on Projects 3, 4 and 5 cost about $6.2 million compared to an estimated cost of $21.25 million for SCRs installed on each of the five CT units in these projects. Finally, this technology is considered BACT and cost-effective as per the granting of the environmental permit by EPA.

Wood Exhibit 1 shows the detail of capital costs for these compliance projects.

PROJECTS 6 AND 7

Q. Please describe the pollution control equipment currently being constructed on EKPC combustion turbines 6 and 7 (Projects 6 and 7) at the J.K. Smith generating station.

A. For Projects 6 and 7: J.K. Smith Unit's 6 and 7 are also GE Simple Cycle 7EA's. These units are currently under construction and are expected to be completed by December 2004. Like Units 4 and 5, these two units were purchased with the DLN Combustion System for NOx control while burning natural gas. They will use demineralized water injection to control NOx while burning fuel oil.

For the same reasons outlined for Projects 3, 4 and 5, the NOx removal technology chosen for Projects 6 and 7 is the most economical per ton of NOx removed. This technology is considered BACT and cost-effective by EPA.

The estimated costs of these projects are shown in Wood Exhibit 1.

PROJECT 2

Q. Discuss in greater detail how the precipitator reduces particulate matter emissions in Project 2 at the Spurlock 1 generating station.

A. The original Spurlock Unit 1 electrostatic precipitator ("ESP") was placed into service in 1980 and was rebuilt in 1992. This ESP had experienced performance problems and EKPC determined that the ESP required replacement. It was decided to replace the old ESP in conjunction with the Unit 1 SCR project in 2003. The new ESP has shown improved performance capability due to improved high voltage electrical control technology and a more conservative

sizing criteria. It is because of these two reasons the new ESP removes more particulate matter than the old system.

Q. Why was the electrostatic precipitator, Project 2, at the Spurlock 1 generating station completely replaced in 2003?

A. The physical logistics of the SCR construction made it desirable to build a new ESP for Spurlock Unit 1. The SCR structure was built "out away" from the original unit due to space limitations. This caused problems with the ductwork design that would utilize the existing ESP. This, in combination with the performance problems with the existing ESP, led to the decision to build a new ESP. In addition, the outage period was reduced by approximately four months. Wood Exhibit 1 provides the details of the cost components of this project.

Q. Describe the process by which particulate matter is removed by the precipitator?

A. The ESP uses electrical forces to capture solid particulate matter from a flue gas system. The ESP is made up of electrodes and collection plates. As a dust particle passes through the ESP, the electrode charges the dust particle, which migrates toward and sticks to the collection plate. The ash is removed from the collection plate by mechanical means.

Q. How has this replacement contributed to the reduction of particulate matter emissions from the Spurlock 1 generating station?

A. Although the old ESP on Spurlock Unit 1 was able to maintain emission requirements, the new ESP is able to lower those emissions while reducing maintenance cost.

PROJECTS 8 AND 9

Q. Describe how the SCR at the Spurlock 1 generating station (Project 8) and the SCR at the Spurlock 2 generating station (Project 9) reduce NOx emissions.

A. NOx removal from flue gas is obtained by the addition of anhydrous ammonia to the flue gas and then passing the flue gas through a vanadium pentoxide (V2O5) catalyst. The NOx compounds are converted to nitrogen and water vapor and then emitted out the stack. The SCR process is generally effective within a temperature range of 575°F to 750°F.

The process requires the construction of a large SCR reactor consisting of soot blowers, isolation dampers, ductwork, structural steel and a catalyst. The SCR for Spurlock 2 is erected in the flue gas path of the existing boiler, after the economizer and prior to the air heater. The SCR for Spurlock 1 required an "out away" erection. This resulted in more equipment, ductwork, structural steel, etc. to be installed. In both units a successful operation requires a good chemical mixing of the ammonia with the flue gas, steady temperature control, and sound catalyst management to keep sufficient catalyst in place to drive the reaction.

Q. Are the SCRs a reasonable means of complying with the applicable environmental regulations?

A. They are. The SCRs constructed for Spurlock 1 and 2 are the industry standard for NOx compound removal from the flue gas. NOx reductions of 80 to 85% are easily obtained with this type of system. As shown in EKPC's NOx reduction plan filed in EKPC's CCN case for these SCRs, this approach is the most cost-

effective alternative for meeting NOx emission limitations. In addition, EKPC received a permit from EPA and the State indicating that the SCRs represented BACT and were cost-effective. Wood Exhibit 1 provides the detail of the cost components for these projects.

Q. Does this conclude your testimony?

A. Yes.

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

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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.

Craig A. Johnson

Subscribed and sworn before me on this 14th day of September, 2004.

Linda Neaville
Notary Public

My Commission expires: January 27, 2005

Gilbert Unit – Pollution Control Equipment being installed

Project # 1

Item	**Original Cost ($ x 1000)**	**Pollutant**
CFB Boiler Pollution Control Components		
Cyclone Separator System	2,603	NOx and SO2
Fluid Bed Heat Exchangers	7,237	NOx and SO2
Fluid Bed Ash Coolers	2,309	NOx and SO2
Fluidizing Air System	2,399	NOx and SO2
Refractory Lining System	9,687	NOx and SO2
Boiler Limestone Injection System	5,991	NOx and SO2
	30,226	**Total for CFB Components**
Fly ash and bed ash removal system	**7,886**	**Fly ash & bed ash/particulate**
Landfill development	**1,000**	**Fly ash & bed ash/particulate**
Selective Non Catalytic Reduction (SNCR)	**1,000**	**NOx**
Limestone reclaim system	**3,500**	**SO2**
Baghouse and Flash Drier Absorber (FDA)	**25,000**	**SO2 and Particulate**
Coal and limestone dust collection systems	1,000	**Fugitive dust/particulate**
	69,612	**Total capital cost for pollution control equipment**

Estimated O&M costs associated with the above equipment

Boiler Pollution Control Components	1,000	**NOx and SO2**
Fly ash and bed ash removal system	300	**Particulate & SO2**
Baghouse, FDA and SNCR	300	**Particulate & SO2**
Ammonia for SNCR	200	**NOx**
Limestone	1,560	**SO2**
Disposal of Ash	810	**Particulate & SO2**
	4,170	**Total Estimated O&M Cost**

JOHNSON EXHIBIT 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 ENVIRONMENTAL COMPLIANCE PLAN AND AUTHORITY TO IMPLEMENT AN ENVIRONMENTAL SURCHARGE	**) CASE NO. 2004-00321**

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 and Materials Management 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 become Manager of Accounting and Materials Management at EKPC. I am a certified public accountant in Kentucky.

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

A. As Manager of Accounting and Materials Management, I am responsible for all aspects of general accounting, payroll, plant accounting, purchasing, and the Winchester warehouse. I report directly to the Vice President of Finance and Planning.

Q. Are you sponsoring any exhibits?

A. Yes, I am sponsoring two exhibits referenced as Wood Exhibit 1 and Wood Exhibit 2. Wood Exhibit 1 is a detailed list of the components of projects 2-9. Wood Exhibit 2 is a list of projected expenses for the 12-month period ended March 31, 2005. These exhibits were prepared by me or under my supervision.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to present and explain EKPC's accounting for the environmental facilities and equipment identified in Eames Exhibit 1 and as described by Mr. Johnson. I will discuss the accounting for plant in service, construction work in progress, emission allowances and related expenses, depreciation expense, property taxes, insurance, and operations and maintenance ("O&M") expenses. I will also discuss the use of a baseline for determining recoverable O&M costs, as well as how EKPC excluded certain capital costs for replaced equipment which are included in base rates.

Q. Please identify the capital costs associated with the facilities and equipment for Projects 2 through 9.

A. EKPC uses the Asset Management Module of PeopleSoft to capture plant accounting information.

Wood Exhibit 1, Pages 1-11, details pollution control related equipment (for projects 2 through 9). The following is a description of Wood Exhibit 1, Pages 1-11.

For each project schedule, the column labeled "Asset Description" describes the specific assets included in the project.

The column labeled "Acquisition Date" is the date that particular asset was placed in service.

The column labeled "Account" reflects the general ledger account in which the asset is included.

The column labeled "Installed Cost" shows the original cost of the asset.

The column labeled "Accumulated Depreciation" represents accumulated depreciation from the acquisition date through March 31, 2005.

The column labeled "Net Book Value @ 3/31/05" refers to the non-depreciated value of the asset as of March 31, 2005.

The column labeled "Depreciation Expense for the 12 months ended 3/31/2005" represents annual depreciation expense as of March 31, 2005.

Q. **Referring to Wood Exhibit 1, Pages 1 and 8 through 10, discuss how EKPC arrived at the amount listed for the precipitator at Spurlock 1 and the SCR at Spurlock 1.**

A. As referenced on page 1, the cost associated with the Spurlock 1 precipitator was included in the 1993 (test year) rate base. In 2003 this precipitator was retired; a new precipitator was installed. EKPC arrived at the amount eligible for surcharge recovery by subtracting the estimated net book value of the retired precipitator as

of December 31, 1993, from the net book value of the new precipitator as of March 31, 2005. EKPC has also calculated the estimated depreciation expense that was included for the 1993 test year, and excluded that portion.

As referenced in pages 8 through 10, the costs associated with the original Spurlock 1 preheaters and fans were included in the 1993 (test year) rate base. In 2003 these preheaters and fans were retired; new preheaters and fans were installed. As mentioned by Mr. Johnson, the replacement of the preheaters and fans was necessary for the functionality of the SCR on Spurlock Unit 1. EKPC arrived at the proposed surcharge amount by subtracting the estimated net book value of the retired preheaters and fans as of December 31, 1993, from the net book value of the new preheaters and fans as of March 31, 2005. EKPC has also calculated the estimated depreciation expense that was included in the 1993 test year, and excluded that portion.

Q. What depreciation rates were used in the calculation of depreciation expense?

A. Pollution control equipment is depreciated over the estimated useful life of the particular generating facility. The exceptions to this are the catalysts installed on the SCRs at Spurlock Units 1 and 2; these catalysts are depreciated using an approximate five-year life.

Q. Is any pollution control equipment included in construction work in process (CWIP)?

A. EKPC does not anticipate having any pollution control-related projects in CWIP on March 31, 2005. The Gilbert Unit is expected to be in service by that time and

included in electric plant in service. As shown in Bosta Exhibit 3, EKPC is, however, requesting approval to include pollution control-related CWIP in rate base. This is consistent with Commission treatment in environmental surcharge cases of other utilities.

Q. What is included in spare parts inventory and limestone inventory?

A. EKPC does not plan to have any pollution control-related spare parts in inventory/electric plant in service on March 31, 2005. At this time, EKPC does not anticipate having limestone in inventory on March 31, 2005. In the future, as reflected in Bosta Exhibit 3, EKPC may have pollution control-related spare parts inventory and limestone inventory, and requests approval to include these in rate base. This is consistent with Commission treatment in environmental surcharge cases of other utilities.

Q. What is included in emission allowance inventory?

A. Bosta Exhibit 3, Page 4, Form 2.3, reflects the SO2 emission allowance inventory to be included in rate base. SO2 emission allowance inventory is carried at a weighted average cost in account 15810. In the future, EKPC will establish a NOx emission allowance inventory, as referenced in Mr. Oliva's testimony. EKPC will account for the cost of NOx allowances in the same manner as SO2 allowances.

Q. How is emission allowance expense calculated?

A. Emission allowance expense is calculated by multiplying the tons of allowances used each month by the weighted average inventory cost of such allowances. The

amount included in Wood Exhibit 2 represents the projected expense for the year ended March 31, 2005.

Q. Explain how property taxes associated with pollution control facilities are calculated.

A. Pollution control facilities located in Kentucky are exempt from local property taxes and are only taxed at the state property tax level at a rate of $.15 per $100 of assessed value. This rate of $.0015 has been applied to the net book value of the pollution control facilities. See Wood Exhibit 2.

Q. Discuss how property insurance expenses on pollution control facilities are calculated.

A. The annual insurance component is based upon the ratio of the net book value of the pollution control equipment to the net book value of total insured assets, multiplied by our annual property insurance premium. See Wood Exhibit 2.

Q. How will EKPC record the operating and maintenance expenses discussed by Mr. Johnson?

A. EKPC's general ledger conforms to the RUS Uniform System of Accounts ("USoA"). The USoA follows the FERC Chart of Accounts. In combination with the general ledger accounts, EKPC uses budget codes and project codes to track expenses associated with the specific pollution control project. The specific accounts used are outlined in Wood Exhibit 2.

Q. Please explain how EKPC will recover O&M costs.

A. EKPC will accumulate O&M costs in the aforementioned accounts/codes for a rolling 12-month period. The rolling 12-month total for each expense month will

be divided by 12 to obtain the current month's amount. This amount will then be compared to the total O&M costs for each account/code as booked in calendar year 1993, divided by 12. This approach ensures that EKPC will only recover incremental O&M costs over and above the level included in base rates.

Q. Explain how air permit fees are tracked.

A. Air permit fees are considered part of O&M expense and are accounted for in budget code 7444 and in the accounts shown on Wood Exhibit 2. Like other O&M expenses, air permit fees will be accounted for on a 12-month basis divided by 12 and then compared to the amounts included in 1993, divided by 12.

Q. Does that conclude your testimony?

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 ENVIRONMENTAL COMPLIANCE PLAN AND AUTHORITY TO IMPLEMENT AN ENVIRONMENTAL SURCHARGE	)))))	**) CASE NO. 2004-00321**

AFFIDAVIT

STATE OF KENTUCKY)
)
COUNTY OF CLARK)

Ann F. Wood, 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.

Ann F. Wood

Subscribed and sworn before me on this 16th day of September, 2004.

Linda Heaville
Notary Public

My Commission expires: January 27, 2005

Spurlock Unit 1 Precipitator--Project 2
Pollutant NOx

New Precipitator

Asset Description	Acquisition Date	Account	Installed Cost	Accumulated Depreciation	Net Book Value at 3/31/05
Structural Steel, Precipitator	06/15/2003	31241	2,915,010	217,391	2,697,620
Foundation, Precipitator	06/15/2003	31241	3,400,845	253,622	3,147,223
Casing, Precipitator	06/15/2003	31241	1,943,340	144,927	1,798,413
Plates, Precipitator	06/15/2003	31241	2,793,551	208,333	2,585,219
Electrodes, Precipitator	06/15/2003	31241	3,400,845	253,622	3,147,223
Transformer Rectifier Sets	06/15/2003	31541	3,643,763	271,738	3,372,024
Control Building, Precipitator	06/15/2003	31141	728,753	54,348	674,405
Motor Control Center, Precipitator	06/15/2003	31241	1,457,505	108,695	1,348,810
Hoppers, Precipitator	06/15/2003	31241	1,578,964	117,753	1,461,211
Ash System, Precipitator	06/15/2003	31241	2,429,175	181,159	2,248,016
Original Cost of New Precipitator			24,291,751	1,811,588	22,480,163

Retired Precipitator

Asset Description	Acquisition Date	Account	Installed Cost of Asset Retired	Accumulated Depreciation Through 12/31/93	Net Book Value at 12/31/93	Net Book Value Difference	Eligible Depreciation Expense for the 12 months ended 3/31/05
Building, Precipitator	4/30/1980	31100	14,628	6,198	8,431		
Foundation, Precip. Bldg.	4/30/1980	31100	809,449	342,936	466,512		
Louver, Precip. Bldg.	4/30/1980	31100	1,419	601	818		
Siding, Precipitator	4/30/1980	31100	30,835	13,064	17,771		
Foundation, Precipitator	4/30/1980	31200	575,790	243,943	331,847		
Insulation, Precipitator	4/30/1982	31200	31,787	11,496	20,291		
Precipitator	5/31/1992	31200	8,021,321	722,299	7,299,022		
Original Cost of Retired Precipitator			9,485,230	1,340,538	8,144,692	14,335,470	

Annual Depreciation Expense--New Precipitator	988,139	Annual Depreciation Expense--Retired Precipitator	501,570	486,569

JK Smith CT 1,2,3 Project--Project 3
Pollutant: NOx

Asset Description	Acquisition Date	Account	Installed Cost	Accumulated Depreciation	Net Book Value @ 3/31/05	Depreciation Expense for the 12 months ended 3/31/05
Water Treatment Building	2/1/1999	34150	900,191	227,691	672,500	35,708
Piping/Accessories/Supports	2/1/1999	34150	129,629	32,788	96,841	5,142
Instrumentation & Controls, Water Treatment	2/1/1999	34150	1,300	332	968	54
Tank, Demineralized Water Storage	2/1/1999	34350	608,730	153,970	454,759	24,147
Tank, Chemical Storage	2/1/1999	34350	16,010	4,049	11,960	635
Skid, Regenerant Pump	2/1/1999	34350	22,370	5,658	16,712	887
Skid, Decarbonater Pump	2/1/1999	34350	46,976	11,882	35,094	1,863
Pumps, Service Water Supply	2/1/1999	34350	11,975	3,029	8,946	475
Pumps, Injection Water	2/1/1999	34350	10,881	2,752	8,129	432
Pumps, NOx Inject Water Suppl	2/1/1999	34350	21,629	5,471	16,158	858
Mixer	2/1/1999	34350	21,704	5,490	16,215	861
Interconnecting Pipe	2/1/1999	34350	21,073	5,330	15,743	836
Instrumentation & Controls, Service Water	2/1/1999	34350	63,853	16,151	47,702	2,533
Instrumentation & Controls, Injection Water	2/1/1999	34350	54,298	13,734	40,564	2,154
Instrumentation & Controls, Injection Water	2/1/1999	34350	170,826	43,208	127,618	6,776
Instrumentation & Controls, Chemical Treatment	2/1/1999	34350	18,557	4,694	13,863	736
Foundation, Injection Water Treatment	2/1/1999	34350	19,708	4,985	14,723	782
Foundation, Injection Water Tank	2/1/1999	34350	66,150	16,732	49,419	2,624
Foundation, Injection Water Equipment	2/1/1999	34350	8,917	2,255	6,662	354
Foundation, Chemical Waste Treatment	2/1/1999	34350	18,730	4,737	13,992	743
Filters, Duplex Carbon	2/1/1999	34350	136,453	34,514	101,939	5,413
Exchanger, Secondary Cation	2/1/1999	34350	60,397	15,277	45,121	2,396
Exchanger, Secondary Anion	2/1/1999	34350	85,003	21,500	63,503	3,372
Exchanger, Primary Cation	2/1/1999	34350	133,098	33,665	99,433	5,280
Exchanger, Primary Anion	2/1/1999	34350	111,847	28,290	83,557	4,437
Decarbonator, Forced Draft	2/1/1999	34350	48,094	12,165	35,929	1,908
Control System	2/1/1999	34350	143,164	36,211	106,952	5,679
Caustic Regenerant System	2/1/1999	34350	78,293	19,803	58,490	3,106
Caustic Hot Water System	2/1/1999	34350	44,739	11,316	33,423	1,775
Bulk Caustic Storage System	2/1/1999	34350	53,686	13,579	40,107	2,130
Bulk Acid Storage System	2/1/1999	34350	31,317	7,921	23,396	1,242
Basin, Neutralization	2/1/1999	34350	140,759	35,603	105,155	5,583
Acid Regenerant System	2/1/1999	34350	77,174	19,520	57,654	3,061
Valves, Nox Injection Water	3/1/1999	34351	58,975	14,683	44,292	2,341
Pump, Injection Water	3/1/1999	34351	34,336	8,551	25,785	1,363
Piping, Nox Injection Water	3/1/1999	34351	43,911	10,934	32,977	1,743
Nozzles, Water	3/1/1999	34351	29,787	7,419	22,368	1,182
Motor, Injection Water Pump	3/1/1999	34351	44,045	10,967	33,078	1,749
Foundation, Water Injection	3/1/1999	34351	7,772	1,940	5,832	308
Controls & Instrumentation, Nox Water Injection	3/1/1999	34351	74,046	18,433	55,613	2,940
Cable & Conduit, Nox Injection	3/1/1999	34351	49,219	12,255	36,964	1,954
Valves, Nox Injection Water	2/1/1999	34352	58,975	14,915	44,060	2,339
Pump, Injection Water	2/1/1999	34352	34,336	8,683	25,653	1,362

JK Smith CT 1,2,3 Project--Project 3
Pollutant: NOx

Asset Description	Acquisition Date	Account	Installed Cost	Accumulated Depreciation	Net Book Value @ 3/31/05	Depreciation Expense for the 12 months ended 3/31/05
Piping, Nox Injection Water	2/1/1999	34352	43,911	11,105	32,806	1,742
Nozzles, Water	2/1/1999	34352	29,787	7,532	22,255	1,182
Motor, Injection Water Pump	2/1/1999	34352	44,045	11,138	32,906	1,747
Foundation, Water Injection	2/1/1999	34352	7,772	1,964	5,809	308
Controls & Instrumentation, Nox Water Injection	2/1/1999	34352	74,046	18,727	55,319	2,937
Cable & Conduit, Nox Injection	2/1/1999	34352	49,219	12,447	36,772	1,953
Valves, Nox Injection Water	4/1/1999	34353	58,975	14,454	44,520	2,343
Pump, Injection Water	4/1/1999	34353	34,336	8,424	25,913	1,364
Piping, Nox Injection Water	4/1/1999	34353	43,911	10,767	33,144	1,744
Nozzles, Water	4/1/1999	34353	29,787	7,310	22,476	1,183
Motor, Injection Water Pump	4/1/1999	34353	44,045	10,800	33,245	1,750
Foundation, Water Injection	4/1/1999	34353	7,772	1,922	5,851	308
Controls & Instrumentation, Nox Water Injection	4/1/1999	34353	74,046	18,143	55,903	2,942
Cable & Conduit, Nox Injection	4/1/1999	34353	49,219	12,067	37,153	1,955
JK Smith 1,2,3 Subtotals			**4,403,805**	**1,109,885**	**3,293,921**	**174,720**

JK Smith CT 4--Project 4
Pollutant: NOx

Asset Description	Acquisition Date	Account	Installed Cost	Accumulated Depreciation	Net Book Value @ 3/31/05	Depreciation Expense for the 12 months ended 3/31/05
Compartment, NOx Water Injection	11/30/2001	34354	69,962	9,561	60,400	2,798
Flow Measurement, NOx Water Injection	11/30/2001	34354	22,093	3,019	19,074	884
Foundation, NOx Water Injection Module	11/30/2001	34354	26,301	3,595	22,707	1,052
Motor,NOx Water Injection Pump	11/30/2001	34354	36,822	5,032	31,790	1,473
Pump, NOx Water Injection	11/30/2001	34354	22,093	3,019	19,074	884
Pumps, Injection Water	11/30/2001	34354	11,650	1,592	10,058	466
Valves, NOx Water Injection	11/30/2001	34354	3,682	503	3,179	147
Combustor, Dry Low Nox	11/30/2001	34354	710,137	97,052	613,085	28,405
JK Smith 4 Subtotals			**902,740**	**123,374**	**779,365**	**36,109**

JK Smith CT 5--Project 5
Pollutant: NOx

Asset Description	Acquisition Date	Account	Installed Cost	Accumulated Depreciation	Net Book Value @ 3/31/05	Depreciation Expense for the 12 months ended 3/31/05
Compartment, NOx Water Injection	11/30/2001	34355	69,962	9,561	60,400	2,798
Flow Measurement, NOx Water Injection	11/30/2001	34355	22,093	3,019	19,074	884
Foundation, NOx Water Injection Module	11/30/2001	34355	26,301	3,595	22,707	1,052
Motor, NOx Water Inject. Pump	11/30/2001	34355	36,822	5,032	31,790	1,473
Piping, NOx Water Injection	11/30/2001	34355	36,822	5,032	31,790	1,473
Valves, NOx Water Injection	11/30/2001	34355	3,682	503	3,179	147
Combustor, Dry Low Nox	11/30/2001	34355	710,137	97,052	613,085	28,405
JK Smith 5 Subtotals			**905,819**	**123,795**	**782,024**	**36,232**

JK Smith CT 6--Project 6
Pollutant: NOx

Asset Description	Acquisition Date	Account	Installed Cost	Accumulated Depreciation	Net Book Value @ 3/31/05	Depreciation Expense for the 4 months ended 3/31/05
Compartment, NOx Water Injection	12/01/2004	343xx	69,962	933	69,029	933
Flow Measurement, NOx Water Injection	12/01/2004	343xx	22,093	295	21,799	295
Foundation, NOx Water Injection Module	12/01/2004	343xx	26,301	351	25,951	351
Motor, NOx Water Inject. Pump	12/01/2004	343xx	36,822	491	36,331	491
Piping, NOx Water Injection	12/01/2004	343xx	36,822	491	36,331	491
Valves, NOx Water Injection	12/01/2004	343xx	3,682	49	3,633	49
Combustor, Dry Low Nox	12/01/2004	343xx	710,137	9,468	700,668	9,468
JK Smith 6 Subtotals			**905,819**	**12,078**	**893,741**	**12,078**

JK Smith CT 7--Project 7
Pollutant: NOx

Asset Description	Acquisition Date	Account	Installed Cost	Accumulated Depreciation	Net Book Value @ 3/31/05	Depreciation Expense for the 4 months ended 3/31/05
Compartment, NOx Water Injection	12/01/2004	343xx	69,962	933	69,029	933
Flow Measurement, NOx Water Injection	12/01/2004	343xx	22,093	295	21,799	295
Foundation, NOx Water Injection Module	12/01/2004	343xx	26,301	351	25,951	351
Motor, NOx Water Inject. Pump	12/01/2004	343xx	36,822	491	36,331	491
Piping, NOx Water Injection	12/01/2004	343xx	36,822	491	36,331	491
Valves, NOx Water Injection	12/01/2004	343xx	3,682	49	3,633	49
Combustor, Dry Low Nox	12/01/2004	343xx	710,137	9,468	700,668	9,468
JK Smith 7 Subtotals			**905,819**	**12,078**	**893,741**	**12,078**

Spurlock 1 SCR--Project 8
Pollutant: NOx

Asset Description	Acquisition Date	Account	Installed Cost	Accumulated Depreciation	Net Book Value @ 3/31/05	Eligible Depreciation Expense for the 12 months ended 3/31/05
Duct,Flue Gas; Boiler to SCR	06/15/03	31241	3,295,877	245,794	3,050,082	134,070
Hoppers, SCR Inlet Duct	06/15/03	31241	599,250	44,690	554,560	24,376
Duct, SCR Bypass	06/15/03	31241	1,498,126	111,725	1,386,401	60,941
Damper, SCR Bypass Isolation	06/15/03	31241	599,250	44,690	554,560	24,376
Drive,SCR Bypass Isolation	06/15/03	31241	299,625	22,345	277,280	12,188
Damper,SCR Bypass	06/15/03	31241	1,797,751	134,070	1,663,681	73,129
Drive, SCR Bypass Damper	06/15/03	31241	898,875	67,035	831,841	36,564
Duct, SCR Outlet	06/15/03	31241	898,875	67,035	831,841	36,564
Damper, SCR Outlet	06/15/03	31241	1,498,126	111,725	1,386,401	60,941
Drive, SCR Outlet Damper	06/15/03	31241	1,676,647	125,038	1,551,609	68,203
Catalyst, SCR	06/15/03	31241	3,727,294	1,344,270	2,383,024	733,238
Structural Steel, SCR	06/15/03	31241	4,845,482	361,358	4,484,124	197,104
Foundation, SCR	06/15/03	31241	5,963,670	444,748	5,518,922	242,590
Tanks, SCR Ammonia	06/15/03	31241	2,236,376	166,781	2,069,596	90,971
Skid, Ammonia Vaporizer; SCR	06/15/03	31241	2,050,012	152,882	1,897,129	83,390
Skid, Ammonia Forwarding; SCR	06/15/03	31241	2,236,376	166,781	2,069,596	90,971
Grid, Ammonia Injection; SCR	06/15/03	31241	745,459	55,594	689,865	30,324
Blowers, Dilution Air; SCR	06/15/03	31241	1,677,282	125,085	1,552,197	68,228
Motor Control Center; SCR	06/15/03	31241	1,118,188	83,390	1,034,798	45,486
Sootblower System; SCR	06/15/03	31241	2,460,014	183,459	2,276,555	100,068
Dampers, SCR Inlet	06/15/03	31241	4,100,023	305,764	3,794,259	166,781
Drives, SCR Inlet Damper	06/15/03	31241	1,863,647	138,984	1,724,663	75,809
Manlift, SCR	06/15/03	31241	1,118,188	83,390	1,034,798	45,486
Collector, Power Pulse; AeroP	06/15/03	31241	10,741	801	9,940	437
Gas Analyzer System; SCR	06/15/03	31241	3,130,927	233,493	2,897,434	127,360
Spurlock 1 Subtotal			**50,346,082**	**4,820,925**	**45,525,157**	**2,629,596**
SCR - Preheater*			**12,709,700**	**947,842**	**11,761,858**	**517,005**
SCR - Fans*			**13,669,406**	**1,019,413**	**12,649,993**	**556,044**
Spurlock 1 Subtotals			**76,725,188**	**6,788,181**	**69,937,007**	**3,702,644**
Impact of Retired Preheater					**(1,315,867)**	**(70,778)**
Impact of Retired Fans					**(573,729)**	**(30,960)**
Spurlock 1 Totals					**68,047,412**	**3,600,906**

*From Wood Exhibit 1, Pages 9 and 10

Spurlock 1 SCR's--P ect 8 (continued)
Pollut Ox

Asset Description	Acquisition Date	Account	Installed Cost	Accumulated Depreciation	Net Book Value at 3/31/05
Spurlock 1 - Preheater					
Steel, Air Preheater	06/15/2003	31241	2,097,100	156,394	1,940,707
Foundation, Air Preheater	06/15/2003	31241	2,160,649	161,133	1,999,516
Casing, Air Preheater	06/15/2003	31241	1,270,970	94,784	1,176,186
Baskets, Air Preheater	06/15/2003	31241	2,541,940	189,568	2,352,372
Drive, Air Preheater	06/15/2003	31241	953,227	71,088	882,139
Sootblower System, Air Preheater	06/15/2003	31241	1,779,358	132,698	1,646,660
Bearings, Air Preheater Support	06/15/2003	31241	1,906,455	142,176	1,764,279
Installed Cost of New Preheater			12,709,700	947,842	11,761,858
Annual Depreciation Expense--New Preheater			517,005		
Spurlock 1 - Fans					
Housing, ID Fan 1A	06/15/2003	31241	369,633	27,566	342,067
Rotor, ID Fan 1A	06/15/2003	31241	616,055	45,943	570,112
Foundation, ID Fan 1A	06/15/2003	31241	677,660	50,537	627,123
Motor, ID Fan 1A	06/15/2003	31241	246,422	18,377	228,045
Damper, ID Fan 1A Inlet Vane	06/15/2003	31241	55,445	4,135	51,310
Damper, ID Fan Inlet	06/15/2003	31241	30,803	2,297	28,506
Damper, ID Fan 1A Outlet	06/15/2003	31241	61,605	4,594	57,011
Lube Oil System, ID Fan 1A	06/15/2003	31241	357,312	26,647	330,665
Housing, ID Fan 1B	06/15/2003	31241	369,633	27,566	342,067
Rotor, ID Fan 1B	06/15/2003	31241	616,055	45,943	570,112
Foundation, ID Fan 1B	06/15/2003	31241	677,660	50,537	627,123
Motor, ID Fan 1B	06/15/2003	31241	246,422	18,377	228,045
Damper, ID Fan 1B Inlet Vane	06/15/2003	31241	24,642	1,838	22,804
Damper, ID Fan 1B Outlet	06/15/2003	31241	30,803	2,297	28,506
Lube Oil System, ID Fan 1B	06/15/2003	31241	357,312	26,647	330,665
Housing, FD Fan 1A	06/15/2003	31241	308,027	22,972	285,056
Rotor, FD Fan 1A	06/15/2003	31241	554,449	41,349	513,100
Foundation, FD Fan 1A	06/15/2003	31241	492,844	36,754	456,089
Motor, FD Fan 1A	06/15/2003	31241	246,422	18,377	228,045
Damper, FD Fan 1A Inlet Vane	06/15/2003	31241	49,284	3,675	45,609
Damper, FD FAn 1A Outlet	06/15/2003	31241	55,445	4,135	51,310
Lube Oil System, FD Fan 1A	06/15/2003	31241	492,844	36,754	456,089
Housing, FD Fan 1B	06/15/2003	31241	308,027	22,972	285,056
Rotor, FD Fan 1B	06/15/2003	31241	369,633	27,566	342,067
Foundation, FD Fan 1B	06/15/2003	31241	492,844	36,754	456,089
Motor, FD Fan 1B	06/15/2003	31241	197,139	14,702	182,438
Damper, FD Fan 1B Inlet Vane	06/15/2003	31241	49,284	3,675	45,609
Damper, FD Fan 1B Outlet	06/15/2003	31241	24,642	1,838	22,804
Lube Oil System, FD Fan 1B	06/15/2003	31241	492,844	36,754	456,089
Housing, PA Fan 1A	06/15/2003	31241	184,816	13,783	171,033
Rotor, PA Fan 1A	06/15/2003	31241	246,422	18,377	228,045
Foundation, PA Fan 1A	06/15/2003	31241	431,238	32,160	399,078
Motor, PA Fan 1A	06/15/2003	31241	197,137	14,702	182,436
Damper, PA Fan 1A Inlet Vane	06/15/2003	31241	36,963	2,757	34,207
Damper, PA Fan 1A Outlet	06/15/2003	31241	49,284	3,675	45,609
Lube Oil System, PA Fan 1A	06/15/2003	31241	308,027	22,972	285,056
Housing, PA Fan 1B	06/15/2003	31241	184,816	13,783	171,033
Rotor, PA Fan 1B	06/15/2003	31241	246,422	18,377	228,045
Foundation, PA Fan 1B	06/15/2003	31241	431,238	32,160	399,078
Motor, PA Fan 1B	06/15/2003	31241	246,422	18,377	228,045
Damper, PA Fan 1B Inlet Vane	06/15/2003	31241	36,963	2,757	34,207
Damper, PA Fan 1B Outlet	06/15/2003	31241	49,284	3,675	45,609

Description	Acquisition Date	Account	Installed Cost of Asset Retired	Accumulated Depreciation Through 12/31/93	Net Book Value at 12/31/93	Difference	Eligible Depreciation Expense for the 12 months ended 3/31/05
Air Heater, Secondary	4/30/1980	31200	1,855,744	786,217	1,069,527		
Air Heater, Primary	4/30/1980	31200	427,427	181,087	246,340		
Installed Cost of Retired Preheater			2,283,171	967,303	1,315,867	10,445,991	
Annual Depreciation Expense--Retired Preheater			70,778				446,227

Spurlock 1 SCR's--Project 8 (continued)
Pollutant: NOx

Asset Description	Acquisition Date	Account	Installed Cost	Accumulated Depreciation	Net Book Value at 3/31/05
Lube Oil System, PA Fan 1B	06/15/2003	31241	308,027	22,972	285,056
Steam Coil, Air Preheater	06/15/2003	31241	492,844	36,754	456,089
Duct, Secondary Air to Air Preheater	06/15/2003	31241	1,348,313	100,552	1,247,761
Installed Cost of New Fans			13,669,406	1,019,413	12,649,993
Annual Depreciation Expense--New Fans			556,044		

Description	Acquisition Date	Account	Installed Cost of Asset Retired	Accumulated Depreciation Through 12/31/93	Net Book Value at 12/31/93	Difference	Eligible Depreciation Expense for the 12 months ended 3/31/05
Fan, F.D.- Aux. Boiler	4/30/1980	31100	10,818	4,583	6,235		
Drive, Air Damper Control	8/31/1980	31200	29,609	12,544	17,065		
Drive, Air Heater Control	8/31/1980	31200	9,093	3,852	5,241		
Drive, ID Damper Control	8/31/1980	31200	10,662	4,517	6,145		
Drive, Prim. Air Damper	8/31/1980	31200	13,702	5,805	7,897		
Drive, Prim. Air Fan Cont	8/31/1980	31200	14,803	6,271	8,531		
Fan, Forced Draft #1A&#1B	4/30/1980	31200	196,566	83,278	113,287		
Fan, Induced Draft #1A,1B	4/30/1980	31200	258,252	109,413	148,839		
Fan, Primary Air	4/30/1980	31200	73,708	31,227	42,480		
Lube Oil Syst.- FD Fan	4/30/1980	31200	7,301	3,093	4,208		
Lube Oil Syst - ID Fan	4/30/1980	31200	7,301	3,093	4,208		
Motor, FD Fan	4/30/1980	31200	119,794	50,753	69,041		
Motor, ID Fan	4/30/1980	31200	208,259	88,233	120,027		
Motor, Prim. Air Fan-1A,1B	4/30/1980	31200	35,613	15,088	20,525		
Installed Cost of Retired Fans			995,481	421,752	573,729	12,076,264	
Annual Depreciation Expense--Retired Fans			30,960				525,084

Spurlock 2 SCR--Project 9
Pollutants: NOx and Particulate

Asset Description	Acquisition Date	Account	Installed Cost	Accumulated Depreciation	Net Book Value @ 3/31/05	Depreciation Expense for the 12 months ended 3/31/05
SCR Catalyst	05/31/02	31242	4,883,942	2,676,075	2,207,868	1,059,776
Catwalk-frm ESP to SCR	05/31/02	31142	39,282	5,669	33,612	1,477
Scaffolding	05/31/02	31142	96,967	13,995	82,972	3,647
SCR Manlift Roll Up Door	05/31/02	31142	8,880	1,282	7,598	334
Collector, Power Pulse 36-6-HN	05/31/02	31242	11,352	1,638	9,713	427
Flowmeter, Brooks Model 9457	05/31/02	31242	7,176	1,874	5,301	643
SCR Ammonia Area Safety Showers	05/31/02	31242	110,999	16,020	94,978	4,175
SCR Ammonia Forwarding Skid	05/31/02	31242	2,663,969	384,486	2,279,483	100,197
SCR Ammonia Tanks	05/31/02	31242	2,397,572	346,037	2,051,534	90,177
SCR Ammonia Vaporizer Skid	05/31/02	31242	2,330,973	336,425	1,994,547	87,672
SCR Damper Drives	05/31/02	31242	2,219,974	320,405	1,899,569	83,498
SCR Dampers	05/31/02	31242	4,217,950	608,769	3,609,181	158,645
SCR Dilution Air Blowers	05/31/02	31242	3,107,963	448,567	2,659,397	116,897
SCR Foundations	05/31/02	31242	5,402,839	779,782	4,623,057	203,211
SCR Gas Analyzer System	05/31/02	31242	3,107,963	448,567	2,659,397	116,897
SCR Manlift	05/31/02	31242	310,796	44,857	265,940	11,690
SCR Motor Control Center	05/31/02	31242	1,278,705	184,553	1,094,152	48,095
SCR Sootblower System	05/31/02	31242	4,439,948	640,810	3,799,138	166,995
SCR Structural Steel	05/31/02	31242	7,991,906	1,153,458	6,838,448	300,591
Breaker, Siemens	05/31/02	31242	14,625	2,111	12,514	550
Sootblowers	05/31/02	31242	258,456	37,303	221,154	9,721
Sootblower Control System	05/31/02	31242	258,456	37,303	221,154	9,721
Spurlock 2 Subtotal			**45,160,692**	**8,489,985**	**36,670,706**	**2,575,036**

EAST KENTUCKY POWER COOPERATIVE, INC.
ENVIRONMENTAL SURCHARGE
ANALYSIS OF EXPENSES (Excluding Gilbert Project)
ESTIMATE FOR THE 12 MONTHS ENDING MARCH 31, 2005

	Expense Type	Account Description	Projected Amount	Amount Included at 12/31/1993	Eligible Recovery
I	**Operations & Maintenance**				
	51240	Maintenance of Boiler Plant Spurlock	626,734	86,526	540,208
	51241	Maintenance of Boiler Plant Spurlock 1	127,605	39,462	88,143
	51242	Maintenance of Boiler Plant Spurlock 2	267,942	68,787	199,155
	51243	Maintenance of Boiler Plant Scrubber	22,937	19,016	3,921
	55351	Maintenance of Generating Equipment CT	135,494	-	135,494
			1,180,712	213,791	966,921
	Air Permit Fees				
	50621	Misc Steam Power Environmental Dale	263,212	88,528	174,684
	50631	Misc Steam Power Environmental Cooper	282,398	-	282,398
	50645	Misc Steam Power Environmental Spurlock	279,624	100,108	179,516
	54961	Environmental Expense CT	28,764	-	28,764
			853,998	188,636	665,362
	Ammonia				
	50641	Misc Steam Power Expense Spurlock 1	210,500	-	210,500
	50642	Misc Steam Power Expense Spurlock 2	210,500	-	210,500
			421,000	-	421,000
			2,455,710	402,427	2,053,283
II	**SO2 Emissions Allowances**				
	50920	Allowances Dale	1,673,152	-	1,673,152
	50930	Allowances Cooper	4,440,982	-	4,440,982
	50940	Allowances Spurlock	8,702,326	-	8,702,326
			14,816,460	-	14,816,460
III	**Taxes and Insurance**				
	Various Accounts		381,168	-	381,168

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF EAST KENTUCKY POWER COOPERATIVE, INC., FOR APPROVAL OF AN ENVIRONMENTAL COMPLIANCE PLAN AND AUTHORITY TO IMPLEMENT AN ENVIRONMENTAL SURCHARGE	)))))	**) CASE NO. 2004-00321**

DIRECT TESTIMONY OF FRANK J. OLIVA ON BEHALF OF EAST KENTUCKY POWER COOPERATIVE, INC.

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

A. My name is Frank J. Oliva, East Kentucky Power Cooperative, Inc. (EKPC), 4775 Lexington Road, Winchester, Kentucky 40391. I am Manager of Finance, Planning and Risk Management for EKPC.

Q. As background for your testimony, please briefly describe your education background and work experience.

A. I have a B.S. degree in Accounting from the University of Kentucky and a Masters degree in Business Administration from Xavier University. In addition, I have attended and participated in numerous seminars and supplemental training courses over the years. I have worked for EKPC for 25 years. I was employed as EKPC's General Accounting Supervisor from 1978 to 1985, Finance Manager from 1985 to 2002, and I have been in my current position with EKPC since February 2002. My responsibilities include finance and treasury activities, financial and power supply planning, and risk management.

Q. Are you sponsoring any exhibits?

A. Yes. I am sponsoring an exhibit, identified herein as Oliva Exhibit 1. This exhibit was prepared by me or under my supervision. This exhibit is:

Oliva Exhibit 1 EKPC Schedule of Long-Term Debt

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to explain EKPC's emission allowance strategy and the basis for the rate of return on rate base.

Q. Please explain the nature of EKPC's SO_2 and NO_x emission allowances.

A. Title IV of the Clean Air Act set a goal of reducing annual SO_2 emissions below 1980 levels. To achieve these reductions, the law required a two-phase tightening of the restrictions placed on fossil fuel-fired power plants.

Phase I began in 1995 and affected 263 units at 110 mostly coal-burning electric utility plants located in 21 eastern and midwestern states. An additional 182 units joined Phase I of the program as substitution or compensating units, bringing the total of Phase I affected units to 445. EKPC became subject to Phase I of these SO_2 regulations in 1995.

Phase II, which began in the year 2000, tightened the annual emissions limits imposed on large plants and also set restrictions on smaller plants fired by coal, oil, and gas. The program affected existing utility units serving generators with an output capacity of greater than 25 megawatts and all new utility units.

The Acid Rain Program represented a departure from traditional command and control regulatory methods, which established specific emissions limitations with which all affected sources must comply. Instead, the Acid Rain Program

introduced an allowance trading system. The U.S. Environmental Protection Agency and the Kentucky Environmental and Public Protection Cabinet enforce these regulations.

As with the SO_2 emission reduction requirements, the NOx program was implemented in two phases, beginning in 1996 and 2000. EKPC came under these NOx regulations beginning in May 2004. The NOx program embodies many of the same principles of the SO_2 trading program.

Q. Please explain how EKPC's SO_2 and NO_x emission allowances are allocated.

A. Under the SO_2 and NO_x emission allowance trading systems, affected utility units are allocated allowances based on their historic fuel consumption and a specific emissions rate. Each allowance permits a unit to emit 1 ton of SO_2 or NO_x during or after a specified year. For each ton of SO_2 or NO_x emitted in a given year, one allowance is retired.

Allowances may be bought, sold, or banked. Anyone may acquire allowances and participate in the trading system. However, regardless of the number of allowances a source holds, it may not emit at levels that would violate federal or state limits set under Title IV of the Clean Air Act.

Currently, EKPC is allocated approximately 39,969 SO_2 emission allowances annually and approximately 3,301 NO_x emission allowances annually.

Q. Please explain EKPC's strategy for buying and selling SO_2 and NO_x emission allowances.

A. EKPC monitors the number of tons of SO_2 and NO_x emitted from its generating plants every month. Based on these measured emissions and the projected

generation and fuel consumption for the remainder of the year, EKPC estimates the number of SO_2 and NO_x allowances that will be needed to be held at year-end in order to comply with the federal and state limits. If it is determined that additional allowances need to be acquired, they can be purchased from others at the current market price.

Q. Please explain the nature of EKPC's NO_x Early Reduction Credits ("ERCs").

A. EKPC was required by law to comply with limitations on its NO_x emissions beginning May 31, 2004. Prior to 2004, pursuant to the Commission's approval of a CCN, EKPC installed Selective Catalytic Reduction ("SCR") equipment on its Spurlock 1 and Spurlock 2 units. Spurlock Unit 2's SCR unit was operated during the summers of 2002 and 2003. Spurlock Unit 1's SCR unit was operated during the summer of 2003. By operating these SCR units earlier than required, EKPC earned a total of 1,791 supplemental NO_x emission allowances, termed ERCs. These ERCs can be utilized for compliance in 2004 and 2005.

Q. What is EKPC recommending as a "reasonable rate of return"?

A. EKPC is requesting approval to establish an environmental surcharge tariff that would produce a Times Interest Earned Ratio ("TIER") of 1.15, as applied to EKPC's average cost of debt.

Q. Why is EKPC using the average cost of debt?

A. The environmental surcharge statute states that a "reasonable" rate of return is required. As EKPC's predominant source of capital is debt, EKPC believes that this approach meets this requirement and will allow EKPC to comply with the financial coverage requirements of its debt covenants.

Q. Please explain how EKPC calculates its weighted average cost of debt.

A. At the end of each month, EKPC calculates its weighted average cost of debt based on the current interest rate of each outstanding long-term debt issue. At July 31, 2004, EKPC's weighted average cost of debt was 4.90%. This information is referenced in Oliva Exhibit 1.

Q. Will EKPC update its average cost of debt at periodic intervals?

A. Yes. EKPC proposes to update its average cost of debt at six-month intervals. The 1.15 TIER will be applied to a new cost of debt at that time. This will allow the surcharge to reflect changes in actual debt costs, either higher or lower, in a timely fashion.

Q. Why does EKPC not try to match capital expenditures with a specific source of financing?

A. Based on the Commission Order in Case No. 2000-439, the Commission stated that "... it has long been recognized in the utility industry that capital expenditures are financed by numerous sources of capital, and that it is generally not possible to match a capital expenditure with a specific source of capital." EKPC concurs that it would be difficult to link each of the environmental assets of its Compliance Plan with a specific source of financing.

Q. Why does EKPC employ a TIER of 1.15 to calculate its rate of return?

A. EKPC is a power supply borrower from the Rural Utilities Service ("RUS"), a branch of the U.S. Department of Agriculture. As such, EKPC is subject to rules and regulations of the RUS. In federal regulation 7 CFR 1710, RUS requires that power supply borrowers maintain a minimum annual TIER of 1.05. This

minimum TIER is also delineated in EKPC's mortgage with RUS. EKPC's request for a TIER of 1.15 allows some flexibility to absorb abnormal expenses or reductions in revenue due to abnormal weather conditions. This return was supported by the Commission in EKPC's last general rate case (Case No. 94-336), in which the Commission allowed a TIER of 1.15.

Q. Does this conclude your testimony?

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 ENVIRONMENTAL COMPLIANCE PLAN AND AUTHORITY TO IMPLEMENT AN ENVIRONMENTAL SURCHARGE	)))))	**) CASE NO. 2004-00321**

AFFIDAVIT

STATE OF KENTUCKY)
)
COUNTY OF CLARK)

Frank J. Oliva, 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.

Frank Oliva

Subscribed and sworn before me on this 16th day of September, 2004.

Linda Neavill
Notary Public

My Commission expires: January 27, 2005

EKPC Schedule of Long Term Debt
as of 07/31/2004

		Principal Outstanding	Composite Rate	Annualized Interest
RUS		$ 62,092,871	4.57%	$ 2,836,534
CFC				
	# 9001	6,863,297	3.68%	252,226
	# 9033	5,730,562	3.68%	210,598
	# 9034	6,174,449	3.68%	226,911
	# 9038	4,902,320	3.68%	180,160
	# 9044	50,000,000	3.00%	1,500,000
	# 9045	7,145,000	3.28%	233,999
	# 9046	28,000,000	3.00%	840,000
	# 9047	4,001,200	6.68%	267,080
FFB				
	L8	115,597,021	7.13%	8,240,912
	M9	34,190,397	6.42%	2,195,365
	N8	82,671,775	7.02%	5,805,212
	P12	1,537,733	8.77%	134,890
	R12	15,717,495	6.30%	990,202
	S8	93,583,946	6.20%	5,798,461
	T62	14,774,135	5.24%	774,460
	U8	6,132,858	6.07%	372,081
	V8	53,282,036	5.29%	2,818,620
	W8	51,693,930	5.24%	2,706,694
	X8	84,885,239	4.61%	3,911,512
	Y8	201,800,000	4.96%	10,017,352
Private Placement Bonds				
		11,600,000	7.70%	893,200
Pollution Control Bonds				
	1984B	99,750,000	1.28%	1,276,800
	1984J	26,105,000	1.08%	281,934
	1993B	9,700,000	1.00%	97,000
		$ 1,077,931,264		$ 52,862,203

Weighted Average Rate **4.90%**

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF EAST KENTUCKY POWER COOPERATIVE, INC., FOR APPROVAL OF AN ENVIRONMENTAL COMPLIANCE PLAN AND AUTHORITY TO IMPLEMENT AN ENVIRONMENTAL SURCHARGE	)))))	**) CASE NO. 2004-00321**

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 Vice President of Finance and Planning.

Q. Are you sponsoring any exhibits?

A. I am sponsoring six exhibits, herein identified as Bosta Exhibits 1 through 6. These exhibits were prepared by me or under my supervision. A list of these exhibits is as follows:

Bosta Exhibit 1: Rate Schedule ES

Bosta Exhibit 2: Environmental Surcharge Report Summary Forms

Bosta Exhibit 3: Environmental Surcharge Report Support Forms

Bosta Exhibit 4: Environmental Surcharge Recoverable Dollars and Surcharge Factor

Bosta Exhibit 5: Calculation of Environmental Surcharge at Wholesale and Retail

Bosta Exhibit 6: Retail Rate Schedules

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to describe the mechanics and components of the proposed EKPC Environmental Surcharge and explain how the surcharge will be

calculated and charged to EKPC's Member Systems. I will also:

(1) introduce Electric Rate Schedule ES;

(2) identify the specific cost components of environmental compliance to be included in the Environmental Surcharge;

(3) define EKPC's reporting procedures and reports for the Environmental Surcharge;

(4) provide an estimate of the surcharge to the Member Systems; and

(5) describe how the retail surcharge will be computed and implemented on a monthly, on-going basis.

Q. What projects comprise EKPC's Compliance Plan?

A. There are nine projects as outlined in Eames Exhibit 1. All of these projects were initiated to meet the requirements of the federal Clean Air Act, as amended.

Q. Describe EKPC's Rate Schedule ES that is presented in Bosta Exhibit 1.

A. Bosta Exhibit 1, Rate Schedule ES, describes the various components of the environmental surcharge, including the calculation of the monthly surcharge percentage factor. The Environmental Surcharge Factor is defined as:

$$\text{CESF (Current Period Environmental Surcharge Factor)} = \frac{E(m)}{R(m)} = \%$$

where E(m) is the current month actual cost of compliance according to the tenets of the environmental surcharge law. R(m) is the matching average monthly revenue for the twelve-month period ending in the expense month. The resulting quotient is a percentage which will be applied to Member Systems' bills. This formula does not change and only the magnitude of the specific components will

change over time. Included also is a component for a surcharge factor included in base rates, BESF (Base Period Environmental Surcharge Factor). This will be zero until the Commission determines that a roll-in to base rates is warranted in a two-year review period proceeding.

Q. What are the cost components included in EKPC Rate Schedule ES?

A. EKPC Rate Schedule ES will include the following costs related to pollution control capital expenditures:

(1) a return on pollution control rate base for applicable pollution control facilities and equipment;

(2) incremental operation and maintenance expenses, including air permit fees, over and above certain O&M costs incurred in 1993 resulting from the installation and operation of pollution control facilities;

(3) depreciation over the expected useful life of the relevant pollution control facilities and equipment;

(4) property taxes on pollution control equipment;

(5) insurance related to pollution control equipment;

(6) emission allowance expense; and

(7) consulting fees.

Q. Please describe the capital cost components included in the environmental surcharge rate base.

A. EKPC will include the capital expenditures net of accumulated depreciation for projects listed in its environmental Compliance Plan which are not reflected in

current rates. Included are investments in pollution control projects that have occurred subsequent to the test year of calendar year 1993 used in EKPC's last rate case, Case No. 94-336. EKPC is seeking to recover the costs associated with the net book value of those investments. A working capital component, the emission allowance inventory, and spare parts and limestone inventory also comprise the rate base.

Q. Describe how operating and maintenance expenses will be recovered in the environmental surcharge.

A. EKPC proposes recovering the incremental O&M expenses over and above a "baseline" of pollution-control related operating and maintenance expenses. The baseline O&M expenses were incurred in calendar year 1993 in EKPC's last base rate case and expenses above or below the established base level will be reflected in the calculation of future surcharges.

Q. Explain how EKPC will handle the expenses of and sale of emission allowances in the environmental surcharge.

A. EKPC will include the monthly expense of use of emission allowances in the surcharge and will include the revenues from the sale of any emission allowances as an offset to costs. The SO_2 emission allowance costs are booked in Accounts 50920, 50930, and 50940, as listed in Wood Exhibit 2.

Q. How will the sale of by-products be handled?

A. EKPC will credit the surcharge for any sales of by-products.

Q. Please explain how the working capital component of the rate base was determined.

A. EKPC will use the working capital formula previously approved by the Commission to calculate the additional working capital required due to pollution control facility-related operating and maintenance expenses. The working capital addition to rate base will be one-eighth of the annual incremental O&M expenses of the pollution control equipment.

Q. Please discuss how E(m) will be determined.

A. E(m) will include a return on rate base plus all applicable expenses. This total will be adjusted for recognition of any off-system sales made by EKPC. In each month, E(m) will be adjusted by the proportion of revenues from Member Systems to total EKPC revenues including off-system sales. This approach is consistent with Commission directives in other environmental surcharge cases.

Q. Please describe how R(m) is determined.

A. EKPC will use the revenues from sales to Member Systems on a rolling twelve-month average to derive R(m). Use of a rolling twelve-month average helps mitigate the effect of swings in monthly revenue that may occur from time to time.

Q. Describe the Environmental Surcharge Report, shown as Bosta Exhibit 2.

A. EKPC will file a monthly Environmental Surcharge report with the Commission. Bosta Exhibit 2 shows the first month of the initial two-year review period. The first page is a summary of the components used in the calculation of the Environmental Surcharge Factor. The second page illustrates the elements of the Environmental Surcharge rate base and the operating expenses that are expected for the month ending March 31, 2005. The Environmental Surcharge revenue

requirement is calculated according to the formula in EKPC Rate Schedule ES. EKPC plans to file the report with the Commission monthly, approximately ten days prior to the actual billing, as supporting information for the following month's Environmental Surcharge.

Q. Describe the detailed support forms that EKPC will file regarding the rate base and operating and maintenance expenses.

A. Bosta Exhibit 3 shows the various support forms that EKPC will use for reporting purposes. Page 1, Form 2.0, shows the Determination of the Environmental Compliance Rate Base and Determination of the Pollution Control Operating Expenses, Gross Proceeds from By-Product and Emission Allowance Sales and the amortization of the Over/Under Recovery due to Timing Differences.

Bosta Exhibit 3, page 2, Form 2.1 shows the form to be used for the Eligible Plant in Service, CWIP, and Depreciation Expense.

Bosta Exhibit 3, page 3, Form 2.2, shows the form to be used for the Inventories of Spare Parts and Limestone.

Bosta Exhibit 3, page 4, Form 2.3, shows the Inventory of Emission Allowances and how the monthly allowance expense is calculated.

Bosta Exhibit 3, page 5, Form 2.4, shows the incremental O&M Expenses and the Determination of Cash Working Capital.

Bosta Exhibit 3, page 6, Form 2.5 shows the calculation of monthly Operating and Maintenance Expenses associated with pollution-control equipment.

Bosta Exhibit 3, page 7, Form 3.0, shows the derivation of R(m), the average monthly revenue.

Q. How will EKPC handle monthly over or under recoveries?

A. EKPC intends to accumulate the monthly over/under recoveries for six-month periods. The cumulative over or under recovery for that six-month period would then be applied prospectively. If a cumulative over or under recovery exists for the six-month period, the amount will be amortized monthly for recovery over a subsequent six-month period. This process will help stabilize the monthly surcharge factor and eliminate fluctuations that may be caused by incorporating the effect of the high levels of over or under recovery experienced at one time.

Q. Please describe Bosta Exhibit 4.

A. Bosta Exhibit 4, page 1 of 2, provides an estimate of the annual recoverable dollars and surcharge factor for the expense month of March 2005. EKPC estimates that it will recover about $36.1 million annually, with an initial surcharge factor of 7.47% for the expense month of March 2005. Bosta Exhibit 4, page 2 of 2, shows the annual dollar recovery and surcharge factor for March 2005 with the full year's inclusion of O&M cost, depreciation, taxes and insurance costs for the pollution control related equipment at the Gilbert Unit. The annual amount is estimated to be $42.5 million and the surcharge factor 8.79%.

Q. Please describe how the 7.47% calculated for the expense month of March 2005 will be billed to Member Systems.

A. EKPC will apply the 7.47% to the total revenue from sales to each Member System. Bosta Exhibit 5, page 1 of 3, shows an example of this computation. In the exhibit, I have included a hypothetical example which shows EKPC's monthly revenues from sales to a Member System (excluding the environmental surcharge) to be $3 million. Applying the 7.47% to the $3 million yields an environmental surcharge dollar amount of $224,100. In this example, the 7.47% is based on using the expense month of March 2005 without the full effect of the Gilbert pollution-control related costs. EKPC would file the factor with the Commission on April 20 and bill the Member System for service rendered in the month of April. The Member System would receive the bill on or about May 5. In this example, the Member System would receive a bill of $3,224,100, which includes the effect of the environmental surcharge.

Q. How will the Member Systems recover the environmental surcharge being charged by EKPC?

A. EKPC proposes that the retail environmental surcharge be calculated at the same time as the wholesale factor is calculated. As shown in Bosta Exhibit 5, page 2 of 3, the 7.47% is first converted to a dollar amount needed for recovery by multiplying the 7.47% by the 12-month average monthly revenue from sales by EKPC to the Member System (excluding the environmental surcharge) of $2.8 million, resulting in $209,160. Note that this amount is different than the $224,100 actually billed in the next month by EKPC to the Member System. In

this example, the $209,160 is being used as a surrogate for the $224,100 in order to bill the wholesale and retail surcharge factors at the same time. The $209,160 is then divided by the Member Systems' 12-month average monthly revenue from sales to its retail customers of $4 million. This yields a retail environmental surcharge factor of 5.23%.

As mentioned above, EKPC proposes that the retail environmental surcharge factor be calculated and filed at the same time as the wholesale Environmental Surcharge factor is filed, with the retail environmental surcharge factor to apply to bills in the first billing cycle of the next month. This will allow Member Systems to collect surcharge payments from their retail customers at about the same time that they will pay EKPC. This is important as it will help cash flow for the Member Systems.

In addition, Section 278.183(2) of the Environmental Surcharge Statute states:

> "Recovery of costs pursuant to subsection (1) of this section that are not directly included in existing rates shall be by environmental surcharge to existing rates imposed as a positive or negative adjustment to customer bills in the second month following the month in which costs are incurred."

Using EKPC's proposed billing process results in retail customers receiving an environmental surcharge factor in the second month following cost incurrence by EKPC.

Q. Will the over/under recovery calculation at retail also be handled on a six-month basis?

A. Yes. The revenues collected from retail customers will be compared to the actual wholesale environmental surcharge billed to the Member System. Bosta Exhibit 5,

page 3 of 3, shows the computation of the over/under recovery at the retail level. The monthly retail over or under recovery will be accumulated over a six-month period and then amortized monthly over a subsequent six-month period.

Q. When will the Retail Surcharge Factor be filed?

A. Under EKPC's proposal, both the EKPC wholesale surcharge factor and the retail surcharge factors for all sixteen member systems will be filed by EKPC at one time with the Commission on or before the 20th of each month. Assuming the Commission accepts the proposed factors, EKPC will bill its Member Systems on or about the 5th of the next month and Member Systems will bill retail customers in the first billing cycle of the next month.

Q. Have you included retail tariff sheets that reflect the environmental surcharge factor formula?

A. Yes. Bosta Exhibit 6 provides the retail tariff sheets.

Q. What is the impact of the environmental surcharge on the average Member System bill to their retail customers?

A. As described above, EKPC estimates that the percent increase to the retail customer using the March 2005 expense month will be 5.23%. The typical retail customer using 1,000 kWh at 6.5 cents per kWh will pay approximately $3.40 more per month. This will vary by Member System and by month.

Q. Does this conclude your testimony?

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 ENVIRONMENTAL COMPLIANCE PLAN AND AUTHORITY TO IMPLEMENT AN ENVIRONMENTAL SURCHARGE	)))))	**) CASE NO. 2004-00321**

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 16th day of September, 2004.

Linda Neavill
Notary Public

My Commission expires: January 27, 2005

For All Counties Served
P.S.C. No. 28
Original Sheet No. 27

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:

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

MESF = Monthly Environmental Surcharge Factor
CESF = Current Environmental Surcharge Factor
BESF = Base Environmental Surcharge Factor

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 and CWIP for applicable environmental projects adjusted for accumulated depreciation, cash working capital, spare parts and limestone inventory, emission allowance inventory;
(b) RORB is the Rate of Return on the Environmental Compliance Rate Base, designated as the overall cost of debt updated every six months plus application of a times-interest-earned ratio of 1.15;

EAST KENTUCKY POWER COOPERATIVE, INC

(c) OE is the Monthly Pollution Control Operating Expenses, defined as incremental operating and maintenance expense (+/-), depreciation expense property taxes, insurance expense, emission allowance expense, and consulting fees, adjusted for average monthly expense included in base rates;
(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 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.

East Kentucky Power Cooperative, Inc.
Environmental Surcharge Report

Form 1.0

Calculation of Monthly Billed Environmental Surcharge Factor - MESF

For the Expense Month Ending March 31, 2005

MESF = CESF - BESF

Where:

CESF = Current Period Environmental Surcharge Factor
BESF = Base Period Environmental Surcharge Factor 0

Calculation of MESF:

CESF, from ES Form 1.1 =
BESF, from Case No. 2004-00321 = 0

MESF =

Effective Date for Billing: _____

Submitted by:

Date Submitted:

East Kentucky Power Cooperative, Inc. **Form 1.1**
Environmental Surcharge Report

Calculation of Current Month Environmental Surcharge Factor (CESF)

For the Expense Month Ending March 31, 2005

1	**E(m) = RORB + OE - BAS**	
2	Rate Base	
3	Rate Base / 12	
4	Rate of Return	=
5	Return on Rate Base (RORB)	+
6	Operating Expenses (OE)	+
7	By-Product and Emission Allowance Sales (BAS)	- _____
8	Sub-Total E(m)	
9	Member System Allocation Ratio for the Month (Form 3.0)	
10	Subtotal E(m) = Subtotal E(m) x Member System Allocation Ratio	
11	Adjustment for (Over)/Under Recovery, as applicable	
12	E(m) = Subtotal E(m) plus (Over)/Under Recovery	
13	R(m) = Average Monthly Member System Revenue for the 12 Months Ending with the Current Expense Month (Form 3.0)	
14	CESF: E(m) / R(m); as a % of Revenue	

East Kentucky Power Cooperative, Inc.
Environmental Surcharge Report

Form 2.0

Revenue Requirements of Environmental Compliance Costs
For the Expense Month of Ending March 31, 2005

Determination of Environmental Compliance Rate Base

Eligible Pollution Control Plant (Gross Plant)	
Eligible Pollution CWIP	
Subtotal	
Additions:	
Inventory - Spare Parts	
Inventory - Limestone	
Inventory - Emission Allowances	
Cash Working Capital Allowance	
Subtotal	
Deductions	
Accumulated Depreciation on Eligible Pollution Control Plant	
Subtotal	
Environmental Compliance Rate Base	

Determination of Pollution Control Operating Expenses

Monthly O&M Expense	
Monthly Depreciation and Amortization Expense	
Monthly Taxes Other Than Income Taxes	
Monthly Insurance Expense	
Monthly Emission Allowance Expense	
Monthly Surcharge Consultant Fee	
Total Pollution Control Operating Expense	

Gross Proceeds from By-Product and Emission Allowance Sales

Total Proceeds from By-Product and Allowance Sales	

(Over)/Under Recovery of Monthly Surcharge Due to Timing Differences

1	E(m) Revenue Requirement for Six Month Period Ending _____	$
2	Revenue Collected for Six-Month Period Ending _____	$
3	Net (Over)/Under Recovery (Row 1 - Row 2)	$
4	Amortization of Net (Over)/Under Recovery Line (3) / 6	$

Form 2.1

East Kentucky Power Cooperative, Inc.
Environmental Surcharge Report
Plant, CWIP, Depreciation, & Taxes and Insurance Expenses
For the Month Ending March 31, 2005

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Project No.	Description	Eligible Gross Plant in Service	Eligible Accumulated Depreciation	Retirement	CWIP Amount	Eligible Net Plant in Service	Monthly Depreciation Expense	Monthly Depreciation in Base Rates	Depreciation Net of Depreciation in Base Rates	Monthly Taxes and Insurance Expense
						(2)-(3)-(4)+(5)			(7)-(8)	
1	Gilbert									
2	Spurlock 1 Precipitator									
3	JK Smith - CT 1,2,3 CT Burner									
4	JK Smith - CT 4 CT Burner									
5	JK Smith - CT 5 CT Burner									
6	JK Smith - CT 6 CT Burner									
7	JK Smith - CT 7 CT Burner									
8	Spurlock 1 SCR									
9	Spurlock 2 SCR									
	Total									

BOSTA EXHIBIT 3
PAGE 2 OF 7

East Kentucky Power Cooperative, Inc.
Environmental Surcharge Report

Form 2.2

Inventories of Spare Parts and Limestone

For the Month Ending March 31, 2005

(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						
Total						

Form 2.3

East Kentucky Power Cooperative, Inc.
Environmental Surcharge Report

Inventory and Expense of Emission Allowances

For the Month ending March 31, 2005

SO2 Allowances

Month Ending March 31, 2005					
	Beginning Inventory	Allocations/ Purchases	Utilized	Sold	Ending Inventory
Total SO2 Emission Allowances in Inventory					
Quantity					
Dollars					
$/Allowance					

NOx Allowances

Month Ending March 31, 2005					
	Beginning Inventory	Allocations/ Purchases	Utilized	Sold	Ending Inventory
Total NOx Emission Allowances in Inventory					
Quantity					
Dollars					
$/Allowance					

East Kentucky Power Cooperative, Inc. **Form 2.4**
Environmental Surcharge Report
O&M Expenses and Determination of Cash Working Capital Allowance

For the Expense Month Ending March 31, 2005

Eligible O&M Expenses

11th previous month	
10th previous month	
9th previous month	
8th previous month	
7th previous month	
6th previous month	
5th previous month	
4th previous month	
3rd previous month	
2nd previous month	
Previous month	
Current month	
Total 12 Month O&M	
Less: Baseline	
12 months Incremental O&M	
Monthly Incremental O&M	

Determination of Working Capital Allowance	
12 Months Incremental O&M Expense	
One-Eighth (1/8) of 12 Month Incremental O&M Expenses	

Form 2.5

East Kentucky Power Cooperative, Inc.
Environmental Surcharge
Operating and Maintenance Expenses
For the Expense Month Ending March 31, 2005

	Expense Type	Account Description	Amount	Amt. for 12-months ended 12/31/1993	Eligible Recovery
I	Maintenance				
	51240	Maintenance of Boiler Plant Spurlock			
	51241	Maintenance of Boiler Plant Spurlock 1			
	51242	Maintenance of Boiler Plant Spurlock 2			
	51243	Maintenance of Boiler Plant Scrubber			
	51244	Maintenance of Boiler Plant Gilbert			
	55351	Maintenance of Generating Equipment CT			
II	Air Permit Fees				
	50621	Misc Steam Power Environmental Dale			
	50631	Misc Steam Power Environmental Cooper			
	50645	Misc Steam Power Environmental Spurlock			
	54961	Environmental Expense CT			
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			

East Kentucky Power Cooperative, Inc.
Environmental Surcharge Report
Monthly Average Revenue Computation of R(m)

Form 3.0

For the Month Ended March 31, 2005

Revenues from Member Systems							Total Company Revenues	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Month	Base Rate Revenues	Fuel Clause Revenues	Environmental Surcharge Revenues	Total (2)+(3)+(4)	Total Excluding Environmental Surcharge (5)-(4)	Off-System Sales	Total (5)+(7)	Total Excluding Environmental Surcharge (8)-(4)
Apr-04								
May-04								
Jun-04								
Jul-04								
Aug-04								
Sep-04								
Oct-04								
Nov-04								
Dec-04								
Jan-05								
Feb-05								
Mar-05								
Totals								
Average Monthly Member System Revenues, Excluding Environmental Surcharge,for 12 Months Ending Current Expense Month.								
Member System Allocation Percentage for Current Month (Environmental Surcharge excluded from Calculations): Column (6) / Column (9) =								

BOSTA EXHIBIT 3
PAGE 7 OF 7

Environmental Surcharge: Recoverable Dollars

Based on Weighted Average Cost of Debt of: 4.900% @ 7/31/04 with TIER of 1.15 = 5.635%

Line No.	Description (1)	Estimated Value 3/31/2005 (2)	RORB: Col. (2) x 5.635% (3)	Annual Depreciation Expense (4)	Annual O&M Expense (5)	Taxes and Insurance (6)	Environmental Surcharge Recoverable $ (3)+(4)+(5)+(6)= (7)
	I. Return on Rate Base, Depreciation, Taxes and Insurance						
1	Gilbert (Reflects one month of depreciation.)	$69,612,000	$3,922,636	$181,281			$4,103,917
2	Spurlock 1- Precipitator	$14,335,470	$807,804	$486,569		$43,888	$1,338,260
3	JK Smith CT 1,2,3	$3,293,921	$185,612	$174,720		$10,084	$370,417
4	JK Smith CT 4	$779,365	$43,917	$36,109		$2,386	$82,412
5	JK Smith CT 5	$782,024	$44,067	$36,232		$2,394	$82,693
6	JK Smith CT 6 (reflects 4 months depreciation, taxes and insurance.)	$893,741	$50,362	$12,078		$912	$63,352
7	JK Smith CT 7 (reflects 4 months depreciation, taxes and insurance.)	$893,741	$50,362	$12,078		$912	$63,352
8	Spurlock 1 - SCR	$68,047,412	$3,834,472	$3,600,907		$208,325	$7,643,704
9	Spurlock 2 - SCR	$36,670,706	$2,066,394	$2,575,036		$112,266	$4,753,697
10	SO2 Allowance Inventory	$14,166,551	$798,285				$798,285
11	NOx Emission Allowance Inventory	$0	$0				$0
12	Cash Working Capital	$256,660	$14,463				$14,463
13	Spare Parts & Limestone Inventory	$0	$0				$0
	II. Other Expenses						
14	O&M Expense (including Air Permit Fees)				$2,053,283		$2,053,283
15	SO2 Emission Allowance Expenses				$14,816,460		$14,816,460
16	NOx Emission Allowance Expenses				$0		$0
	Totals	**$209,731,591**	**$11,818,375**	**$7,115,010**	**$16,869,743**	**$381,168**	**$36,184,296**
17	Monthly Surcharge Allocation Factor	**99.79%**					
18	Recoverable Dollars = Monthly Surcharge Allocation Factor x Total ES Recoverable $	$36,108,309					
19	Projected Electric Energy Revenues from Member Systems in year ending March 31, 2005	$483,700,000					
20	Recoverable $ / Revenues	**7.47%**					

Environmental Surcharge: Recoverable Dollars

Based on Weighted Average Cost of Debt of: 4.900% @ 7/31/04 with TIER of 1.15 = 5.635%

Line No	Description (1)	Estimated Value 3/31/2005 (2)	RORB: Col. (2) x 5.635% (3)	Annual Depreciation Expense (4)	Annual O&M Expense (5)	Taxes and Insurance (6)	Environmental Surcharge Recoverable $ (3)+(4)+(5)+(6)= (7)
	I. Return on Rate Base, Depreciation, Taxes and Insurance						
1	Gilbert	$69,612,000	$3,922,636	$2,175,375		$213,115	$6,311,126
2	Spurlock 1- Precipitator	$14,335,470	$807,804	$486,569		$43,888	$1,338,260
3	JK Smith CT 1,2,3	$3,293,921	$185,612	$174,720		$10,084	$370,417
4	JK Smith CT 4	$779,365	$43,917	$36,109		$2,386	$82,412
5	JK Smith CT 5	$782,024	$44,067	$36,232		$2,394	$82,693
6	JK Smith CT 6 (reflects 4 months depreciation, taxes and insurance.)	$893,741	$50,362	$12,078		$912	$63,352
7	JK Smith CT 7 (reflects 4 months depreciation, taxes and insurance.)	$893,741	$50,362	$12,078		$912	$63,352
8	Spurlock 1 - SCR	$68,047,412	$3,834,472	$3,600,907		$208,325	$7,643,704
9	Spurlock 2 - SCR	$36,670,706	$2,066,394	$2,575,036		$112,266	$4,753,697
10	SO2 Allowance Inventory	$14,166,551	$798,285				$798,285
11	NOx Emission Allowance Inventory	$0	$0				$0
12	Cash Working Capital	$777,910	$43,835				$43,835
13	Spare Parts & Limestone Inventory	$0	$0				$0
	II. Other Expenses						
14	O&M Expense (including Air Permit Fees)				$6,223,283		$6,223,283
15	SO2 Emission Allowance Expenses				$14,816,460		$14,816,460
16	NOx Emission Allowance Expenses				$0		$0
	Totals	**$210,252,841**	**$11,847,748**	**$9,109,104**	**$21,039,743**	**$594,283**	**$42,590,878**
17	Monthly Surcharge Allocation Factor	**99.79%**					
18	Recoverable Dollars = Monthly Surcharge Allocation Factor x Total ES Recoverable $	$42,501,437					
19	Projected Electric Energy Revenues from Member Systems in year ending March 31, 2005	$483,700,000					
20	Recoverable $ / Revenues	**8.79%**					

Effect of Wholesale Environmental Surcharge on EKPC Bill to Member System

Line		
(1)	EKPC Bill to Member System before Environmental Surcharge	$ 3,000,000
(2)	EKPC ES Factor	7.47%
(3)	ES Dollars to be Recovered from Member System (Line (1) x Line (2))	$ 224,100
(4)	Total EKPC Bill to Member Systems including Environmental Surcharge (Line (1) + Line (3))	$ 3,224,100

Determination of Retail Environmental Surcharge Factor

Line			
(1)	Environmental Surcharge to Member Systems		7.47%
(2)	Average 12-months ended of Sales by EKPC to Member Systems (excluding Environmental Surcharge)	$	2,800,000
(3)	Amount to be Recovered from Retail Customers (Line (1) x Line (2))	$	209,160
(4)	Average 12-months ended Retail Sales (Excluding Environmental Surcharge)	$	4,000,000
(5)	Environmental Surcharge Factor (Line (3) / Line (4))		5.23%

DETERMINATION OF (OVER)/UNDER RECOVERY AT RETAIL

(1) Expense Month	(2) EKPC Monthly Revenues from Sales to Coops (Wholesale)	(3) EKPC 12-months Ended Average Monthly Revenue from Sales to Coops (Wholesale)	(4) EKPC Environmental Surcharge Factor for Expense Month	(5) Retail Environmental Surcharge Revenue Requirement	(6) 12 months ended Average Monthly Retail Revenue	(7) Environmental Surcharge at Retail	(8) Environmental Surcharge Billed to Coop	(9) Monthly Retail Revenues	(10) Environmental Surcharge Billed at Retail	(11) (Over)/ Under Recovery
				Col. (3) x Col. (4)		Col.(5)/Col.(6)	Col.(2)xCol.(4)*		Col.(7)xCol.9*	Col.(8)-Col.(10)
March 2005		$ 2,800,000	7.47%	$ 209,160	$ 4,000,000	5.23%				
April 2005	$ 3,000,000						$ 224,100	$ 4,200,000	$ 219,660	$ 4,440

*Note that the factors in Column 4 and Column 7 are applied to revenue in the next month.

BOSTA EXHIBIT 5
PAGE 3 OF 3

FOR ENTIRE TERRITORY SERVED
Community, Town or City

P.S.C. KY. NO. _____

Original SHEET NO. 23

BIG SANDY RURAL ELECTRIC
COOPERATIVE CORPORATION

CLASSIFICATION OF SERVICE

RATES SCHEDULE ES – ENVIRONMENTAL SURCHARGE

AVAILABILITY

In all of the Company's service territory.

APPLICABILITY

This rate schedule shall apply to all electric rate schedules and all special contracts with rates subject to adjustment upon the approval of the Commission.

RATE

CES(m) = ES(m) – BESF

where CES(m) = Current Month Environmental Surcharge Factor
ES(m) = Current Month Environmental Surcharge Calculation
BESF = Base Environmental Surcharge Factor

ES(m) = [((WESF) x (Average of 12-months ended revenues from sales to Member System, excluding environmental surcharge)) + (Over)/Under Recovery] *divided by* [Average of 12-months ending Retail Revenue (excluding environmental surcharge)] = _____%

where WESF = Wholesale Environmental Surcharge Factor for Current Expense Month

DATE OF ISSUE September 17, 2004
Month / Date / Year

DATE EFFECTIVE Service rendered beginning April 1, 2005
Month / Date / Year

ISSUED BY _____
(Signature of Officer)

TITLE PRESIDENT/CEO

BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION
IN CASE NO. _____ DATED _____

FOR ENTIRE TERRITORY SERVED
Community, Town or City

P.S.C. KY. NO. _____

Original SHEET NO. 24

BIG SANDY RURAL ELECTRIC
COOPERATIVE CORPORATION

CLASSIFICATION OF SERVICE

(Over)/Under Recovery =

6-months cumulative (over)/under recovery as defined by amount billed by EKPC to Member System minus the amount billed by Member System to retail customer. Over or under recoveries shall be amortized over a six-month period.

BESF = zero

BILLING

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

DATE OF ISSUE September 17, 2004
Month / Date / Year

DATE EFFECTIVE Service rendered beginning April 1, 2005
Month / Date / Year

ISSUED BY _____
(Signature of Officer)

TITLE PRESIDENT/CEO

BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION
IN CASE NO. _____ DATED _____

FOR ENTIRE TERRITORY SERVED
Community, Town or City

P.S.C. KY. NO. _____

Original SHEET NO. 108

BLUE GRASS ENERGY
COOPERATIVE CORPORATION

CLASSIFICATION OF SERVICE

RATES SCHEDULE ES – ENVIRONMENTAL SURCHARGE

AVAILABILITY

In all of the Company's service territory.

APPLICABILITY

This rate schedule shall apply to all electric rate schedules and all special contracts with rates subject to adjustment upon the approval of the Commission.

RATE

CES(m) = ES(m) – BESF

where CES(m) = Current Month Environmental Surcharge Factor
ES(m) = Current Month Environmental Surcharge Calculation
BESF = Base Environmental Surcharge Factor

ES(m) = [((WESF) x (Average of 12-months ended revenues from sales to Member System, excluding environmental surcharge)) + (Over)/Under Recovery] *divided by* [Average of 12-months ending Retail Revenue (excluding environmental surcharge)] = _____%

where WESF = Wholesale Environmental Surcharge Factor for Current Expense Month

DATE OF ISSUE September 17, 2004
Month / Date / Year

DATE EFFECTIVE Service rendered beginning April 1, 2005
Month / Date / Year

ISSUED BY _____
(Signature of Officer)

TITLE PRESIDENT/CEO

BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION
IN CASE NO. _____ DATED _____

FOR ENTIRE TERRITORY SERVED
Community, Town or City

P.S.C. KY. NO. _____

Original SHEET NO. 109

BLUE GRASS ENERGY
COOPERATIVE CORPORATION

CLASSIFICATION OF SERVICE

(Over)/Under Recovery =

6-months cumulative (over)/under recovery as defined by amount billed by EKPC to Member System minus the amount billed by Member System to retail customer. Over or under recoveries shall be amortized over a six-month period.

BESF = zero

BILLING

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

DATE OF ISSUE September 17, 2004
Month / Date / Year

DATE EFFECTIVE Service rendered beginning April 1, 2005
Month / Date / Year

ISSUED BY _____
(Signature of Officer)

TITLE PRESIDENT/CEO

BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION
IN CASE NO. _____ DATED _____

FOR ENTIRE TERRITORY SERVED
Community, Town or City

P.S.C. KY. NO. _____

Original SHEET NO. 94

Clark Energy Cooperative, Inc.

CLASSIFICATION OF SERVICE

RATES SCHEDULE ES – ENVIRONMENTAL SURCHARGE

AVAILABILITY

In all of the Company's service territory.

APPLICABILITY

This rate schedule shall apply to all electric rate schedules and all special contracts with rates subject to adjustment upon the approval of the Commission.

RATE

CES(m) = ES(m) – BESF

where CES(m) = Current Month Environmental Surcharge Factor
ES(m) = Current Month Environmental Surcharge Calculation
BESF = Base Environmental Surcharge Factor

ES(m) = [((WESF) x (Average of 12-months ended revenues from sales to Member System, excluding environmental surcharge)) + (Over)/Under Recovery] *divided by* [Average of 12-months ending Retail Revenue (excluding environmental surcharge)] = _____%

where WESF = Wholesale Environmental Surcharge Factor for Current Expense Month

DATE OF ISSUE September 17, 2004
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(Signature of Officer)

TITLE PRESIDENT/CEO

BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION
IN CASE NO. _____ DATED _____

FOR ENTIRE TERRITORY SERVED
Community, Town or City

P.S.C. KY. NO. _____

Original SHEET NO. 95

Clark Energy Cooperative, Inc.

CLASSIFICATION OF SERVICE

(Over)/Under Recovery =

6-months cumulative (over)/under recovery as defined by amount billed by EKPC to Member System minus the amount billed by Member System to retail customer. Over or under recoveries shall be amortized over a six-month period.

BESF = zero

BILLING

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

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IN CASE NO. _____ DATED _____

FOR ENTIRE TERRITORY SERVED
Community, Town or City

P.S.C. KY. NO. _____

Original _____ SHEET NO. _____

CUMBERLAND VALLEY ELECTRIC, INC.

CLASSIFICATION OF SERVICE

RATES SCHEDULE ES – ENVIRONMENTAL SURCHARGE

AVAILABILITY

In all of the Company's service territory.

APPLICABILITY

This rate schedule shall apply to all electric rate schedules and all special contracts with rates subject to adjustment upon the approval of the Commission.

RATE

CES(m) = ES(m) – BESF

where CES(m) = Current Month Environmental Surcharge Factor
ES(m) = Current Month Environmental Surcharge Calculation
BESF = Base Environmental Surcharge Factor

ES(m) = [((WESF) x (Average of 12-months ended revenues from sales to Member System, excluding environmental surcharge)) + (Over)/Under Recovery] *divided by* [Average of 12-months ending Retail Revenue (excluding environmental surcharge)] = _____%

where WESF = Wholesale Environmental Surcharge Factor for Current Expense Month

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(Signature of Officer)

TITLE PRESIDENT/CEO

BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION
IN CASE NO. _____ DATED _____

FOR ENTIRE TERRITORY SERVED
Community, Town or City

P.S.C. KY. NO. _____

Original _____ SHEET NO. _____

CUMBERLAND VALLEY ELECTRIC, INC.

CLASSIFICATION OF SERVICE

(Over)/Under Recovery =

6-months cumulative (over)/under recovery as defined by amount billed by EKPC to Member System minus the amount billed by Member System to retail customer. Over or under recoveries shall be amortized over a six-month period.

BESF = zero

BILLING

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

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TITLE PRESIDENT/CEO

BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION
IN CASE NO. _____ DATED _____

FOR ENTIRE TERRITORY SERVED
Community, Town or City

P.S.C. KY. NO. _____

Original SHEET NO. 7

Farmers Rural Electric Cooperative Corporation

CLASSIFICATION OF SERVICE

RATES SCHEDULE ES – ENVIRONMENTAL SURCHARGE

AVAILABILITY

In all of the Company's service territory.

APPLICABILITY

This rate schedule shall apply to all electric rate schedules and all special contracts with rates subject to adjustment upon the approval of the Commission.

RATE

CES(m) = ES(m) – BESF

where CES(m) = Current Month Environmental Surcharge Factor
ES(m) = Current Month Environmental Surcharge Calculation
BESF = Base Environmental Surcharge Factor

ES(m) = [((WESF) x (Average of 12-months ended revenues from sales to Member System, excluding environmental surcharge)) + (Over)/Under Recovery] *divided by* [Average of 12-months ending Retail Revenue (excluding environmental surcharge)] = _____%

where WESF = Wholesale Environmental Surcharge Factor for Current Expense Month

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TITLE PRESIDENT/CEO

BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION
IN CASE NO. _____ DATED _____

FOR ENTIRE TERRITORY SERVED
Community, Town or City

P.S.C. KY. NO. _____

Original SHEET NO. 8

Farmers Rural Electric Cooperative Corporation

CLASSIFICATION OF SERVICE

(Over)/Under Recovery =

6-months cumulative (over)/under recovery as defined by amount billed by EKPC to Member System minus the amount billed by Member System to retail customer. Over or under recoveries shall be amortized over a six-month period.

BESF = zero

BILLING

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

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IN CASE NO. _____ DATED _____

FOR ENTIRE TERRITORY SERVED
Community, Town or City

P.S.C. KY. NO. _____

Original SHEET NO. 17

Fleming-Mason Energy Cooperative

CLASSIFICATION OF SERVICE

RATES SCHEDULE ES – ENVIRONMENTAL SURCHARGE

AVAILABILITY

In all of the Company's service territory.

APPLICABILITY

This rate schedule shall apply to all electric rate schedules and all special contracts with rates subject to adjustment upon the approval of the Commission.

RATE

CES(m) = ES(m) – BESF

where CES(m) = Current Month Environmental Surcharge Factor
ES(m) = Current Month Environmental Surcharge Calculation
BESF = Base Environmental Surcharge Factor

ES(m) = [((WESF) x (Average of 12-months ended revenues from sales to Member System, excluding environmental surcharge)) + (Over)/Under Recovery] *divided by* [Average of 12-months ending Retail Revenue (excluding environmental surcharge)] = _____%

where WESF = Wholesale Environmental Surcharge Factor for Current Expense Month

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TITLE PRESIDENT/CEO

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IN CASE NO. _____ DATED _____

FOR ENTIRE TERRITORY SERVED
Community, Town or City

P.S.C. KY. NO. _____

Original SHEET NO. 17 a

Fleming-Mason Energy Cooperative

CLASSIFICATION OF SERVICE

(Over)/Under Recovery =

6-months cumulative (over)/under recovery as defined by amount billed by EKPC to Member System minus the amount billed by Member System to retail customer. Over or under recoveries shall be amortized over a six-month period.

BESF = zero

BILLING

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

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TITLE PRESIDENT/CEO

BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION
IN CASE NO. _____ DATED _____

FOR ENTIRE TERRITORY SERVED
Community, Town or City

P.S.C. KY. NO. _____

Original SHEET NO. 18

Grayson Rural Electric Cooperative Corporation

CLASSIFICATION OF SERVICE

RATES SCHEDULE ES – ENVIRONMENTAL SURCHARGE

AVAILABILITY

In all of the Company's service territory.

APPLICABILITY

This rate schedule shall apply to all electric rate schedules and all special contracts with rates subject to adjustment upon the approval of the Commission.

RATE

CES(m) = ES(m) – BESF

where CES(m) = Current Month Environmental Surcharge Factor
ES(m) = Current Month Environmental Surcharge Calculation
BESF = Base Environmental Surcharge Factor

ES(m) = [((WESF) x (Average of 12-months ended revenues from sales to Member System, excluding environmental surcharge)) + (Over)/Under Recovery] *divided by* [Average of 12-months ending Retail Revenue (excluding environmental surcharge)] = _____%

where WESF = Wholesale Environmental Surcharge Factor for Current Expense Month

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TITLE PRESIDENT/CEO

BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION
IN CASE NO. _____ DATED _____

FOR ENTIRE TERRITORY SERVED
Community, Town or City

P.S.C. KY. NO. _____

Original SHEET NO. 19

Grayson Rural Electric Cooperative Corporation

CLASSIFICATION OF SERVICE

(Over)/Under Recovery =

6-months cumulative (over)/under recovery as defined by amount billed by EKPC to Member System minus the amount billed by Member System to retail customer. Over or under recoveries shall be amortized over a six-month period.

BESF = zero

BILLING

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

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BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION
IN CASE NO. _____ DATED _____

FOR ENTIRE TERRITORY SERVED
Community, Town or City

P.S.C. KY. NO. _____

Original SHEET NO. 58

INTER-COUNTY ENERGY
(Name of Utility)

CLASSIFICATION OF SERVICE

RATES SCHEDULE ES – ENVIRONMENTAL SURCHARGE

AVAILABILITY

In all of the Company's service territory.

APPLICABILITY

This rate schedule shall apply to all electric rate schedules and all special contracts with rates subject to adjustment upon the approval of the Commission.

RATE

CES(m) = ES(m) – BESF

where CES(m) = Current Month Environmental Surcharge Factor
ES(m) = Current Month Environmental Surcharge Calculation
BESF = Base Environmental Surcharge Factor

ES(m) = [((WESF) x (Average of 12-months ended revenues from sales to Member System, excluding environmental surcharge)) + (Over)/Under Recovery] *divided by* [Average of 12-months ending Retail Revenue (excluding environmental surcharge)] = _____%

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TITLE PRESIDENT/CEO

BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION
IN CASE NO. _____ DATED _____

FOR ENTIRE TERRITORY SERVED
Community, Town or City

P.S.C. KY. NO. _____

Original SHEET NO. 59

INTER-COUNTY ENERGY
(Name of Utility)

CLASSIFICATION OF SERVICE

(Over)/Under Recovery =

6-months cumulative (over)/under recovery as defined by amount billed by EKPC to Member System minus the amount billed by Member System to retail customer. Over or under recoveries shall be amortized over a six-month period.

BESF = zero

BILLING

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TITLE PRESIDENT/CEO

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IN CASE NO. _____ DATED _____

FOR ENTIRE TERRITORY SERVED
Community, Town or City

P.S.C. KY. NO. _____

Original SHEET NO. 61

JACKSON ENERGY COOPERATIVE CORPORATION

CLASSIFICATION OF SERVICE

RATES SCHEDULE ES – ENVIRONMENTAL SURCHARGE

AVAILABILITY

In all of the Company's service territory.

APPLICABILITY

This rate schedule shall apply to all electric rate schedules and all special contracts with rates subject to adjustment upon the approval of the Commission.

RATE

CES(m) = ES(m) – BESF

where CES(m) = Current Month Environmental Surcharge Factor
ES(m) = Current Month Environmental Surcharge Calculation
BESF = Base Environmental Surcharge Factor

ES(m) = [((WESF) x (Average of 12-months ended revenues from sales to Member System, excluding environmental surcharge)) + (Over)/Under Recovery] *divided by* [Average of 12-months ending Retail Revenue (excluding environmental surcharge)] = _____%

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TITLE PRESIDENT/CEO

BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION
IN CASE NO. _____ DATED _____

FOR ENTIRE TERRITORY SERVED
Community, Town or City

P.S.C. KY. NO. _____

Original SHEET NO. 62

JACKSON ENERGY COOPERATIVE CORPORATION

CLASSIFICATION OF SERVICE

(Over)/Under Recovery =

6-months cumulative (over)/under recovery as defined by amount billed by EKPC to Member System minus the amount billed by Member System to retail customer. Over or under recoveries shall be amortized over a six-month period.

BESF = zero

BILLING

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TITLE PRESIDENT/CEO

BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION
IN CASE NO. _____ DATED _____

FOR ENTIRE TERRITORY SERVED
Community, Town or City

P.S.C. KY. NO. _____

Original SHEET NO. 6

Licking Valley Rural Electric
Cooperative Corporation

CLASSIFICATION OF SERVICE

RATES SCHEDULE ES – ENVIRONMENTAL SURCHARGE

AVAILABILITY

In all of the Company's service territory.

APPLICABILITY

This rate schedule shall apply to all electric rate schedules and all special contracts with rates subject to adjustment upon the approval of the Commission.

RATE

CES(m) = ES(m) – BESF

where CES(m) = Current Month Environmental Surcharge Factor
ES(m) = Current Month Environmental Surcharge Calculation
BESF = Base Environmental Surcharge Factor

ES(m) = [((WESF) x (Average of 12-months ended revenues from sales to Member System, excluding environmental surcharge)) + (Over)/Under Recovery] *divided by* [Average of 12-months ending Retail Revenue (excluding environmental surcharge)] = _____%

where WESF = Wholesale Environmental Surcharge Factor for Current Expense Month

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(Signature of Officer)

TITLE PRESIDENT/CEO

BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION
IN CASE NO. _____ DATED _____

FOR ENTIRE TERRITORY SERVED
Community, Town or City

P.S.C. KY. NO. _____

Original SHEET NO. 7

Licking Valley Rural Electric
Cooperative Corporation

CLASSIFICATION OF SERVICE

(Over)/Under Recovery =

6-months cumulative (over)/under recovery as defined by amount billed by EKPC to Member System minus the amount billed by Member System to retail customer. Over or under recoveries shall be amortized over a six-month period.

BESF = zero

BILLING

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

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(Signature of Officer)

TITLE PRESIDENT/CEO

BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION
IN CASE NO. _____ DATED _____

FOR ENTIRE TERRITORY SERVED
Community, Town or City

P.S.C. KY. NO. _____

Original SHEET NO. 56

Nolin RECC
411 Ring Road
Elizabethtown, KY 42701-8701

CLASSIFICATION OF SERVICE

RATES SCHEDULE ES – ENVIRONMENTAL SURCHARGE

AVAILABILITY

In all of the Company's service territory.

APPLICABILITY

This rate schedule shall apply to all electric rate schedules and all special contracts with rates subject to adjustment upon the approval of the Commission.

RATE

CES(m) = ES(m) – BESF

where CES(m) = Current Month Environmental Surcharge Factor
ES(m) = Current Month Environmental Surcharge Calculation
BESF = Base Environmental Surcharge Factor

ES(m) = [((WESF) x (Average of 12-months ended revenues from sales to Member System, excluding environmental surcharge)) + (Over)/Under Recovery] *divided by* [Average of 12-months ending Retail Revenue (excluding environmental surcharge)] = _____%

where WESF = Wholesale Environmental Surcharge Factor for Current Expense Month

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TITLE PRESIDENT/CEO

BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION
IN CASE NO. _____ DATED _____

FOR ENTIRE TERRITORY SERVED
Community, Town or City

P.S.C. KY. NO. _____

Original SHEET NO. 57

Nolin RECC
411 Ring Road
Elizabethtown, KY 42701-8701

CLASSIFICATION OF SERVICE

(Over)/Under Recovery =

6-months cumulative (over)/under recovery as defined by amount billed by EKPC to Member System minus the amount billed by Member System to retail customer. Over or under recoveries shall be amortized over a six-month period.

BESF = zero

BILLING

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

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(Signature of Officer)

TITLE PRESIDENT/CEO

BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION
IN CASE NO. _____ DATED _____

FOR ENTIRE TERRITORY SERVED
Community, Town or City

P.S.C. KY. NO. _____

Original SHEET NO. 38

Owen Electric Cooperative, Inc.

CLASSIFICATION OF SERVICE

RATES SCHEDULE ES – ENVIRONMENTAL SURCHARGE

AVAILABILITY

In all of the Company's service territory.

APPLICABILITY

This rate schedule shall apply to all electric rate schedules and all special contracts with rates subject to adjustment upon the approval of the Commission.

RATE

CES(m) = ES(m) – BESF

where CES(m) = Current Month Environmental Surcharge Factor
ES(m) = Current Month Environmental Surcharge Calculation
BESF = Base Environmental Surcharge Factor

ES(m) = [((WESF) x (Average of 12-months ended revenues from sales to Member System, excluding environmental surcharge)) + (Over)/Under Recovery] *divided by* [Average of 12-months ending Retail Revenue (excluding environmental surcharge)] = _____%

where WESF = Wholesale Environmental Surcharge Factor for Current Expense Month

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(Signature of Officer)

TITLE PRESIDENT/CEO

BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION
IN CASE NO. _____ DATED _____

FOR ENTIRE TERRITORY SERVED
Community, Town or City

P.S.C. KY. NO. _____

Original SHEET NO. 39

Owen Electric Cooperative, Inc.

CLASSIFICATION OF SERVICE

(Over)/Under Recovery =

6-months cumulative (over)/under recovery as defined by amount billed by EKPC to Member System minus the amount billed by Member System to retail customer. Over or under recoveries shall be amortized over a six-month period.

BESF = zero

BILLING

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

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(Signature of Officer)

TITLE PRESIDENT/CEO

BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION
IN CASE NO. _____ DATED _____

FOR ENTIRE TERRITORY SERVED
Community, Town or City

P.S.C. KY. NO. _____

Original SHEET NO. 123

Salt River Electric

CLASSIFICATION OF SERVICE

RATES SCHEDULE ES – ENVIRONMENTAL SURCHARGE

AVAILABILITY

In all of the Company's service territory.

APPLICABILITY

This rate schedule shall apply to all electric rate schedules and all special contracts with rates subject to adjustment upon the approval of the Commission.

RATE

CES(m) = ES(m) – BESF

where CES(m) = Current Month Environmental Surcharge Factor
ES(m) = Current Month Environmental Surcharge Calculation
BESF = Base Environmental Surcharge Factor

ES(m) = [((WESF) x (Average of 12-months ended revenues from sales to Member System, excluding environmental surcharge)) + (Over)/Under Recovery] *divided by* [Average of 12-months ending Retail Revenue (excluding environmental surcharge)] = _____%

where WESF = Wholesale Environmental Surcharge Factor for Current Expense Month

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(Signature of Officer)

TITLE PRESIDENT/CEO

BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION
IN CASE NO. _____ DATED _____

FOR ENTIRE TERRITORY SERVED
Community, Town or City

P.S.C. KY. NO. _____

Original SHEET NO. 124

Salt River Electric

CLASSIFICATION OF SERVICE

(Over)/Under Recovery =

6-months cumulative (over)/under recovery as defined by amount billed by EKPC to Member System minus the amount billed by Member System to retail customer. Over or under recoveries shall be amortized over a six-month period.

BESF = zero

BILLING

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

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(Signature of Officer)

TITLE PRESIDENT/CEO

BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION
IN CASE NO. _____ DATED _____

FOR ENTIRE TERRITORY SERVED
Community, Town or City

P.S.C. KY. NO. _____

Original SHEET NO. 62

Shelby Energy Cooperative, Inc.
Shelbyville, Kentucky

CLASSIFICATION OF SERVICE

RATES SCHEDULE ES – ENVIRONMENTAL SURCHARGE

AVAILABILITY

In all of the Company's service territory.

APPLICABILITY

This rate schedule shall apply to all electric rate schedules and all special contracts with rates subject to adjustment upon the approval of the Commission.

RATE

CES(m) = ES(m) – BESF

where CES(m) = Current Month Environmental Surcharge Factor
ES(m) = Current Month Environmental Surcharge Calculation
BESF = Base Environmental Surcharge Factor

ES(m) = [((WESF) x (Average of 12-months ended revenues from sales to Member System, excluding environmental surcharge)) + (Over)/Under Recovery] *divided by* [Average of 12-months ending Retail Revenue (excluding environmental surcharge)] = _____%

where WESF = Wholesale Environmental Surcharge Factor for Current Expense Month

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(Signature of Officer)

TITLE PRESIDENT/CEO

BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION
IN CASE NO. _____ DATED _____

FOR ENTIRE TERRITORY SERVED
Community, Town or City

P.S.C. KY. NO. _____

Original SHEET NO. 63

Shelby Energy Cooperative, Inc.
Shelbyville, Kentucky

CLASSIFICATION OF SERVICE

(Over)/Under Recovery =

6-months cumulative (over)/under recovery as defined by amount billed by EKPC to Member System minus the amount billed by Member System to retail customer. Over or under recoveries shall be amortized over a six-month period.

BESF = zero

BILLING

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

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TITLE PRESIDENT/CEO

BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION
IN CASE NO. _____ DATED _____

FOR ENTIRE TERRITORY SERVED
Community, Town or City

P.S.C. KY. NO. _____

Original SHEET NO. T-21

SOUTH KENTUCKY R.E.C.C
SOMERSET, KENTUCKY 42501

CLASSIFICATION OF SERVICE

RATES SCHEDULE ES – ENVIRONMENTAL SURCHARGE

AVAILABILITY

In all of the Company's service territory.

APPLICABILITY

This rate schedule shall apply to all electric rate schedules and all special contracts with rates subject to adjustment upon the approval of the Commission.

RATE

CES(m) = ES(m) – BESF

where CES(m) = Current Month Environmental Surcharge Factor
ES(m) = Current Month Environmental Surcharge Calculation
BESF = Base Environmental Surcharge Factor

ES(m) = [((WESF) x (Average of 12-months ended revenues from sales to Member System, excluding environmental surcharge)) + (Over)/Under Recovery] *divided by* [Average of 12-months ending Retail Revenue (excluding environmental surcharge)] = _____%

where WESF = Wholesale Environmental Surcharge Factor for Current Expense Month

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TITLE PRESIDENT/CEO

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IN CASE NO. _____ DATED _____

FOR ENTIRE TERRITORY SERVED
Community, Town or City

P.S.C. KY. NO. _____

Original SHEET NO. T-22

SOUTH KENTUCKY R.E.C.C.
SOMERSET, KENTUCKY 42501

CLASSIFICATION OF SERVICE

(Over)/Under Recovery =

6-months cumulative (over)/under recovery as defined by amount billed by EKPC to Member System minus the amount billed by Member System to retail customer. Over or under recoveries shall be amortized over a six-month period.

BESF = zero

BILLING

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

DATE OF ISSUE September 17, 2004
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DATE EFFECTIVE Service rendered beginning April 1, 2005
Month / Date / Year

ISSUED BY _____
(Signature of Officer)

TITLE PRESIDENT/CEO

BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION
IN CASE NO. _____ DATED _____

FOR ENTIRE TERRITORY SERVED
Community, Town or City

P.S.C. KY. NO. _____

Original _____ SHEET NO. _____

Taylor County Rural Electric Cooperative Corp.
(Name of Utility)

CLASSIFICATION OF SERVICE

RATES SCHEDULE ES – ENVIRONMENTAL SURCHARGE

AVAILABILITY

In all of the Company's service territory.

APPLICABILITY

This rate schedule shall apply to all electric rate schedules and all special contracts with rates subject to adjustment upon the approval of the Commission.

RATE

CES(m) = ES(m) – BESF

where CES(m) = Current Month Environmental Surcharge Factor
ES(m) = Current Month Environmental Surcharge Calculation
BESF = Base Environmental Surcharge Factor

ES(m) = [((WESF) x (Average of 12-months ended revenues from sales to Member System, excluding environmental surcharge)) + (Over)/Under Recovery] *divided by* [Average of 12-months ending Retail Revenue (excluding environmental surcharge)] = _____%

where WESF = Wholesale Environmental Surcharge Factor for Current Expense Month

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CLASSIFICATION OF SERVICE

(Over)/Under Recovery =

6-months cumulative (over)/under recovery as defined by amount billed by EKPC to Member System minus the amount billed by Member System to retail customer. Over or under recoveries shall be amortized over a six-month period.

BESF = zero

BILLING

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

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