



EAST KENTUCKY POWER COOPERATIVE

January 30, 2006

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PUBLIC SERVICE
COMMISSION

Ms. Beth O'Donnell
Executive Director
Kentucky Public Service Commission
P.O. Box 615
211 Sower Boulevard
Frankfort, Kentucky 40601

Case 2006-00048

Dear Ms. O'Donnell:

Enclosed for filing with the Commission are an original and eight copies of an Appendix containing information about a proposed East Kentucky Power Cooperative, Inc. ("EKPC") demand-side management ("DSM") demonstration project – Direct Load Control ("DLC") of Water Heaters and Air Conditioners. EKPC is making this filing pursuant to the requirements of KRS § 278.285 regarding the reasonableness of the project.

The enclosed Appendix includes a description of the project, a summary of the benefits and costs results, a schedule of key assumptions utilized in the development of the program, a section responding to specific requirements of KRS §278.285 and a proposed tariff.

EKPC is seeking a reasonableness review of this DSM demonstration project only, and is not proposing any recovery of costs in rates at this time. EKPC requests an informal conference with the Commission staff at their earliest convenience to discuss the details of this proposal.

If you have any questions concerning this filing, or if additional information is required, please contact me or Bill Bosta at EKPC headquarters.

Very truly yours,

Charles A. Lile
Senior Corporate Counsel

cal/wb

c: Dan Brewer - Blue Grass Energy
Bobby Sexton - Big Sandy RECC
Betsy Blackford, Esq. - OAG
John Davies - KDOE
Bill Bosta - EKPC

4775 Lexington Road 40391
P.O. Box 707, Winchester,
Kentucky 40392-0707

Tel. (859) 744-4812
Fax: (859) 744-6008
<http://www.ekpc.coop>

APPENDIX

**EAST KENTUCKY POWER COOPERATIVE
DEMAND-SIDE MANAGEMENT DEMONSTRATION PROJECT
DIRECT LOAD CONTROL (DLC) OF
WATER HEATERS & AIR CONDITIONERS**

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SECTION I

PROJECT DESCRIPTION

East Kentucky Power Cooperative
Demand-Side Management Demonstration Project
Direct Load Control (DLC) of
Water Heaters & Air Conditioners

Introduction

Pursuant to KRS 278.285, East Kentucky Power Cooperative (EKPC) is seeking approval of the reasonableness of a proposed demand-side management demonstration project for direct load control of water heaters and air conditioners. The demonstration project will consist of learning the effect of installing switches to control water heating and air conditioning load during peak demand periods. Big Sandy RECC and Blue Grass Energy have agreed to participate in the demonstration project. EKPC is proposing to install 400 switches on central air conditioning or heat pump units and on electric water heating units for customers of Blue Grass Energy and 300 switches on electric water heating units for customers of Big Sandy RECC. EKPC proposes to have the air conditioning switches installed prior to June 1, 2006, in order to measure the effect of load control for the summer of 2006. Water heating switches will be installed by October 2006, with the effect of load control to be measured through the summer of 2007. Thus, the project period will cover two summers for air conditioning and 12 months for water heaters. Based on the positive benefit/cost result for the Total Resource Cost Test contained herein, as well as the experience of other utilities in Kentucky, EKPC anticipates embarking on direct load control on a permanent basis. However, interpreting the results of the proposed demonstration project during 2006 and 2007 will ensure that EKPC works through issues of recruitment, incentives, technical matters and logistics and proceeds in a prudent manner on a proper course of action.

Background

EKPC's peak demand has been growing at a significant pace. Residential load growth, in particular, has led to an average annual increase in peak demand of 4.6% over the last five years. As a result, the need to prudently manage load has never been greater.

Direct Load Control (DLC) is a DSM alternative that has met with some success throughout the utility industry. In Kentucky, for example, LG&E and KU have had a DLC program for air conditioning units in place for several years. Following discussions with representatives from LG&E, a review of industry literature and

discussing the issue with member systems, EKPC decided to use the demonstration project as a way of moving into this area of DSM.

Big Sandy RECC and Blue Grass Energy both showed an interest in the project and both have recently installed and utilize Automated Meter Reading (AMR) systems. As a result of these two factors, coupled with the fact that Big Sandy and Blue Grass are geographically different, it is proposed that the DLC demonstration project be offered at these two Member Systems.

Direct Load Control Mechanism

A. Air Conditioning

A load control air conditioning “switch” will be installed on each central air conditioning unit or heat pump that will allow the unit to be “cycled off” for 15-minute periods. EKPC will be able to manage peak loads by operating a button at EKPC headquarters and sending a “signal” through the power line to the load control switch. Through the two-way AMR systems in place at Big Sandy and Blue Grass, EKPC can communicate directly with the switching device and also receive data showing load levels before and after the interruption. Use of this two-way power line carrier technology will preclude the need for additional communication equipment and lower the fixed costs of the demonstration project.

B. Water Heaters

Much like the air conditioning arrangements, a switch will be placed on the water heater and the communications process for water heating is identical to the process used for the air conditioning units. However, unlike air conditioners, which will cycle on and off in 15-minute intervals, water heaters will be shut down for a maximum time period of four hours. As water heaters are built to store water for future use, this time period is not unusual for accomplishing load reductions while maintaining customer comfort. Water heaters must have a minimum capacity of 40 gallons in order to ensure that the interruption does not affect customer comfort.

Time Period for DLC

EKPC proposes to limit the time period for DLC to the on-peak period currently utilized. These periods are as follows:

<u>Months</u>	<u>Hours Applicable – EST</u>
October through April	6:00 AM* to Noon 4:00 PM* to 10:00 PM
May through September	10:00 AM to 10:00 PM

*Note: The 6:00 AM and 4:00 PM starting hours are one hour prior to the approved on-peak period for EKPC's wholesale tariff. This is being done in order to allow water heater interruptions to be fully effective by the beginning of the peak period.

Number of Participants

EKPC has established a goal of placing switches on 400 air conditioning units at Blue Grass Energy, and switches on 400 water heaters at Blue Grass Energy and 300 water heaters at Big Sandy. These levels are based on a determination of a minimum sample size, the need to expose as many customers as practicable to the concept and the interest in gathering data from two different geographic areas in the state. EKPC estimates that an absolute minimum sample size for the air conditioning population is 153 and is 68 for water heaters, at a 90 percent statistical confidence level.

These minimum sample size values increase to 216 and 96, respectively, at a 95 percent statistical confidence level. It should be noted that the estimate of the population standard deviation of kW load reduction for air conditioning that is used in the calculation of the sample size, is based on data from other utilities in the industry. This fact lends credence to the minimum sample size level for air conditioning described above. Such information for water heaters, however, is not as readily available in the industry, and consequently the estimate of population standard deviation is not as certain. Therefore, the minimum sample size levels cited above for water heaters may be low and make the goal of 700 water heaters on the EKPC system more practicable.

Incentives

Customers participating in the demonstration project will not experience a direct kWh savings as a result of their actions. Residential customers are billed on an energy only rate and would not see an appreciable difference in their kWh usage. While their participation will result in a decrease in peak demand for EKPC, that will not translate directly into a significant reduction in energy use. As a result, residential customers typically need a monetary incentive to participate in the project.

EKPC proposes to offer \$20 per air conditioner for the summer season, and \$10 per year for each water heater for the entire year. These incentives are comparable to those offered at other utilities, including the LG&E/KU DLC program.

Recruitment & Administration

Blue Grass Energy and Big Sandy RECC will use the direct mail method to secure participants. Potential customers will receive a letter describing the demonstration project, the incentive payout, the terms and conditions of participation and other related information.

Reporting

EKPC will provide a report of the results of the demonstration project to the Commission by December 31, 2007. Included will be the effect on peak demand, the number of participants, participant satisfaction, and the cost of the program.

Estimated Cost of Project

EKPC estimates that the cost of the demonstration project will be \$296,000, as shown below:

1. Switches		
Blue Grass Energy	600* @ \$150/switch =	\$ 90,000
Big Sandy RECC	300 @ \$120/switch =	\$ 36,000
*Note: It is estimated that 200 out of the 400 water heater installations will also have air conditioning. One switch can perform both functions in those homes.		
2. Good Cents Solutions & Other Consulting		\$115,000
3. Recruitment & Marketing		\$ 10,000
4. Leased Data Circuit		\$ 12,000
5. Software & Training		\$ 10,000
6. Incentives		
AC	400 x \$20 x 2 =	\$ 16,000
Water Heater	700 x \$10 =	<u>\$ 7,000</u>
		\$ 23,000
Total		\$296,000

SECTION II

SUMMARY OF BENEFITS/COSTS RESULTS

EKPC has evaluated the benefits and costs of the Direct Load Control (DLC) Program for Air Conditioners and Water Heaters in terms of the Standard California Cost Effectiveness Tests. EKPC utilized the software package *DSManager* that was developed by the Electric Power Research Institute. These cost-benefit tests were also used in EKPC's Touchstone Energy Manufactured Home filing of August 2002, Case No. 2002-00313 and the Touchstone Energy Home Program filing of December 2003, Case No. 2003-00481. Three different ratios were developed. A description and the result of each test follows.

(1) **Ratepayer Impact Test:** Compares the benefits of avoided supply costs (production, transmission, and distribution) based on energy and load reductions with the program costs (including incentives, if any) plus net lost revenues caused by lost sales. This test measures the benefit/cost ratios to the Member Systems, East Kentucky Power Cooperative, and Combined Ratepayer. The results are as follows:

- Member System: 1.82
- EKPC: 0.67

(2) **Participant Test:** Compares the incentives, if any, from the Member Systems to the program participants plus the reduction in the participants' electricity bill with the participants' direct cost of participation in the program. This ratio cannot be computed since the participant has no cost to participate.

(3) **Total Resource Cost Test:** Compares the avoided supply costs based on energy and load reductions to the total program costs of both the Member Systems and EKPC exclusive of incentives. The benefit/cost ratio for this test is 2.41.

Section III herein provides the "Key Assumptions" used in the analysis.

SECTION III

KEY ASSUMPTIONS

1. EKPC has prepared the cost effectiveness tests under the assumption that this would be a permanent program. As detailed herein, EKPC is proposing a demonstration project before embarking on a permanent program.
2. For purposes of the cost-effectiveness test, EKPC has assumed that there would be 5,000 participants and that the expenses of the program would be shared equally between the Member Systems and EKPC.
3. The benefits and costs for this program are expressed in terms of the Standard California cost effectiveness tests. EKPC utilized the software package *DSManager* that was developed by the Electric Power Research Institute (EPRI). The tests include (1) Rate Impact Measure, (2) Participant Test, and (3) Total Resource Cost.
4. EKPC's generation capacity credit is based on the difference in the peak load contributions of two appliances with and without load control. The first is a typical residential central air conditioner versus that of a central air conditioner that is controlled during peak days in June through September using a 50% cycling control strategy. The second is a typical electric water heater versus that of an electric water heater that is shut off for 3 hours during peaks, January through December. EKPC has estimated that the expected peak summer reduction for the load control of both the appliances is 1.37 kW, and the expected peak winter reduction is 1.03 kW.
5. EKPC's production energy cost savings are minimal due to the nature of this program, and are based on the estimated reduction in fuel and variable operating and maintenance expenses stemming from the very modest decrease in kWh generated as a result of the program. EKPC estimates that 10 kWh per year will be saved for each air conditioner that participates and 4 kWh per year for each water heater.
6. EKPC anticipates four categories of costs associated with a permanent program: one time system costs, one time costs per new participant, annual marketing costs, and annual maintenance costs. EKPC estimates that the one time system costs will be approximately \$159,000 and include software, substation upgrades, and measurement & verification costs. EKPC estimates that the one time costs per new participant will be \$293 per participant and cover the recruitment costs, load control switch costs, and the installation costs. Costs in future years escalate at an assumed 3% rate of inflation. For purposes of this analysis, all costs were assumed to be shared equally between EKPC and the member system. Finally, EKPC estimates that the annual maintenance costs will be \$1.80 per participant per year.

7. Wholesale demand and energy rates are based on EKPC wholesale tariff Schedule E-2, effective as of January 1, 2006.
8. Retail rates are based on Blue Grass Energy's residential rate as of January 1, 2006.
9. The incentive to the participants is \$30 per customer per year for water heating and air conditioning.
10. There will be no cost to the participant.
11. For purposes of determining the present value of future benefits and costs of the program, a discount rate of 6.5% was used for both the Rate Impact Measure and the Total Resource Cost test and 13% for the Participant test.
12. The program assesses participation for one year. Demand and energy savings were evaluated for a program time of 20 years.

SECTION IV

RESPONSE TO KRS 278.285

KRS 278.285 Demand-side management plans - Review and approval of proposed plans and mechanisms - Assignment of costs - Home energy assistance programs.

(1) The commission may determine the reasonableness of demand-side management plans proposed by any utility under its jurisdiction. Factors to be considered in this determination include, but are not limited to, the following:

(a) The specific change in customers' consumption patterns which a utility is attempting to influence:

R. *This demonstration project is structured to reduce peak demand, resulting in benefits to Member Systems and their customers and EKPC. The demonstration project will provide information to enable EKPC to make an informed decision as to whether a permanent program is warranted.*

(b) The cost and benefit analysis and other justification for specific demand-side management programs and measures included in a utility's proposed plan;

R. See Attachment 1 to this document.

(c) A utility's proposal to recover in rates the full costs of demand-side management programs, any net revenues lost due to reduced sales resulting from demand-side management programs, and incentives designed to provide positive financial rewards to a utility to encourage implementation of cost-effective demand-side management programs;

R. EKPC does not propose at this time to recover the cost of this demonstration project through an adjustment of rates. EKPC reserves the right to seek recovery of any lost revenues and/or relevant costs related to approved DSM programs or projects in any future general rate case.

(d) Whether a utility's proposed demand-side management programs are consistent with its most recent long-range integrated resource plan;

R. Direct Load Control was cited as a possible DSM program in EKPC's Integrated Resource Plan filed in April 2003. It will be incorporated into EKPC's next integrated resource plan.

(e) Whether the plan results in any unreasonable prejudice or disadvantage to any class of customers;

R. This particular demonstration project is being offered to two Member Systems' residential retail customers on a voluntary basis. If ultimately implemented on a permanent basis, all Member System customers will benefit through deferral of generation capacity or purchases.

(f) The extent to which customers representatives and the Office of the Attorney General have been involved in developing the plan, including program design, cost recovery mechanisms, and financial mechanisms, and if involved, the amount of support for the plan by each participant, provided however, that unanimity among the participants developing the plan shall not be required for the commission to approve the plan; and

R. The Member Systems of EKPC have participated in the development of this DSM project. EKPC representatives met with the Office of the Attorney General ("AG") and talked by telephone with the Kentucky Division of Energy ("KDOE") to describe the program. During these meetings, no firm opinion was expressed.

(g) The extent to which the plan provides programs which are available, affordable, and useful to all customers.

R. The results of the demonstration project will determine whether this DSM project will be useful for customers.

(2) A proposed demand-side management mechanism including:

(a) Recover the full costs of Commission-approved demand-side management programs and revenues lost by implementing these programs;

(b) Obtain incentives designed to provide financial rewards to the utility for implementing cost-effective demand-side management programs; or

(c) Both of these actions specified may be reviewed and approved by the Commission as part of a proceeding for approval of new rate schedules initiated pursuant to KRS 278.190 or in a separate proceeding initiated pursuant to this section which shall be limited to a review of demand-side management issues and related rate-recovery issues as set forth in subsection (1) of this section and in this subsection.

R. As indicated in EKPC's response to item (1)(c), EKPC does not intend to seek recovery of program costs or lost revenues at this time. Attachment 2 to this Appendix is a proposed tariff sheet that incorporates the features of the demonstration project. EKPC requests that the demonstration project remain in effect through 2007. EKPC proposes that the report on the project be filed by the end of 2007.

(3) The Commission shall assign the cost of demand-side management programs only to class or classes of customers which benefit from the programs. The Commission shall allow individual industrial customers with energy intensive

processes to implement cost-effective energy efficiency measures in lieu of measures approved as part of the utility's demand-side management programs if alternative measures by these customers are not subsidized by other customer classes. Such individual customers shall not be assigned the cost of demand-side management programs.

R. EKPC is not assigning the cost of this DSM program to any class of customers for purposes of rate recovery at this time. However, EKPC reserves the right to propose an appropriate assignment of costs at such time recovery is sought.

- (4) Home energy assistance programs may be part of a demand-side management program. In considering a home energy assistance program, the Commission shall only utilize the criteria set forth in subsections (1)(f) and (3) of this section.

R. The Direct Load Control (DLC) Demonstration Project is not an energy assistance program.

ATTACHMENT 1

BENEFITS / COST ANALYSIS

STANDARD CALIFORNIA TEST RESULTS

Distribution System Ratepayer Impact Test

<u>LINE</u>			<u>LINE</u>	<u>EXPLANATION</u>
1	<u>Benefits</u>		1	Avoided supply costs (e.g.production, transmission, and/or distribution) based on energy and load reductions.
2	D. S. Electric Acquisition Decrease	\$4,778,091	2	PV of decrease in Distribution Systems' wholesale power expense paid to EKPC. Based on EKPC's Wholesale Tariff Schedule E-2.
3	Incentives Received from EKPC	<u>\$1,112,362</u>	3	PV of incentives paid by EKPC to DS evaluated over 20 years.
4	Total Benefits	\$5,890,452	4	Line 2 plus Line 3
5	<u>Costs</u>		5	Utility program costs (including incentives) plus net lost revenues caused by reduced sales.
6	D. S. Base Electric Revenue Decrease	\$62,643	6	PV of D.S. reduction in electric revenues from decrease in kWh sales. Based on Blue Grass Energy Rate GS-1.
7	Adjusted Revenue Decrease	\$2,438	7	PV of Fuel Adjustment Clause evaluated over 20 years.
8	Fixed Administrative Cost	\$148,598	8	PV of \$79,438 in year 1, \$5,150 in year 2, then escalated at 3% per year.
9	Distribution System Variable Cost	\$802,013	9	PV of \$147 one-time cost per new participant; \$0.90 maint./yr/participant; esc. @ 3%/yr.
10	Incentives Paid	\$2,224,824	10	PV of incentives over 20 years
11	Total Costs	\$3,240,516	11	Line 6 plus Line 7 plus Line 8 plus Line 9 plus Line 10.
12	<u>Net Benefits</u>	\$2,649,936	12	Line 4 minus Line 11
13	Benefit / Cost Ratio	1.82	13	Line 4 divided by Line 11

Note: Incentives are defined as Customer incentive payments of \$30 per year per participant.

East Kentucky Power Cooperative Ratepayer Impact Test
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<u>LINE</u>			<u>LINE</u>	<u>EXPLANATION</u>
1	<u>Benefits</u>		1	Avoided supply costs (production, transmission, and distribution) based on energy and load reductions.
2	Distribution Capacity Credit	\$727,486	2	PV of avoided distribution capacity.
3	Electric Production Cost Decrease	\$110,736	3	PV of EKPC's electric production cost decrease over 20 years. Includes fuel and variable operating and maintenance expense.
4	Generation Capacity Credit	\$3,562,008	4	PV of EKPC's avoided capacity costs due to reduction in generation evaluated over 20 years.
5	Transmission Capacity Credit	<u>\$180,057</u>	5	PV of avoided transmission capacity.
6	Total Benefits	\$4,580,287	6	Line 2 + Line 3 + Line 4 + Line 5
7	<u>Costs</u>		7	Utility program costs (including incentives) plus net lost revenues caused by reduced sales.
8	Incentives Paid	\$1,112,362	8	PV of incentives paid to Member Systems
9	Base Revenue Decrease	\$4,775,619	9	PV of EKPC's reduction in base revenues; based on EKPC's Wholesale Tariff Schedule E-2.
10	Adjusted Revenue Decrease	\$2,471	10	PV of EKPC's Fuel Adjustment Clause evaluated over 20 years.
11	Fixed Administrative Cost	\$148,598	11	PV of \$79,438 in year 1, \$5,150 in year 2, then escalated at 3% per year.
12	Variable Costs	<u>\$802,013</u>	12	PV of \$147 one-time cost per new participant; \$0.90 maint./yr/participant; esc. @ 3%/yr.
13	Total Costs	\$6,841,063	13	Line 8 + Line 9 + Line 10 + Line 11 + Line 12
14	<u>Net Benefits</u>	-\$2,260,777	14	Line 6 minus Line 13.
15	Benefit / Cost Ratio	0.67	15	Line 6 divided by Line 13.

Note: Incentives are defined as Customer incentive payments of \$30 per year per participant.

Participant Test

<u>LINE</u>			<u>LINE</u>	<u>EXPLANATION</u>
1	<u>Benefits</u>		1	Incentive from Distribution System, plus a reduction in electric bill.
2	Customer Electric Bill Decrease	\$43,300	2	PV of reduction in Participants' retail electric bill due to decrease in energy consumption. Based on Blue Grass Energy Rate GS-1.
3	Customer Incentives	<u>\$1,429,360</u>	3	PV of incentives received from Distribution Systems.
4	Total Benefits	\$1,472,660	4	Line 2 + Line 3
5	<u>Costs</u>		5	Participants' direct cost of participation.
6	Customer Investment	<u>\$0</u>	6	No cost to the Participant to participate in these programs.
7	Total Costs	\$0	7	Line 6.
8	<u>Net Benefits</u>	\$1,472,660	8	Line 4 minus Line 7.
9	Benefits / Cost Ratio	#DIV/0!	9	Line 4 divided by Line 7. No ratio - division by zero.

Note: Incentives are defined as Customer incentive payments of \$30 per year per participant.

Total Resource Cost Test

<u>LINE</u>			<u>LINE</u>	<u>EXPLANATION</u>
1	<u>Benefits</u>		1	Avoided supply costs (e.g.production, transmission, and/or distribution) based on energy and load reductions.
2	Distribution Capacity Credit	\$727,486	2	PV of avoided distribution capacity.
3	EKPC Electric Prod Cost Decrease	\$110,736	3	PV of EKPC's electric production cost decrease evaluated over 20 years. Includes fuel and variable operating and maintenance expense.
4	EKPC Generation Capacity Credit	\$3,562,008	4	PV of EKPC's avoided capacity costs due to reduction in generation.
5	Transmission Capacity Credit	<u>\$180,057</u>	5	PV of avoided transmission capacity.
6	Total Benefits	\$4,580,287	6	Line 2 + Line 3 + Line 4 + Line 5
7	<u>Costs</u>		7	Total program costs to participants, the Distribution Systems, and EKPC.
8	Participants' Investment	\$0	8	
9	Distribution System Fixed Cost	\$148,598	9	PV of \$79,438 in year 1, \$5,150 in year 2, then escalated at 3% per year.
10	Distribution System Variable Cost	\$802,013	10	PV of \$147 one-time cost per new participant; \$0.90 maint./yr/participant.
11	EKPC Fixed Admin Cost	\$148,598	11	PV of \$79,438 in year 1, \$5,150 in year 2, then escalated at 3% per year.
12	EKPC Variable Cost	<u>\$802,013</u>	12	PV of \$147 one-time cost per new participant; \$0.90 maint./yr/participant.
13	Total Costs	\$1,901,222	13	Line 9 + Line 10 + Line 11 + Line 12
14	<u>Net Benefits</u>	\$2,679,065	14	Line 6 minus Line 13
15	Benefit / Cost Ratio	2.41	15	Line 6 divided by Line 13

ATTACHMENT 2

TARIFF SHEETS - SECTION DSM - 3

Section DSM - 3

Direct Load Control of Water Heaters Program

Direct Load Control of Air-Conditioners Program

Purpose

The Direct Load Control of Water Heaters and Air Conditioners are demonstration projects established to encourage the reduction in growth of peak demand, enabling the Company to utilize its system more efficiently and defer the construction of new generation.

Availability

Both the Direct Load Control of Water Heaters Program and the Direct Load Control of Air Conditioners Program are available to residential customers in the service territories of EKPC Member System Blue Grass Energy. The Direct Load Control of Water Heaters Program is available at EKPC Member System Big Sandy RECC.

Availability may be denied where, in the judgment of the Member System, installation of the load control equipment is impractical.

Availability is limited to 400 switches on central air conditioning or heat pump units and on electric water heater units for residential customers of Member System Blue Grass Energy.

Availability is limited to 300 switches on electric water heating units for customers of Member System Big Sandy RECC.

Eligibility

To qualify for these Programs, the participant must be located in the service territory of the participating Member System and have central air conditioning or heat pumps units and/or 40 gallon electric water heating units. The above appliances may be electrically cycled or interrupted in accordance with the rules of this Tariff.

DATE OF ISSUE January 30, 2006 DATE EFFECTIVE June 1, 2006

ISSUED BY _____ TITLE President & Chief Executive Officer

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

EAST KENTUCKY POWER COOPERATIVE, INC.

Incentive - Direct Load Control of Water Heaters Program

EKPC and Member Systems Big Sandy RECC and Blue Grass Energy will provide an incentive to the participants in this program. EKPC will credit the wholesale power bill of both Blue Grass Energy and Big Sandy RECC \$10.00 per switch. Blue Grass Energy and Big Sandy in turn will credit the residential power bill of the participant \$10.00 per switch. The participant will receive this credit regardless of whether the water heater is cycled.

Incentive - Direct Load Control of Air-Conditioners Program

EKPC and Member System Blue Grass Energy will provide an incentive to the participants in this program. EKPC will credit the wholesale power bill of Blue Grass Energy \$20.00 per switch. Blue Grass Energy in turn will credit the residential power bill of the participant \$20.00 per switch. The participant will receive this credit regardless of whether the air conditioner or heat pump is cycled.

Time Period for the Direct Load Control of Water Heaters Program

A load control switch will be placed on the water heater and may be electrically interrupted for a maximum time period of four hours.

EKPC will cycle the water heaters only during the hours listed below.

<u>Months</u>	<u>Hours Applicable for Demand Billing - EST</u>
October through April	6:00 a.m. to 12:00 noon 4:00 p.m. to 10:00 p.m.
May through September	10:00 a.m. to 10:00 p.m.

Time Period for the Direct Load Control of Air Conditioners

A load control air conditioning switch will be placed on each central air conditioning unit or heat pump that will allow the unit to be cycled off for 15-minute periods.

EKPC will cycle the air conditioning units and heat pumps only during its summer on-peak billing hours listed below.

<u>Months</u>	<u>Hours Applicable for Demand Billing - EST</u>
May through September	10:00 a.m. to 10:00 p.m.

DATE OF ISSUE January 30, 2006

DATE EFFECTIVE June 1, 2006

ISSUED BY _____ TITLE President & Chief Executive Officer

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

EAST KENTUCKY POWER COOPERATIVE, INC.

Report to the Commission

EKPC will submit a report to the Commission outlining the results of the demonstration project by December 31, 2007.

Term

The term of the Direct Load Control of Water Heaters Program will be from October 1, 2006 to September 30, 2007. The term of the Direct Load Control of Air Conditioners will be from June 1, 2006 to September 30, 2007.

Terms and Conditions

1. If a participant decides to withdraw from the program(s) or change to another load control option, the Member Systems will endeavor to implement the change as soon as possible.
2. Prior to the installation of load control devices, the Member Systems may inspect the participant's electrical equipment to insure good repair and working condition, but the Member Systems shall not be responsible for the repair or maintenance of the electrical equipment.
3. The Member Systems will install, own, and maintain the load management devices controlling the participant's air conditioner or water heater. The participant must allow the Member System reasonable access to install, maintain, inspect, test and remove load control devices. Inability of the Member System to gain access to the load management device to perform any of the above activities for a period exceeding 30 days may, at the Member System's option, result in discontinuance of credits under this tariff until such time as the Member System is able to gain the required access.

DATE OF ISSUE January 30, 2006

DATE EFFECTIVE June 1, 2006

ISSUED BY _____

TITLE President & Chief Executive Officer

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