



March 23, 2006

HAND DELIVERED

Ms. Elizabeth O'Donnell
Executive Director
Public Service Commission
211 Sower Boulevard
Frankfort, KY 40601

RECEIVED

MAR 23 2006

PUBLIC SERVICE
COMMISSION

Re: PSC Administrative Case No. 2006-00045

Dear Ms. O'Donnell:

Please find enclosed for filing with the Commission in the above-referenced case an original and seven (7) copies of responses to Appendix C of the Commission's Order dated February 24, 2006, by East Kentucky Power Cooperative, Inc., and its Member Systems.

Very truly yours,

A handwritten signature in cursive script, appearing to read 'Charles A. Lile'.

Charles A. Lile
Senior Corporate Counsel

Enclosures

Cc: Parties of Record

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

CONSIDERATION OF THE)	
REQUIREMENTS OF THE FEDERAL)	
ENERGY POLICY ACT OF 2005)	ADMINISTRATIVE
REGARDING TIME-BASED METERING,)	CASE NO. 2006-00045
DEMAND RESPONSE AND)	
INTERCONNECTION SERVICE)	

**EAST KENTUCKY POWER COOPERATIVE, INC.
AND ITS MEMBER SYSTEMS**

PSC ADMINISTRATIVE CASE 2006-00045

PUBLIC SERVICE COMMISSION REQUEST DATED 02/24/06

East Kentucky Power Cooperative, Inc. (EKPC) and its Member Systems hereby submit responses to the information requests contained in Appendix C to the order of the Public Service Commission ("PSC") in this case dated February 24, 2006. Each response with its associated supportive reference materials is individually tabbed.

The Member Systems are:

Big Sandy Rural Electric Cooperative Corporation
Blue Grass Energy Cooperative Corporation
Clark Energy Cooperative, Inc.
Cumberland Valley Electric
Farmers Rural Electric Cooperative Corporation
Fleming-Mason Energy Cooperative
Grayson Rural Electric Cooperative Corporation
Inter-County Energy Cooperative Corporation
Jackson Energy Cooperative
Licking Valley Rural Electric Cooperative Corporation
Nolin Rural Electric Cooperative Corporation
Owen Electric Cooperative
Salt River Electric Cooperative Corporation
Shelby Energy Cooperative, Inc.
South Kentucky Rural Electric Cooperative Corporation
Taylor County Rural Electric Cooperative Corporation

**EAST KENTUCKY POWER COOPERATIVE, INC.
AND ITS MEMBER SYSTEMS
PSC ADMINISTRATIVE CASE NO. 2006-00045
RESPONSES TO INITIAL DATA REQUESTS**

**PUBLIC SERVICE COMMISSION INITIAL DATA REQUEST DATED 02/24/06
REQUEST 1**

RESPONSIBLE PERSON: William A. Bosta
COMPANY: East Kentucky Power Cooperative, Inc. and its
Member Systems

Smart Metering

Request 1. Provide a list of programs you offer at present or have offered at any time since the enactment of the Public Utilities and Regulatory Policies Act (“PURPA”) that can be included under the definition of either time-based metering or demand response set forth in Section 1252 of EPAct 2005. Include a brief description of each program, the relevant tariffs (if applicable) and a cite to the Commission case number in which the program was approved (if applicable).

Response 1. EKPC and its Member Systems have offered a number of time-based metering and demand response options since the enactment of the Public Utilities and Regulatory Policies Act (“PURPA”). Shown below is a list and description of the time-of-day rate options and a list and description of the demand response programs.

I. Time-of-Day Rate Options

- **Large Commercial and Industrial Time-of-Day Rates**

EKPC's wholesale "B" and "C" rates, as well as many of the Member System retail rates for Large Commercial and Industrial customers, have a time-differentiated demand charge. The time-differentiated demand charge for EKPC wholesale rates has been in place since the late 1980's (Case No. 9582 for Rate "C" and Case No. 10369 for Rate "B"). Following implementation of the EKPC wholesale rate, the EKPC Member Systems implemented time-differentiated demand charges. A copy of EKPC's "B" and "C" rate, and a typical rate schedule from a Member System, are included in Attachment 1.

EKPC's/Member Systems' time-differentiated demand charge recognizes a demand charge for load in the on-peak period and no demand charge in the off-peak period. As a result, it is a direct demand response rate as customers have the opportunity to shift demand to the off-peak period and avoid the on-peak demand charge. Industrial customers, in particular, may choose to save money by shifting production to off-peak hours. This mechanism enables EKPC and its Member Systems to avoid peak demands.

- **Interruptible Rates**

EKPC offers two interruptible rates: Section D, Interruptible Service, and Section F, Voluntary Interruptible Service. Both rates are used by a number of our Member Systems.

The Section D, Interruptible Service rate was established in 1995 (Tariff Filing for Section D). It allows the retail customer to receive a monthly demand credit for allowing their load to be interrupted.

The Voluntary Interruptible Rate, Section F, established in August 2000 (Tariff Filing T-61-0819) is also a demand response mechanism but reflects a slightly different approach. Retail customers interested in participating are given at least a one-hour notice for interruption. The customer will receive an energy price quote from EKPC and will receive a credit equivalent to 110 percent of the energy price quote minus the actual tariff energy rate. The interruption process is entirely voluntary and customers may participate totally at their discretion. The two tariffs are included in Attachment 1.

- **EKPC's Non-Industrial Wholesale Rate**

EKPC's wholesale rate applicable for non-industrial customers (Section A) included a time-differentiated demand element in 1985 at the time of filing (Case No. 8948). In addition, EKPC's "E" rate was established in the early 1990's as an alternative to the Section "A" rate. The "E" rate initially contained a time-differentiated demand charge as well and was subsequently altered to include a time-differentiated energy charge during the most recent EKPC rate proceeding in 1994 (Case No. 94-336). EKPC's "A" and "E" rates are included in Attachment 1.

- **Special Contract Rates – Owen Electric’s/EKPC Special Contract Rates with Gallatin Steel; Taylor County RECC and Fleming-Mason /EKPC Special Contract with Tennessee Gas Pipeline (TGP)**

From 1995 through 2005, Gallatin Steel Company was served by Owen Electric under a Special Contract. That contract had pricing features which charged Gallatin for the incremental cost of energy incurred by EKPC to serve Gallatin’s interruptible load. The current contract, effective in June 2005, has time-of-day rate features for both the demand and energy charges.

Taylor County RECC and Fleming-Mason Energy entered into Special Contracts with Tennessee Gas Pipeline (TGP) in 2001. These contracts have a real-time pricing element included. Depending on their load, TGP may be billed during on-peak hours using CINERGY hub energy prices. This provides a day-ahead price signal to the customer.

- **Electric Thermal Storage (ETS) - Residential**

The Electric Thermal Storage program was established in the 1980’s (Case No. 10281). The program offers a special discount rate for off-peak power usage for those customers who install electric thermal storage heating units. The ETS program remains in place as one of EKPC/Member System’s demand response efforts. The ETS Tariff for one of the Member Systems is included in Attachment 1.

- **Experimental Time-of-Day and Time-of-Day Rates Research Project for Residential**

In 1983, the Commission approved EKPC's Application to conduct a time-of-day rate experiment for residential customers of its Member Systems. The Order in the Case (Case No. 8906) authorized EKPC and its Member Systems to conduct a time-of-day rate and research experiment. The Commission, at that time, was in an environment of rising costs and indicated that it was important to consider alternatives to the construction of new generating units. The experiment was concluded in the 1986-1987 time period.

II. Demand-Side Management Options

EKPC and its Member Systems have had a variety of demand-side management programs in place over a number of years. Shown below is a list and description of demand response programs.

- **Tune-Up HVAC Maintenance Program**

This program is targeted to single-family homes using electric furnaces or electric heat pumps that have exhibited high-energy use. It is also available to multi-family residences, churches and commercial facilities heated by electric furnaces, electric heat pumps, and geothermal units. All facilities must have duct systems at least two years old to qualify for incentive payments.

This program includes cleaning indoor and outdoor heat-exchanger coils, changing filters, measuring the temperature differential across the indoor coil to determine proper compressor operation, checking the thermostat to verify operation and proper staging, measuring air flows to ensure proper conditioned air distribution, and sealing ductwork either through traditional mastic sealers or the AeroSeal duct sealing system. Duct losses are to be reduced to 10% or less. Duct loss measurement requires the use of a blower door test and the blower door subtraction method, or the approved duct loss measurement test associated with the AeroSeal duct sealing system. Only contractors trained and certified by EKPC may be used.

- **Geothermal Heating & Cooling Incentive Program**

The program is designed to encourage homeowners to choose geothermal heating and cooling over less-efficient forms of heating and cooling. For retail members building new homes, it works in conjunction with the Touchstone Energy Home building standards. For those retail members replacing existing, less-efficient HVAC equipment, the incentive encourages the consideration of geothermal as a viable HVAC solution.

The incentives are available to any residential retail member of participating EKPC cooperatives. Primary targets are retail members constructing new homes and retail member homeowners currently heating with electric furnaces, ceiling cables, baseboard heat or fossil fuels.

- **Electric Thermal Storage Incentive Program**

Electric Thermal Storage (ETS) provides retail members with a cost-efficient means of using electricity for space heating. The time-of-day rate for ETS energy encourages retail members to use heating energy off-peak rather than on-peak. The incentives are available to any retail member, but are primarily designed for retail members currently using baseboard, ceiling cable and electric furnaces as their primary source of heat. Secondary targets would be retail members using wood, coal or kerosene as primary or secondary sources of heat.

- **Electric Water Heater Incentive Program**

The electric water heater incentive is designed to encourage residential retail members engaged in new construction to choose a high-efficiency electric water heater over other available options. It is also designed to encourage retail members using a fossil-fuel water heater to convert to a high-efficiency electric water heater. By reducing the cost of choosing a high-efficiency water heater, cooperatives can contribute to lower long-term energy costs and improved satisfaction among residential retail members. The incentive is available to any residential retail member of a participating EKPC cooperative building a new home and installing that home's initial water heater. The incentive is also available to any residential retail member replacing an existing gas or propane water heater with an electric water heater meeting the defined program standards.

- **Air-Source Heat Pump Incentive Program**

The primary targets for this program are retail members building new homes in areas where natural gas heat is an option. An important secondary target is the HVAC retrofit market, offering incentives to retail members to replace electric furnaces and gas or propane heat with high-efficiency electric heat pumps. Incentives are available for either new homes or retrofits.

- **Button-Up Weatherization Program**

This program requires the installation of insulation materials or the use of other weatherization techniques to reduce heat loss in the home. Any retail member living in a stick-built or manufactured home that is at least two years old, and which uses electric as the primary source of heat, is eligible. The primary program targets for this program are older homes exhibiting unusually high usage of electricity.

- **Touchstone Energy Manufactured Home Program**

This program was approved by the Commission in 2002 as a demand-side management program and provides an incentive for retail customers to purchase a more energy efficient manufactured home. The retail customer pays an additional estimated amount of \$1,000 for a more energy efficient manufactured home – the home uses around 5,100 kWh less per year relative to other manufactured homes. The tariff sheet for this program is included in Attachment 1.

- **Touchstone Energy Home Program**

This program was approved by the Commission in 2003 as a demand-side management program. It provides an incentive to encourage customers to purchase a more energy-efficient home – one that meets the Department of Energy’s Energy Star standards. The tariff sheet for this program is included in Attachment 1.

- **Direct Load Control of Air Conditioners and Water Heaters**

On January 30, 2006, EKPC filed with the Commission for approval of a direct load control demonstration project. EKPC has requested that 400 load control switches be installed on Air Conditioning units for Blue Grass Energy customers and 400 load control switches on Water Heaters at Blue Grass Energy. In addition, EKPC is requesting that 300 switches be installed on Water Heaters at Big Sandy RECC. This project is scheduled to begin in the summer of 2006 and continue through the fall of 2007. Commission approval is pending.

- **Commercial and Industrial Energy Services**

EKPC provides load management services to commercial and industrial customers on an on-going basis. Services include infrared testing of commercial facilities, blower door testing, energy audits and HVAC engineering advisory services for new facilities and facility retrofits.

Incentive programs, as well as energy audits, are available to help commercial and industrial customers purchase and install energy efficient technologies. Among these technologies are:

- High efficiency lighting
- High efficiency motors
- Heat Pump tune-up
- HVAC efficiency upgrades
- Commercial button-up program

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**PUBLIC SERVICE COMMISSION INITIAL DATA REQUEST DATED 02/24/06
REQUEST 2**

RESPONSIBLE PERSON: William A. Bosta/Paul A. Dolloff
COMPANY: East Kentucky Power Cooperative, Inc. and its
Member Systems

Smart Metering

Request 2. Provide a general discussion of the types of time-based metering or demand response programs that are possible using existing technologies and a specific discussion on which of these programs, if any, are feasible for current implementation in Kentucky.

Response 2. A detailed description of the existing technologies and feasibility of use is provided in the response to Item 3.

**EAST KENTUCKY POWER COOPERATIVE, INC.
AND ITS MEMBER SYSTEMS
PSC ADMINISTRATIVE CASE NO. 2006-00045
RESPONSES TO INITIAL DATA REQUESTS**

**PUBLIC SERVICE COMMISSION INITIAL DATA REQUEST DATED 02/24/06
REQUEST 3**

RESPONSIBLE PERSON: William A. Bosta/Paul A. Dolloff
COMPANY: East Kentucky Power Cooperative, Inc. and its
Member Systems

Smart Metering

Request 3. Provide, in narrative form, with all relevant calculations, workpapers and assumptions included, what you see as the potential impact of implementing the Smart Metering standard included in Section 1252 of EPAct in Kentucky. At a minimum, the response should address the costs of implementation, financial impact on the utility, who should bear the costs of implementation, and possible rate making and rate treatment issues.

Response 3.

Residential Time-of-Use

Existing technologies exist that can be configured to provide time-of-use metering. In its basic form, time-of-use would provide the residential customer with two electric rates:

one for on- peak and one for off-peak. Generally, on-peak energy is more expensive to generate than off-peak energy.

The idea behind offering time-of-use rates is to change the electrical usage patterns of customers by offering them the opportunity to reduce their electric bills. By consuming energy during off-peak hours and taking advantage of a reduced rate, the customer's bill will decrease. Electric utilities benefit by reducing the amount of energy and capacity that is to be supplied during peak hours of the day.

Implementation of a Time-of-Use Rate

Implementing a time-of-use rate is an involved process and the level of effort required will vary depending upon how the utility currently performs monthly meter reads. This response will be broken down into the following two categories:

1. Manual monthly meter reads
2. Automatic meter reading

1. Manual Monthly Meter Reads

Currently, there are two forms of manual monthly meter reading taking place within the Member Systems of East Kentucky Power: Meter readers and member (self) read. For either method, there will be two values that need to be read from customers on time-of-use rates.

Self Read

For self read customers, the information contained on the monthly bill with a tear off stub, or a post card, will require a change. There will likely be a mailing to all customers explaining the new system and how to report two reads instead of one. The cost to update the bill and develop and mail the instructional flier would be around \$3,000 per Cooperative. Alternatively, the co-op may elect to manually read the time-of-use meter with either co-op staff or a contract meter reader.

Contract Meter Reading

For utilities using meter readers, a number of changes will be required. Most utilities use outside contracting firms to provide meter reading services. The firms will likely ask for an additional fee to read two values for a single customer. Likely, this will be either an additional meter read or a percentage added to the existing fee. Currently, meter reading fees are just under \$1.00 per read. Time-of-use customer reads would increase from a per read adder of \$0.20 to \$1.50 if viewed as a new read.

Meter reading firms use hand held electronic devices that interface with the utility's meters to collect, read, and store customer usage data. These hand held devices require programming specific to the manufacturer and model of all meters. Currently, the vast majority of East Kentucky Power Member System customers are not on time-of-use rates. Therefore, the database within each hand held meter reading device will require reprogramming to accommodate two reads for every customer on time-of-use rates.

Most often, these hand held meter reading devices and the associated software (database) are owned by the utility. Reprogramming will either be performed by

the utility or the manufacturer of the device. Reprogramming costs will vary between \$50 to \$200 per hand held meter reading device. Typically, a utility may have as many as 25 devices.

Accounting Software

All meter reads, whether obtained by self read cards or by electronic means, are entered into accounting software within each utility. The accounting software will require substantial programming changes to accommodate time-of-use rates. The accounting software will have to accept two reads per customer (on-peak and off-peak) and assign a cost structure to each. The cost to reprogram the accounting software to accommodate time-of-use would likely be in the range of \$5,000 per Cooperative.

Using member read cards, data entry will take more time when entering two reads instead of one read per customer in the accounting software.

Electronic meter read data is automatically downloaded into the accounting software through direct connection of each hand held meter reading device to the computer housing the accounting software. The interfacing software between these devices will need to be updated to allow for two reads per meter at a cost of approximately \$1,000.

Customer Billing Software

Utilities use customer billing software to generate customer bills. Often, billing is a service provided by an outside firm. The vast majority of the East Kentucky Power Member Systems use the services of either Southeastern Data Cooperative (SEDC) or National Information Solutions Cooperative (NISC). Both of these

billing firms provide the software necessary to incorporate time-of-use billing. The addition of these time-of-use software modules would come with a fee. Once in place, in-house training would be required. Finally, the bill print (customer bill print layout) would require changes to incorporate time-of-use billing. At a minimum, two lines will need to be displayed on the bill: one showing on-peak energy usage, one showing off-peak energy usage. Currently, many of the East Kentucky Power Member Systems display a graph on the customer bill showing monthly energy usage for the previous year. Likely, this graph would have to be updated to show on and off peak energy usage. In all, the costs associated with customer billing software would range from \$7,500 to \$10,000 per Cooperative.

Revenue Meter

Whether self read or using meter readers, each time-of-use customer will require a revenue meter which offers a time-of-use feature. The standard, electro-mechanical, rotating disk revenue meter in wide use by electric utilities today is incapable of providing energy consumption data suitable for time-of-use billing. The revenue meter of choice capable of providing time-of-use functionality is the GE KV2 manufactured by General Electric. The cost of the KV2 is \$350 each. More information on this meter can be found on the Internet at:

http://www.gepower.com/prod_serv/products/metering/en/utility_revenue_meters/kv2_multifunc_elec.htm.

Once purchased, each and every revenue meter will require testing prior to installation to ensure accuracy. Once testing has been completed, the time-of-use meter must be installed, often times replacing an existing electro-mechanical revenue meter. Once installed, the customer accounting software will need to be

updated to record the meter number with the customer number. In all, these costs would range from \$50 to \$150 per meter.

In total, the cost of the meter would range from \$400 to \$500, or \$4.00 to \$5.00 per month.

2. Automatic Meter Reading

Several of the East Kentucky Member Systems have installed sophisticated automatic metering reading systems. Two manufacturers of these systems have been installed, each with their own challenges associated with incorporating time-of-use billing. These two manufacturers are: Hunt Technologies and Distribution Control Systems. More information about these manufacturers' automatic meter reading systems can be found on the Internet at:

Hunt Technologies: <http://www.hunttechnologies.com/index.asp>

Distribution Control Systems: <http://www.twacs.com/>.

Hunt Technologies

Hunt Technologies offers two types of automatic meter reading products – the TS1 system and the TS2 system. The TS1 system is Hunt Technologies' standard product and has been offered for a number of years. The TS2 system is very new and offers many services not provided by the TS1 system. Table One shows which of the East Kentucky Member Systems are using either the TS1 or TS2 systems.

Table One East Kentucky Member Systems Using Hunt Technologies

East Kentucky Member System	Hunt Technologies System	Number of Customers
Blue Grass Energy	TS2	52,500
Clark Energy	TS1	25,200
Cumberland Valley Electric	TS1	23,000
Grayson	TS1	15,400
Licking Valley	TS1	16,900
Nolin	TS2	29,800
Salt River	TS1	42,900

Both the TS1 and TS2 systems use power line carrier technology - use the utility’s power lines to transfer the revenue meter reading to the utility. Each revenue meter must be retrofitted with a reading module, often times referred to as a “turtle.”

Issues involved when incorporating time-of-use rates will vary greatly between the TS1 and TS2 systems. Therefore, the following discussion will consider each of these individually.

TS1

The Hunt Technologies TS1 system is a basic automatic meter reading system that provides a single value – energy consumption as shown on the faceplate of the revenue meter. The TS1 turtle cannot be programmed to make multi reads during a 24 hour period as would be required for time-of-use billing. Because the TS1 turtles are not programmable, an electronic meter with programming capabilities will be required to offer time-of-use billing. As previously discussed, the GE KV2 revenue meter would be the meter of choice at a cost of \$350. Each of these meters will require two (2) turtles at a cost of \$100 per turtle to read the on-peak and off-peak energy consumption numbers. Note that Hunt Technologies

is in the final phases of testing a turtle system that will interface with the GE KV2 revenue meter.

TS2

The Hunt Technologies TS2 system is a more sophisticated automatic meter reading system that is capable of providing time-of-use readings. Because the TS2 turtles are programmable, the use of a programmable electronic revenue meter as described in the TS1 section is not required.

Should utilities using the Hunt Technologies TS2 system offer time-of-use rates, each turtle will require reprogramming. Each utility will have to update the meter reading software with the appropriate changes to those turtles within each of the revenue meters of each customer requesting time-of-use rates. The cost to reprogram the TS2 turtle to provide time-of-use data would be \$25 per meter.

Software Issues

Automatic meter reading systems come with software designed to interface with the data-gathering infrastructure installed in the field. Once this data is gathered, it is processed and exported to the accounting software. The automatic meter reading software provided by Hunt Technologies includes a time-of-use module. When offering time-of-use rates, this module will require activation, for a fee. Additionally, there will be in-house training provided by the manufacturer to insure proper usage and integration to the accounting software. Together, these costs are estimated to be \$5,000 per Cooperative.

Note that all costs associated with accounting software and billing software as previously discussed would also apply to utilities using an automatic meter reading system.

Distribution Control Systems

Distribution Control Systems offers the TWACS automatic meter reading system, which uses a power line carrier technology. Table Two shows which of the East Kentucky Member Systems are using the TWACS system.

Table Two East Kentucky Member Systems Using TWACS

East Kentucky Member System	Number of Customers
Big Sandy	12,800
Jackson Energy	50,500

Each revenue meter must be retrofitted with a reading module. Currently, the TWACS system does not offer time-of-use functionality. However, Distribution Control Systems is upgrading the TWACS system so that it can provide time-of-use in the future. In the meantime, it is possible to reconfigure the existing TWACS system to provide time-of-use data, although at considerable effort and without assurances of complete reliability.

To incorporate time-of-use into the TWACS system, each revenue meter reading module will need to be reprogrammed to collect hourly meter readings. Note that the volume of data will increase by 24; instead of one read for the day, 24 reads, one for each hour, will be recorded. Unlike Hunt Technologies’ system, it is not possible to reprogram the reading modules from the office. Therefore, a reprogrammed reading module will need to be installed in each revenue meter and

that meter will be used as a replacement for those customers requesting time-of-use rates. Once reprogrammed, each and every revenue meter will require testing prior to installation to ensure accuracy. Once testing has been completed, the reprogrammed meter must be installed. Once installed, the customer accounting software will need to be updated to record the meter number with the customer number. In all, these costs would range from \$150 to \$250 per meter.

Software Issues

Automatic meter reading systems come with software designed to interface with the data gathering infrastructure installed in the field. Once this data is gathered, it is processed and exported to the accounting software. The automatic meter reading software provided with the TWACS system does not include a time-of-use module. Therefore, the utility will have to develop specialized software that will take 24 hourly energy reads, sort those hours that are on-peak and off-peak, accumulate and add those numbers to monthly totals all on a daily basis.

Programming of on- and off-peak will require coordination of season and day light savings time. The cost to implement an in-house solution will likely cost \$10,000 per Cooperative.

Once the time-of-use interfacing software is developed, there is a reliability issue that must be considered. Should the daily hourly reads not be read within an 8-hour period, the data will be over written and lost. This is a likely scenario should there be a problem with the communication infrastructure. For this reason, it is likely that those customers on time-of-use rates will be manually read until the TWACS software with time-of-use functionality becomes available. Once available, there will be software upgrades and associated in-house training provided by the manufacturer to insure proper usage and integration to the accounting software. Together, these costs would total \$10,000 per Cooperative.

Note that all costs associated with accounting software and billing software as previously discussed would also apply to utilities using an automatic meter reading system.

Net Metering

In 2005, Kentucky enacted a net metering law that allows customers with photovoltaic (PV) solar generation systems to be compensated for their energy at retail rates. Should net metering customers wish to go on a time-of-use rate, a very sophisticated revenue meter would be required.

A meter that is capable of providing time-of-use data, delivered energy, received energy, and that can be retrofitted with automatic meter reading systems is the Elster Alpha meter. More information on this meter can be found on the Internet at:

<http://www.elstermetering.com/en/950.shtml>.

The cost of this meter is approximately \$600 each. This type of meter will be required regardless of whether the utility uses manual meter reading or an automatic meter reading system. Costs as described above would apply accordingly.

Summary

Implementing a residential time-of use-rate is a costly proposition. Depending upon the current meter reading process currently in place, costs may include:

- Member read card updates
- Informational fliers and announcements
- Additional meter reading charges by contractors
- Meter reading hand held device and database upgrades
- Accounting software upgrades
- Customer billing software upgrades
- Bill print upgrades
- Automatic meter reading software upgrades
- In-house integration software development
- Revenue meter replacements
- Automatic meter reading modules

Attachment 2 to this response shows the estimated costs of implementing a residential time-of-use rate for each Member System.

In all, these costs will total in the thousands of dollars. With that, it seems unreasonable and unfair for these costs to be recovered by those customers who choose not to take advantage of time-of-use rates. At a minimum, it is clear that any distribution upgrades and associated labor costs required to offer time-of-use rates should be the responsibility of those customers on time-of-use rates.

Distribution upgrade costs include replacement revenue meter costs, meter testing, meter installation, and automatic meter reading modules.

Real-Time Pricing

Real-time pricing is a demand response program that offers retail energy prices on either a day-ahead basis or even an hour-ahead basis. The price of the product is based on the marginal cost of producing or purchasing energy to serve the

customer. Demand response to real-time prices may take the form of reduced load and offer benefits to the customer and the utility. Real-time pricing is in place for several large industrial customers throughout the United States.

For implementation purposes, the following items are required:

- 1) Metering estimated to be \$1,000 to \$1,200 or \$10 to \$12 per month.
- 2) Software/Hardware – Download of data is required every night with the ability to query the meter instantly. Would require a dedicated telephone line with redundancy.
- 3) Administration Fee – Some utilities charge a monthly fee for providing immediate informational services to the Real-Time pricing customer.
- 4) Billing will be done off-line from other customers and separately handled.
- 5) Implement methods for identifying and conveying hourly prices to customers.
- 6) Develop mechanism to measure actual load response.

EKPC and its Member Systems will work with a customer to see if a Real-Time Pricing option is feasible and beneficial.

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**PUBLIC SERVICE COMMISSION INITIAL DATA REQUEST DATED 02/24/06
REQUEST 4**

RESPONSIBLE PERSON: William A. Bosta/Paul A. Dolloff
COMPANY: East Kentucky Power Cooperative, Inc. and its
Member Systems

Smart Metering

Request 4. Provide a general discussion of what you perceive to be the pros and cons of implementing a Smart Metering standard in Kentucky and the policy issues that you believe the Smart Metering standard presents for the Commission.

Response 4. As indicated in the response to Item 1 of the Smart Metering Section, EKPC and its Member Systems have a long history of using time-of-day rates and demand response programs to encourage customers to make sound choices about energy consumption and peak demand loads. EKPC and its Member Systems expect to continue to offer Large Commercial and Industrial customers time-of-day price signals to foster informed decisions about the advantage of shifting load to the off-peak. In addition, to the extent that such customers show interest in a Real-Time pricing option, EKPC and its Member Systems would consider offering the product with the understanding that the customer will pay for the incremental costs of providing the

option. Continuation of these options is consistent with the intent of the 2005 EAct and will be beneficial to the EKPC system and its Member Systems. Reduction in the growth of peak demand will be beneficial to EKPC and its Member Systems as it defers the need for additional generation capacity and/or power purchases.

With regard to Residential customers, EKPC and its Member Systems intend to continue to offer the many demand-side management programs/incentives cited in the response to Item 1. From a policy perspective, EKPC would encourage the Commission to continue to embrace these types of demand-side management programs.

EKPC has benefited significantly from the availability of such programs. As shown in EKPC's most recent IRP (P.83), the net reduction in winter peak demand in 2002 from these demand-side management programs was over 60 MW. And, according to DSMANAGER, a tool that calculates the benefits and costs of DSM projects, the projects described in the response to Item 1 have a positive benefit/cost ratio for the Participant Test and for the Total Resource (TRC) test. While EKPC plans to update these tests in the October 2006 IRP filing, these results reveal that the projects are consistent with the goals of the 2005 EAct and are worthy of continued application.

With regard to Section 1252's requirement to offer time-of-day rates to any customer requesting such rates, EKPC and its Member Systems believe it is important for the Commission to offer price signals which enable customers to make informed choices and use energy wisely. However, as described in the response to Item 3, it is equally important for the Commission to recognize the level of effort and costs that will be required to adhere strictly to this standard, and the likelihood of whether the on-peak/off-peak price differential for residential customers will truly induce load shifts.

In terms of price signals, EKPC and its Member Systems believe strongly in the concept of proper price signals, and this belief is illustrated by the extensive level of time-of-day pricing offered to commercial and industrial customers and the real-time pricing alternative made available in the special contracts cited in the response to Item 1.

For policy consideration by the Commission, offering a complete, immediate time-of-day rate option is simply more problematic.

First, there are close to 500,000 residential customers in the EKPC system. That fact alone makes it difficult to immediately offer such rates to that many customers.

Second, as shown in the response to Item 3, the costs to provide the metering, database management, billing, hardware and software are significant. Moreover, the costs vary significantly from co-op to co-op. Two of our co-ops, Blue Grass Energy and Nolin RECC, which have invested millions of dollars in state-of-the-art Automated Meter Reading Systems, can offer time-of-day rates to residential customers without much in the way of incremental costs. In contrast, the remainder of our co-ops will expend significant sums of money to offer such rates. These cooperatives must be allowed to recoup such costs from the customers seeking time-of-day rates. Otherwise, customers uninterested in participating will subsidize those customers who choose to participate.

Third, Kentucky has maintained relatively low residential rates and the incremental difference between the on-peak and off-peak rate is not nearly as high as in other states. As a result, the incentive to shift load from on-peak periods to off-peak periods may be limited. That fact, coupled with the need to recover the incremental metering and program costs from participants, will serve to mitigate the level of savings for participants. To put this in perspective, in 2004 the average cost per kWh for a residential co-op customer on the EKPC system was about 7¢/kWh. Further assume the

incremental difference in the on-peak and off-peak rate to be 5¢/kWh. As indicated in the response to Item 3, the incremental cost of the time-of-day meter for co-ops requiring the meter, will be a minimum of \$4 per month. For an average co-op customer using 1,100 kWh per month, assume the customer can shift 100 kWh of load to the off-peak, via programmable thermostats and timers on certain appliances. The customer will save \$5 (100 kWh x 5¢/kWh) on a \$77 monthly bill (i.e. 1,100 kWh x 7¢/kWh). However, that will be offset by the incremental metering charge of \$4 per month, resulting in a net benefit of \$1 per month, or a 1.3% savings. It should be noted that the \$1 per month savings assumes a significant shift (100 kWh) in load from the on-peak period to the off-peak period. The 100 kWh would amount to about 20 percent of the on-peak load (100 kWh divided by 550 kWh on-peak, or 18.2%). Moreover, shifting 100 kWh per month does not necessarily translate into a direct reduction in peak demand. In fact, the two most significant elements of load shift at the time of peak, the heating/cooling system and the water heater, would require a lifestyle change during cold/hot weather to effectuate a direct impact on peak load. As EKPC and its Member Systems have not had an extensive amount of experience with residential time-of-use rates, it is difficult to assess the degree to which peak load would be affected.

Given these factors, EKPC and its Member Systems recommend that the Commission:

- Endorse the time-of-day pricing and demand response principles set forth in Section 1252 as it relates to non-residential customers. Utilities should be required to consider offering real-time pricing on a case-by-case basis to large industrial customers (i.e. with demands of 5 MW or more).
- Endorse the demand response aspect of Section 1252 and recognize all demand-side management efforts by EKPC and its Member Systems as being in conformance with this requirement.

- If time-of-use rates become available to residential customers, the Commission should strongly encourage application of new demand-side management efforts including the purchase and installation of programmable thermostats and “smart” appliances with timers.
- Encourage, but do not mandate, utilities to offer time-of-day rates to residential customers. Set forth a reasonable time period for utilities to move toward the goal of offering such rates to all residential customers. In every instance, the proposed time-of-day rate must recover the incremental cost of metering and associated distribution upgrade costs.

Interconnection

**EAST KENTUCKY POWER COOPERATIVE, INC.
AND ITS MEMBER SYSTEMS
PSC ADMINISTRATIVE CASE NO. 2006-00045
RESPONSES TO INITIAL DATA REQUESTS**

**PUBLIC SERVICE COMMISSION INITIAL DATA REQUEST DATED 02/24/06
REQUEST 1**

RESPONSIBLE PERSON: Paul A. Dolloff
COMPANY: East Kentucky Power Cooperative, Inc. and its
Member Systems

Interconnection

Request 1. Provide, in narrative form, with all relevant calculations, workpapers and assumptions included, what you see as the potential impact of implementing the interconnection standard included in Section 1254 of EPAct in Kentucky. At a minimum, the response should address the costs of implementation, financial impact on the utility, who should bear the costs of implementation, and possible rate making and rate treatment issues.

Response 1. Electric utilities have long recognized the need for interconnection standards to ensure safe and reliable operation. Though operational standards vary among electric utilities, the very nature of an interconnected electric grid in North America requires that all electric utilities function in harmony. An important piece to maintaining this system are interconnection standards.

Interconnection standards have been in place as long as electric utilities have been in existence. Currently, there are two basic types of interconnection standards: one to interconnect the electric utility system with a generating system and one to connect to a non-generating system.

Interconnection standards dealing with generating systems have traditionally been available to accommodate independent power producers (IPP). Because IPPs generally need access to transmission systems, generating interconnection standards involve high voltage systems.

With recent technology developments in small generating systems, generating interconnection standards have needed to address interconnecting with a utility's distribution system. Small generating systems, generally less than 2 MW, have come to be referred to as either distributed generation (DG) or distributed resources (DR). To help with this interconnection effort, the Institute of Electrical and Electronics Engineers (IEEE) with the aid of the US Department of Energy (DOE) developed and released an interconnection standard for DR systems with electric utility distribution systems. With that, most electric utilities have a generating interconnection standard for DR systems.

Interconnection standards dealing with non-generation systems have long been available to ensure safe and reliable operation between physically adjacent electric utilities where interconnection points exist that allow for the free flow of electricity between the electric utilities.

Interconnection standards are highly technical documents and outline specific operating requirements and equipment settings for proper coordination among the various and numerous systems.

Non-Generating Interconnections

Below is a list of the major topics that should be considered and included in any electric utility's non-generating interconnection standard.

Non-Generating Interconnection Issues

- Tap connection definition and requirements
- Looped connection definition and requirements
- Network connection definition and requirements
- Voltage levels
- Power factor requirements
- Frequency range
- Power quality
- Generation
- Information required
- Requester's facility equipment
- System protection
- Revenue metering and telemetry requirements
- Communications
- Inspection requirements
- Maintenance requirements
- Coordination with other codes, standards, and agencies
- Indemnification

Generating Interconnections

Below is a list of the major topics that should be considered and included in any electric utility's generating interconnection standard.

Generating Interconnection Issues

- Design requirements for connection
- Requirements for operation
- Protective relaying
- Supervisory control and data acquisition
- Communications
- Costs incurred
- Design review
- Inspection, maintenance, and coordination with other codes, standards, and agencies
- Final documentation
- Approval
- Special provisions
- Indemnification

Net Metering Interconnections

In 2005, Kentucky enacted a net metering law that allows customers with photovoltaic (PV) solar generation systems to be compensated for their energy at retail rates. Accompanying the net metering tariffs were the interconnection standards. For generating systems other than PV, the generating interconnection standards apply.

North American Electric Reliability Council

Virtually all electric utilities are governed by the North American Electric Reliability Council (NERC) whose mission is “to ensure that the bulk electric system in North America is reliable, adequate, and secure.” NERC is comprised of eight Regional Reliability Councils of which East Kentucky Power and the Member Systems are members of the Southeastern Electric Reliability Council (SERC). Of its many responsibilities, SERC sets standards for the reliable operation and planning of the bulk electric system.

One of these standards is the NERC Reliability Standard FAC-001, “Facility Connection Requirements.” The table of contents from this document is given below.

Facility Connection Requirements
NERC Reliability Standard FAC-001
Table of Contents

- I. Introduction
- II. General Requirements of Compliance
- III. Facility Connection Requirements Document Topics
 - 1. Impact Study Requirements
 - 2. Provision for Future Changes
 - 3. Voltage and Power Factor Control
 - 4. Generation Control
 - 5. Short Circuit Conditions
 - 6. System Protection and Other Controls
 - 7. System Protection and Other Controls
 - 8. Telemetry and Metering

9. Supervisory Control and Data Acquisition (SCADA)
10. System Grounding
11. Equipment Ratings
12. Reactive Power Requirements
13. Power Quality
14. Synchronizing Facilities
15. Maintenance Coordination
16. Maintenance Requirements
17. Abnormal Frequency and Voltage Operation
18. Inspection Requirements
19. Communications During Normal and Emergency Conditions
20. Responsibilities During Emergency Conditions

Implementation

The most effective way for Kentucky to develop a statewide interconnection standard would be to form a committee consisting of representatives from each of the electric utilities serving in the Commonwealth of Kentucky. Because each utility has different operational, equipment, communication, etc. standards, statewide interconnection standards should be developed under a consensus and negotiation effort among all affected utilities.

Developing a statewide interconnection standard under this scenario would require a sizable time commitment by all those involved. The development of the IEEE 1547 interconnection standard addressing only distributed generation interconnecting with distribution systems took over four years to complete. For completeness of all types of interconnections, a minimum of three standards would be needed for a statewide effort. These three would be:

- Non-generating interconnections
- Generating interconnections
- Net metering interconnections

Other interconnections could be developed such as interconnecting generating facilities to distribution systems for non-net metering installations.

Given the magnitude of the work and the number of parties involved, the KY PSC should expect this to be a minimum of a two-year effort. For that two-year period, each participating utility would commit staff resources of 8 man-hours per week for a total of 400 hours per year or approximately \$17,000 per year. Including 20% for travel expenses, the total comes to \$20,400 per year.

Benefits

Given that all electric utilities currently serving in the Commonwealth of Kentucky already have interconnections in place, the KY PSC should determine if the development of a series of statewide interconnections is a duplication of effort. Given the required commitment level by all involved, this may not be the most effective use of available resources. Additionally, nearly all of the electric utilities serving in Kentucky must adhere to interconnection standards already developed and in place by NERC and one of its associated Regional Reliability Councils.

It should be recognized that a statewide interconnection standard, though comprehensive in scope, cannot include all necessary details for a safe and reliable interconnection. In all cases, the local utility will have specific requirements that must be obtained from the serving utility. Issues that a statewide document cannot mandate but are required for a safe and reliable interconnection include communication protocol, choice of

telecommunication technology, supervisory control and data acquisition specifications (SCADA) interfacing equipment recommendations, automatic generation control and economic dispatch interfacing with the utility's energy management system (EMS), ancillary service offerings, pricing signals, etc. With that, a statewide interconnection can address all topics to be considered but cannot replace existing interconnection standards within each utility. As a consequence, the creation and adoption of a statewide interconnection standard would require each utility to revise their current interconnection standards and documents accordingly.

A potential benefit to having a series of statewide interconnection standards may be that independent power producers (IPP) looking to locate in Kentucky, could go to the KY PSC website to find the interconnection requirements that would apply statewide. This would provide easy means for potential IPPs to obtain interconnection regulations without having to determine the serving utility and its associated rules and regulations.

Having a standardized set of interconnection rules that apply to all electric utilities serving in the Commonwealth of Kentucky means that most interconnection rules and regulations would be independent of the serving utility and most practices and requirements would already be established. This may become important when IPPs are considering locations.

IEEE 1547

East Kentucky Power is the nationwide representative for the National Rural Electric Cooperative Association (NRECA) on the development of IEEE 1547, "IEEE Standard for Interconnecting Distributed Resources with Electric Power Systems." Collectively, all electric cooperatives serve two-thirds of the nation's land mass and own 49% of all

domestic electric distribution assets. Therefore, the introduction of distributed generation of electric distribution systems was an extremely high priority for NRECA. Recognized for its leadership, NRECA and DOE have asked East Kentucky Power to serve as a technical lead on IEEE 1547 and companion documents supporting the entire IEEE 1547 family of documents.

IEEE 1547 is restricted to generating system installations no greater than 10 MVA interconnected on typical primary and/or secondary distribution voltages. This means that transmission interconnections are out of the scope of IEEE 1547. Additionally, generating installations greater than 10 MVA are also out of the scope for IEEE 1547.

The net metering tariffs currently in place for the East Kentucky Member Systems already stipulate that adherence to IEEE 1547 is required. Again, IEEE does not apply to transmission level voltages. Therefore, there would be no cost by having the Commonwealth of Kentucky adopt IEEE 1547 into statewide interconnection standards that apply to distributed generation installations within the scope of IEEE 1547.

**EAST KENTUCKY POWER COOPERATIVE, INC.
AND ITS MEMBER SYSTEMS
PSC ADMINISTRATIVE CASE NO. 2006-00045
RESPONSES TO INITIAL DATA REQUESTS**

**PUBLIC SERVICE COMMISSION INITIAL DATA REQUEST DATED 02/24/06
REQUEST 2**

RESPONSIBLE PERSON: Paul A. Dolloff
COMPANY: East Kentucky Power Cooperative, Inc. and its
Member Systems

Interconnection

Request 2. Provide a general discussion of what you perceive to be the pros and cons of implementing an interconnection standard in Kentucky and the policy issues that you believe the Interconnection standard presents for the Commission. Include discussion of the issues that must be addressed to comply with IEEE 1547.

Response 2. See response to Item 1.

**EAST KENTUCKY POWER COOPERATIVE, INC.
AND ITS MEMBER SYSTEMS
PSC ADMINISTRATIVE CASE NO. 2006-00045
RESPONSES TO INITIAL DATA REQUESTS**

**PUBLIC SERVICE COMMISSION INITIAL DATA REQUEST DATED 02/24/06
REQUEST 3**

**RESPONSIBLE PERSON: Paul A. Dolloff
COMPANY: East Kentucky Power Cooperative, Inc. and its
Member Systems**

Interconnection

Request 3. Identify any customer with on-site generation that is currently connected to your distribution system. Provide the customer's maximum demand in 2005 and current generating capacity.

Response 3.

On-Site Generation Installations

Currently there are three customers using the net metering tariff and one other customer connected to the Member Systems' distribution system, as shown in Table One below.

Table One On-Site Generation Connected To Distribution System

Customer Name	Member System	Installed Capacity	Maximum Demand in 2005
<u>Net Metering</u>			
Rosemary McCrady	Blue Grass Energy	1.9 kW	NA
Tom Lowery	Clark Energy	2.2 kW	NA
Cooperative Extension Agency	Owen Electric	0.7 kW	NA
<u>Other</u>			
Cox Interiors	Taylor County	4,000 kW	3,960 kW

Attachment 1

For All Counties Served
P.S.C. No. 29
Original Sheet No. 7
Canceling P.S.C. No. 28
Original Sheet No. 7

EAST KENTUCKY POWER COOPERATIVE, INC.

Section B

Availability

Available to all cooperative associations which are or shall be members of EKPC and which execute EKPC approved contracts with the ultimate consumers. The electric power and energy furnished hereunder shall be separately metered for each point of delivery.

Applicability

Applicable to cooperative associations and ultimate consumers willing to contract for demands of 500 kW or greater and a monthly minimum energy usage equal to or greater than 400 hours per kW of contract demand. Wholesale monthly minimum demand shall be agreed between the cooperative association and EKPC.

Monthly Rate

Demand Charge per kW of Minimum Demand	\$5.39
Demand Charge per kW of Billing Demand in Excess of Minimum Demand	\$7.82
Energy Charge per kWh	\$0.027325

Billing Demand

The billing demand (kilowatt demand) shall be the minimum demand plus any excess demand. Excess demand occurs when the ultimate consumer's highest demand during the current month, coincident with EKPC's system peak (coincident peak), exceeds the minimum demand. EKPC's system peak demand is the highest average rate at which energy is used during any fifteen minute interval in the below listed hours for each month and adjusted for power factor as provided herein:

<u>Months</u>	<u>Hours Applicable for Demand Billing - EST</u>
October through April	7:00 a.m. to 12:00 noon
May through September	5:00 p.m. to 10:00 p.m.

DATE OF ISSUE June 7, 2005 DATE EFFECTIVE: Service rendered on and after June 1, 2005

ISSUED BY [Signature] TITLE President & Chief Executive Officer

Issued by authority of an Order of the Public Service Commission c
Case No. 2004-00464 Dated May 24, 2005

PUBLIC SERVICE COMMISSION
OF KENTUCKY
EFFECTIVE
Pursuant to 807 KAR 5:011
SECTION 9 (1)

By [Signature]
Executive Director

For All Counties Served
P.S.C. No. 29
Original Sheet No. 8
Canceling P.S.C. No. 28
Original Sheet No. 8

EAST KENTUCKY POWER COOPERATIVE, INC.

Section B (con't.)

Minimum Monthly Charge

The minimum monthly charge shall not be less than the sum of (a) and (b) below:

- (a) The product of the minimum demand multiplied by the demand charge, plus
- (b) The product of the minimum demand multiplied by 400 hours and the energy charge per kWh minus the fuel base per kWh.

DATE OF ISSUE June 7, 2005 DATE EFFECTIVE: Service rendered on and after June 1, 2005
ISSUED BY *Roy M. Salt* TITLE President & Chief Executive Officer
Issued by authority of an Order of the Public Service Commission of Kentucky in
Case No. 2004-00464 Dated May 24, 2005

PUBLIC SERVICE COMMISSION
OF KENTUCKY
EFFECTIVE 6/1/2005
SECTION 9 (1)
By *[Signature]*
Executive Director

For All Counties Served
P.S.C. No. 29
Original Sheet No. 9
Canceling P.S.C. No. 28
Original Sheet No. 9

EAST KENTUCKY POWER COOPERATIVE, INC.

Section C

Availability

Available to all cooperative associations which are or shall be members of EKPC and which execute EKPC approved contracts with the ultimate consumers. The electric power and energy furnished hereunder shall be separately metered for each point of delivery.

Applicability

Applicable to cooperative associations and ultimate consumers willing to contract for demand of 500 kW or greater and a monthly energy usage equal to or greater than 400 hours per kW of billing demand.

Monthly Rate

Demand Charge per kW of Billing Demand	\$5.39
Energy Charge per kWh	\$0.027325

DATE OF ISSUE June 7, 2005 DATE EFFECTIVE: Service rendered on and after June 1, 2005

ISSUED BY Ray M. Falk TITLE President & Chief Executive Officer

Issued by authority of an Order of the Public Service Commission of Kentucky in
Case No. 2004-00464 Dated May 24, 2005

PUBLIC SERVICE COMMISSION	
OF KENTUCKY	
EFFECTIVE	
6/1/2005	
KRS 192.007 KAR 5:011	
SECTION 9 (1)	
By <u>[Signature]</u>	Executive Director

For All Counties Served
P.S.C. No. 29
Original Sheet No. 10
Canceling P.S.C. No. 28
Original Sheet No. 10

EAST KENTUCKY POWER COOPERATIVE, INC.

Section C (con't.)

Billing Demand

The kilowatt demand shall be the greater of (a) or (b) listed below:

- (a) The contract demand
- (b) The ultimate consumer's highest demand during the current month or preceding eleven months coincident with EKPC's system peak demand. EKPC's system peak demand is the highest average rate at which energy is used during any fifteen minute interval in the below listed hours for each month and adjusted for power factor as provided herein:

<u>Months</u>	<u>Hours Applicable for Demand Billing - EST</u>
October through April	7:00 a.m. to 12:00 noon 5:00 p.m. to 10:00 p.m.
May through September	10:00 a.m. to 10:00 p.m.

Minimum Monthly Charge

The minimum monthly charge shall not be less than the sum of (a) and (b) below:

- (a) The product of the billing demand multiplied by the demand charge, plus
- (b) The product of the billing demand multiplied by 400 hours and the energy charge per kWh minus the fuel base per kWh.

<p>DATE OF ISSUE <u>June 7, 2005</u> DATE EFFECTIVE: <u>Service rendered on and after June 1, 2005</u></p> <p>ISSUED BY <u>[Signature]</u> TITLE <u>President & Chief Executive Officer</u></p> <p>Issued by authority of an Order of the Public Service Commission of Kentucky in Case No. <u>2004-00464</u> Dated <u>May 24, 2005</u></p>	<p>PUBLIC SERVICE COMMISSION OF KENTUCKY</p> <p>EFFECTIVE 6/1/2005 ISSUED BY ORDER 07 KAR 5:011 SECTION 9 (1)</p> <p>By <u>[Signature]</u> Executive Director</p>
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FORM FOR FILING RATE SCHEDULES

FOR ENTIRE TERRITORY SERVED
Community, Town or CitySALT RIVER ELECTRIC

Name of Issuing Corporation

P.S.C. No. 10

3rd Revised Sheet No. 96

Canceling P.S.C. No. 10

2nd Original Sheet No. 96CLASSIFICATION OF SERVICELARGE POWER 5,000 KW - 9,999 KWSCHEDULE LPR-1-B2APPLICABLE

In all territory served.

AVAILABILITY

Applicable to contracts with contract demands of 5,000 KW - 9,999 KW with a monthly energy usage equal to or greater than 400 hours per KW of contract demand and who are served by a dedicated feeder(s) from a substation, and metered no more than one span from the substation, and also own the distribution facilities past the meter location. These contracts will be between the Cooperative Association and the consumer subject to approval of East Kentucky Power Cooperative.

RATES PER MONTH

<u>CONSUMER CHARGE</u>	\$2980.00
<u>DEMAND CHARGE</u>	\$5.39 per KW of contract demand \$7.82 per KW for all billing demand in excess of contract demand.
<u>ENERGY CHARGE</u>	\$.029187 per KWH

DETERMINATION OF BILLING DEMAND

The billing demand shall be the greater of (a) or (b) listed below:

(a) The contract demand.

(b) The ultimate consumer's highest demand during the current month. The consumer's peak demand is the highest average rate at which energy is used during any fifteen-minute interval in the below listed hours for each month (and adjusted for power factor as provided herein):

<u>Months</u>	<u>Hours Applicable for Demand Billing-EST</u>
October through April	7:00 A.M. to 12:00 Noon 5:00 P.M. to 10:00 P.M.
May through September	10:00 A.M. to 10:00 P.M.

Date of Issue: June 17, 2005

Date Effective: June 01, 2005

Issued By _____

Larry Hicks

Tj _____

By _____

Executive Director

Issued by authority of an order of the Public Service Commission of Kentucky in
Case No. 2004-00480

Dated: May 24, 2005.

PUBLIC SERVICE COMMISSION
OF KENTUCKY
EFFECTIVE
6/1/2005
PURSUANT TO 807 KAR 5:011

SECTION 9 (1)

FORM FOR FILING RATE SCHEDULES

FOR ENTIRE TERRITORY SERVED
Community, Town or City

SALT RIVER ELECTRIC

Name of Issuing Corporation

P.S.C. No. 10

3rd Revised Sheet No. 97

Canceling P.S.C. No. 10

2nd Original Sheet No. 97

CLASSIFICATION OF SERVICE

LARGE POWER 5,000 KW - 9,999 KW

SCHEDULE LPR-1-B2 (Cont.)

POWER FACTOR

The consumer agrees to maintain unity power factor as nearly as practicable. The cooperative reserves the right to measure such power factor at any time. Should such measurement indicate that the power factor at the time of this maximum demand is less than 90% the demand for billing purpose shall be the demand as indicated or recorded by the demand meter multiplied by 90% and divided by the percent power factor.

*FUEL ADJUSTMENT CLAUSE

The above rate may be increased or decreased by an amount per KWH equal to the fuel adjustment amount per KWH as billed by the Wholesale Power Supplier plus an allowance for line losses. The allowances for line losses will not exceed 10% and is based on a twelve month moving average of such losses.

PUBLIC SERVICE COMMISSION
OF KENTUCKY
EFFECTIVE
6/1/2005

PURSUANT TO 807 KAR 5:011

SECTION 9(1)

Date Effective: June 01, 2005

Date of Issue: June 17, 2005

Issued By

Larry Hicks

T: _____
By: _____

Executive Director

Issued by authority of an order of the Public Service Commission of Kentucky in
Case No. 2004-00480

Dated: May 24, 2005.

FORM FOR FILING RATE SCHEDULES

FOR ENTIRE TERRITORY SERVED
Community, Town or City

SALT RIVER ELECTRIC
Name of Issuing Corporation

P.S.C. No. 10
3rd Revised Sheet No. 98
Canceling P.S.C. No. 10
2nd Original Sheet No. 98

CLASSIFICATION OF SERVICE

LARGE POWER 5,000 KW - 9,999 KW SCHEDULE LPR-1-B2 (Cont.)

MINIMUM CHARGE

The computed minimum monthly charge shall not be less than the sum of (a), (b), (c) and (d) below:

- (a) The product of the contract demand multiplied by the contract demand charge, plus
- (b) the product of the excess demand multiplied by the excess demand rate, plus
- (c) the product of the contract demand multiplied by 400 hours and the energy charge per KWH, plus
- (d) the consumer charge.

CONDITION OF SERVICE

An "Agreement for Purchased Power" shall be executed by the consumer for service under this schedule.

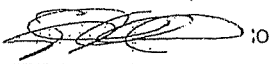
CHARACTER OF SERVICE

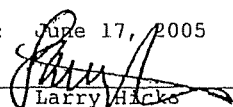
Three phase 60 hertz at voltage as agreed to in the "Agreement for Purchased Power."

TERMS OF PAYMENT

All of the above rates are net, the gross being five percent (5%) higher. In the event that the current monthly bill is not paid within 15 days from the date of the bill, the gross rates shall apply.

PUBLIC SERVICE COMMISSION
OF KENTUCKY
EFFECTIVE
6/1/2005
PURSUANT TO 807 KAR 5:011
SECTION 9 (1)

T: _____ :0
By: 
Executive Director
Commission of Kentucky in
Dated: May 24, 2005

Date of Issue: June 17, 2005
Issued By: 
Larry Hicks

Date Effective: June 01, 2005

FORM FOR FILING RATE SCHEDULES

FOR ENTIRE TERRITORY SERVED
Community, Town or City

SALT RIVER ELECTRIC

Name of Issuing Corporation

P.S.C. No. 10

3rd Revised Sheet No. 99

Canceling P.S.C. No. 10

2nd Original Sheet No. 99

CLASSIFICATION OF SERVICE

LARGE POWER 5,000 KW - 9,999 KW

SCHEDULE LPR-1-C2

APPLICABLE

In all territory served.

AVAILABILITY

Applicable to contracts with contract demands of 5,000 KW - 9,999 KW with a monthly energy usage equal to or greater than 400 hours per KW of contract demand and who are served by a dedicated feeder(s) from a substation, and metered no more than one span from the substation, and also own the distribution facilities past the meter location. These contracts will be between the Cooperative Association and the consumer subject to approval of East Kentucky Power Cooperative.

RATES PER MONTH

CONSUMER CHARGE \$2980.00
DEMAND CHARGE \$ 5.39 per KW of contract demand
ENERGY CHARGE \$.029187 per KWH

DETERMINATION OF BILLING DEMAND

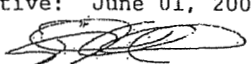
The billing demand shall be the greater of (a) or (b) listed below:

(a) The contract demand.

(b) The ultimate consumer's highest demand during the current month or preceding eleven months. The consumer's peak demand is the highest average rate at which energy is used during any fifteen-minute interval in the below listed hours for each month (and adjusted for power factor as provided herein):

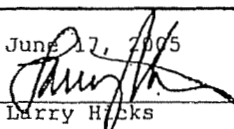
<u>Months</u>	<u>Hours Applicable for Demand Billing - EST</u>
October through April	7:00 A.M. to 12:00 Noon 5:00 P.M. to 10:00 P.M.
May through September	10:00 A.M. to 10:00 P.M.

PUBLIC SERVICE COMMISSION
OF KENTUCKY
EFFECTIVE
6/1/2005
PURSUANT TO 807 KAR 5:011
SECTION 9 (1)

By  0
Executive Director

Date of Issue: June 17, 2005

Date Effective: June 01, 2005

Issued By 
Larry Hicks

Issued by authority of an order of the Public Service Commission of Kentucky in
Case No. 2004-00480 Dated: May 24, 2005.

FORM FOR FILING RATE SCHEDULES

FOR ENTIRE TERRITORY SERVED
Community, Town or City

SALT RIVER ELECTRIC
Name of Issuing Corporation

P.S.C. No. 10
3rd Revised Sheet No. 100
Canceling P.S.C. No. 10
2nd Original Sheet No. 100

CLASSIFICATION OF SERVICE

LARGE POWER 5,000 KW - 9,999 KW SCHEDULE LPR-1-C2 (Cont.)

POWER FACTOR

The consumer agrees to maintain unity power factor as nearly as practicable. The Cooperative reserves the right to measure such power factor at any time. Should such measurement indicate that the power factor at the time of this maximum demand is less than 90% the demand for billing purpose shall be the demand as indicated or recorded by the demand meter multiplied by 90% and divided by the percent power factor.

*FUEL ADJUSTMENT CLAUSE

The above rate may be increased or decreased by an amount per KWH equal to the fuel adjustment amount per KWH as billed by the Wholesale Power Supplier plus an allowance for line losses.

PUBLIC SERVICE COMMISSION
OF KENTUCKY
EFFECTIVE

6/1/2005

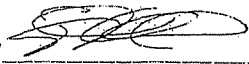
PURSUANT TO 807 KAR 5:011

SECTION 9(1)

Date of Issue: June 17, 2005

Date Effective: June 01, 2005

Issued By 
Larry Hicks

Ti 
By

Executive Director

Issued by authority of an order of the Public Service Commission of Kentucky in
Case No. 2004-00480

Dated: May 24, 2005.

For All Counties Served

P.S.C. No. 29

Original Sheet No. 11

Canceling P.S.C. No. 28

Original Sheet No. 11

EAST KENTUCKY POWER COOPERATIVE, INC.

Section D
Interruptible Service

Standard Rider

This Interruptible Rate is a rider to Rate Sections A, B, C, and E.

Applicable

In all territory served by EKPC.

Availability of Service

This schedule shall be made available at any load center, to any member cooperative where an ultimate "Customer" will contract for an interruptible demand of not less than 250 kW and not more than 20,000 kW, subject to a maximum number of hours of interruption per year and a notice period as listed below.

Monthly Rate

A monthly demand credit per kW is based on the following matrix:

<u>Notice Minutes</u>	<u>Annual Hours of Interruption</u>		
	<u>200</u>	<u>300</u>	<u>400</u>
10	\$2.70	\$3.15	\$3.60
60	\$2.25	\$2.70	\$3.15

DATE OF ISSUE June 7, 2005 DATE EFFECTIVE: Service rendered on and after June 1, 2005

ISSUED BY Ray M. Falk TITLE President & Chief Executive Officer

Issued by authority of an Order of the Public Service Commission of Kentucky in
Case No. 2004-00464 Dated May 24, 2005

PUBLIC SERVICE COMMISSION OF KENTUCKY	
6/1/2005	
SUBSISTENT TO 207 KAR 5:011 SECTION 9 (1)	
By <u>[Signature]</u>	Executive Director

For All Counties Served
P.S.C. No. 29
Original Sheet No. 12
Canceling P.S.C. No. 28
Original Sheet No. 12

EAST KENTUCKY POWER COOPERATIVE, INC.

Section D (con't.)

Determination of Measured Load - Billing Demand

The billing demand (kilowatt demand) is based on EKPC's system peak demand (coincident peak) which is the highest average rate at which energy is used during any fifteen minute interval in the below listed hours for each month and adjusted for power factor as provided herein:

<u>Months</u>	<u>Hours Applicable for Demand Billing - EST</u>
October through April	7:00 a.m. to 12:00 noon 5:00 p.m. to 10:00 p.m.
May through September	10:00 a.m. to 10:00 p.m.

The interruptible billing demand shall be equal to the amount by which the monthly billing demand exceeds the minimum billing demand as specified in the contract.

Conditions of Service for Customer Contract

1. The customer will, upon notification by the Cooperative, reduce his load being supplied by the Cooperative to the contract capacity level specified by the contract.
2. The Cooperative will endeavor to provide the Customer as much advance notice as possible of the interruption of service. However, the Customer shall interrupt service within the notice period as contracted.
3. Service will be furnished under the Cooperatives "General Rules and Regulations" or "Terms and Conditions" except as set out herein and/or provisions agreed to by written contract.
4. No responsibility of any kind shall attach to the Cooperative for, or on account of, any loss or damage caused by, or resulting from, any interruption or curtailment of this service.

DATE OF ISSUE June 7, 2005 DATE EFFECTIVE: Service rendered on and after June 1, 2005
ISSUED BY [Signature] TITLE President & Chief Executive Officer
Issued by authority of an Order of the Public Service Commission of Kentucky in
Case No. 2004-00464 Dated May 24, 2005

PUBLIC SERVICE COMMISSION OF KENTUCKY 6/1/2005 807 KAR 5:011 SECTION 9 (1) By <u>[Signature]</u> Executive Director

For All Counties Served
P.S.C. No. 29
Original Sheet No. 13
Canceling P.S.C. No. 28
Original Sheet No. 13

EAST KENTUCKY POWER COOPERATIVE, INC.

Section D (con't.)

5. The Customer shall own, operate, and maintain all necessary equipment for receiving electric energy and all telemetering and communications equipment, within the Customer's premises, required for interruptible service.
6. The minimum original contract period shall be one year and thereafter until terminated by giving at least six months previous written notice. The Cooperative may require a contract be executed for a longer initial term when deemed necessary by the size of the load and other conditions.
7. The Fuel Adjustment Clause, as specified in the General Wholesale Power Rate Schedule, is applicable.

Calculation of Monthly Bill

The monthly bill is calculated on the following basis:

- A. Sum of metering point charge and substation charge, plus
- B. Minimum billing demand in kW multiplied by the firm capacity rate, plus
- C. Interruptible billing demand in kW multiplied by interruptible rate, plus
- D. Energy usage in kWh multiplied by the energy rate.

Number and Duration of Interruptions

- A. Winter Season: There shall be no more than two (2) interruptions during any 24 hour calendar day. No interruption shall last more than six hours.
- B. Summer Season: There shall be no more than one (1) interruption during any 24 hour calendar day. No interruption shall last more than twelve hours.
- C. The maximum number of annual hours of interruption shall be in accordance with the customer contracted level of interruptible service.

DATE OF ISSUE June 7, 2005 DATE EFFECTIVE: Service rendered on and after June 1, 2005
ISSUED BY Ray M. Falk TITLE President & Chief Executive Officer
Issued by authority of an Order of the Public Service Commission of Kentucky in
Case No. 2004-00464 Dated May 24, 2005

PUBLIC SERVICE COMMISSION OF KENTUCKY	
6/1/2005 SECTION 9 (1)	
By <u>[Signature]</u>	Executive Director

For All Counties Served
P.S.C. No. 29
Original Sheet No. 14
Canceling P.S.C. No. 28
Original Sheet No. 14

EAST KENTUCKY POWER COOPERATIVE, INC.

Section D (con't.)

Charge for Failure to Interrupt

If Customer fails to interrupt load as requested by the Cooperative, the Cooperative shall bill the uninterrupted load at a rate equal to five (5) times the applicable firm power demand charge for that billing month. Uninterrupted load is equal to actual load during requested interruption minus firm load.

DATE OF ISSUE June 7, 2005 DATE EFFECTIVE: Service rendered on and after June 1, 2005

ISSUED BY *Ray M. Falk* TITLE President & Chief Executive Officer

Issued by authority of an Order of the Public Service Commission of Kentucky in
Case No. 2004-00464 Dated May 24, 2005

PUBLIC SERVICE COMMISSION	
OF KENTUCKY	
EFFECTIVE	
6/1/2005	
PURSUANT TO 2007 KAR 5:011	
SECTION 9 (1)	
By <u><i>[Signature]</i></u>	-----
Executive Director	

For All Counties Served
P.S.C. No. 29
Original Sheet No. 17
Canceling P.S.C. No. 28
Original Sheet No. 17

EAST KENTUCKY POWER COOPERATIVE, INC.

Section F

Voluntary Interruptible Service

Standard Rider

This Voluntary Interruptible Service is a rider to Rate Sections A, B, C, E, G and special contracts.

Applicable

In all territory served by EKPC.

No interruptible demand which is already under contract under any other Interruptible Rider is eligible for this service.

Availability of Service

This schedule shall be made available at any load center, to any member cooperative where an ultimate "Customer" is capable of interrupting at least 1,000 kW upon request and has contracted with the Member System to do so under a retail contract rider.

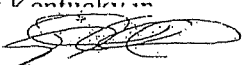
Conditions of Service

1. Any request for interruption under this Rider shall be made by EKPC through its Member Cooperative.
2. Each interruption will be strictly voluntary. The Member Cooperative may accept or decline the terms of the interruption offered by EKPC.
3. No responsibility of any kind shall attach to EKPC for, or on account of, any loss or damage caused by, or resulting from, any interruption or curtailment of this service.
4. The Customer shall agree by contract to own, operate, and maintain all necessary equipment for receiving electric energy and all telemetering and communications equipment, within the Customer's premises, required for interruptible service.
5. It is the Member Cooperative's responsibility to notify the Customer and execute an

DATE OF ISSUE, June 7, 2005 DATE EFFECTIVE: Service rendered on and after June 7, 2005

ISSUED BY Ray M. Falk TITLE President & Chief Executive Officer

Issued by authority of an Order of the Public Service Commission of Kentucky in
Case No. 2004-00464 Dated May 24, 2005

PUBLIC SERVICE COMMISSION OF KENTUCKY	
6/1/2005	
PURSUANT TO 807 KAR 5:011 SECTION 9 (1)	
By	
	Executive Director

For All Counties Served
P.S.C. No. 29
Original Sheet No. 17.1
Canceling P.S.C. No. 28
Original Sheet No. 17.1

EAST KENTUCKY POWER COOPERATIVE, INC.

interruption request from EKPC. Therefore, EKPC and the Member Cooperative shall mutually agree upon the manner by which EKPC shall notify the Customer of a request for interruption. Such an agreement shall include the means by which EKPC shall communicate the interruption request (e.g. email, phone, pager, etc.) and the Customer's point of contact to receive such a request.

- 6. EKPC will attempt to provide as much advance notice as possible for requests for interruption. However, upon the Customer's acceptance of the Terms of Interruption the Customer's load shall be interrupted with as little as one (1) hour of advance notification.
- 7. EKPC reserves the right to require verification of a Customer's ability to interrupt its load.
- 8. The Member Cooperative is not eligible for the Interruption Credits for any interruption when the Customer's interruptible load is down for other reasons during the period of the requested interruption. Such down time would include any event outside of the Customer's normal operating circumstances such as planned or unplanned outages due to renovation, repair, vacation, refurbishment, renovation, strike, or force majeure.

Interruptible Customer Data Report

The Member Cooperative shall furnish to EKPC an Interruptible Customer Data Report for each of its eligible Customers. Such a report shall include such information as:

- 1. The maximum number of hours per day and the time of day that the Customer has the ability to interrupt.
- 2. The maximum number of days and the maximum number of consecutive days that the Customer has the ability to interrupt.
- 3. The maximum interruptible demand and the minimum interruptible demand by the Customer upon request.
- 4. The minimum price at which each Customer is willing to interrupt.

Demand and Energy Interruption

The Customer will agree by contract, within an agreed time after receiving notice, to comply to the extent possible with EKPC's request to interrupt load. EKPC is the sole judge of the need for

DATE OF ISSUE June 7, 2005 DATE EFFECTIVE: Service rendered on and effective 6/1/2005

ISSUED BY [Signature] TITLE President & Chief Executive Officer

Issued by authority of an Order of the Public Service Commission of
Case No. 2004-00464 Dated May 24, 2005

PUBLIC SERVICE COMMISSION OF KENTUCKY	
PURSUANT TO 807 KAR 5:011 SECTION 9 (1)	
By <u>[Signature]</u>	Executive Director

For All Counties Served
P.S.C. No. 29
Original Sheet No. 17.2
Canceling P.S.C. No. 28
Original Sheet No. 17.2

EAST KENTUCKY POWER COOPERATIVE, INC.

interruption of load. EKPC is the sole judge of the amount of interruptible demand provided by the Customer, based on the following calculation:

The average of the integrated fifteen-minute demand for the two hours prior to the hour immediately preceding the call for interruption will be used as the basis for establishing the existing demand level. The hourly interruptible demands for each customer will be the difference between the existing demand level and the actual demand measured during each hour of the interruption period. The interrupted energy of each interruption period shall be the sum of the hourly interrupted demands. These types of interruptions will cover a period of no more than six hours.

For interruptions longer than six hours in duration, the Customer's average load usage for the same hours as the interruption hours in the two preceding business days prior to the day of notice will be used as the basis for determining the demand level for interruption. The average hourly usage for these business days, based on the average integrated fifteen minute demand intervals, minus the actual load during the interruption period will equal the amount of interruptible load. The interrupted energy of each interruption period shall be the sum of the hourly interrupted demands.

Terms of Interruption

For each interruption request, EKPC shall identify the Customer to be interrupted. EKPC shall inform the Member Cooperative or each Customer of an interruption request in accordance with the agreed upon method of notification. The Terms of Interruption shall include the following:

1. The time at which each interruption shall begin is to be established by EKPC. At least one (1) hour of advance notice of each request for interruption shall be provided by EKPC.
2. The duration in clock hours of the interruption request is to be established by EKPC.
3. The current price and the potential savings. This price will be determined by EKPC on a case by case basis and will be based on a percentage of the market price of power at the time of interruption.
4. The Member Cooperative shall specify or arrange for the Customer to specify:
 - a. The maximum demand in kW that will be interrupted.

DATE OF ISSUE June 7, 2005 DATE EFFECTIVE: Service rendered on and after June 1, 2005

ISSUED BY [Signature] TITLE President & Chief Executive Officer

Issued by authority of an Order of the Public Service Commission of Kentucky in
Case No. 2004-00464 Dated May 24, 2005

PUBLIC SERVICE COMMISSION OF KENTUCKY	
6/1/2005	
PURSUANT TO 807 KAR 5:011 SECTION 9 (1)	
By <u>[Signature]</u>	Executive Director

For All Counties Served
P.S.C. No. 29
Original Sheet No. 17.3
Canceling P.S.C. No. 28
Original Sheet No. 17.3

EAST KENTUCKY POWER COOPERATIVE, INC.

- b. The maximum firm demand that the Customer will purchase through the Member Cooperative during the interruption.

Interruption Credits

The interruption credit for each interruption period shall be equal to the interrupted energy MWh times an amount equal to 110% by which the quoted price for each interruption exceeds the Customer's regular tariff rate. The sum of the interruption credits for the billing month will be allocated as follows:

1. The Member Cooperative's account with EKPC will be credited in the amount of 10% of the credit to the Customer.
2. The interruption credit to the Customer shall be equal to the product of the interrupted energy multiplied by the interruption price for each interruption. This amount will be credited to the Member Cooperative's account with EKPC and passed along to the Customer.

Failure to Interrupt

For those Customers failing to interrupt a minimum of 80% of their agreed amount of interruptible load of 5,000 kW or greater, an excess energy charge will be applicable. This excess energy is equal to the difference of 80% of the interruptible load minus the interrupted load. Excess energy shall be charged to the Customer at a price equal to 125% of the interruption price plus the standard rate applicable to this load.

Term

The minimum original contract period shall be one (1) year and shall remain in effect thereafter until either party provides to the other at least thirty (30) days previous written notice.

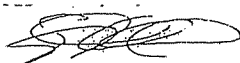
Interruption Implementation Procedure

Voluntary interruptions will be implemented based on data developed from the Interruptible Customer Data Report. EKPC personnel will match the interruption scenario with the interruptible customers' profiles to determine interruption priority and sequence.

DATE OF ISSUE June 7, 2005 DATE EFFECTIVE: Service rendered on and after June 1, 2005

ISSUED BY Ray M. Falk TITLE President & Chief Executive Officer

Issued by authority of an Order of the Public Service Commission of
Case No. 2004-00464 Dated May 24, 2005

PUBLIC SERVICE COMMISSION OF KENTUCKY	
EFFECTIVE 6/1/2005	
PURSUANT TO 807 KAR 5:011 SECTION 9 (1)	
By	
	Executive Director

For All Counties Served

P.S.C. No. 29

Original Sheet No. 5

Canceling P.S.C. No. 28

Original Sheet No. 5

EAST KENTUCKY POWER COOPERATIVE, INC.

Section A

Availability

Available to all cooperative associations which are or shall be members of EKPC. The electric power and energy furnished hereunder shall be separately metered for each point of delivery.

Applicability

Applicable to all power usage at the load center not subject to the provisions of Sections B, C, and E of this tariff.

Monthly Rate - Per Load Center

Demand Charge per kW of billing demand	\$7.82
Energy Charge per kWh	\$0.027325

Billing Demand

The billing demand (kilowatt demand) is based on EKPC's system peak demand (coincident peak) which is the highest average rate at which energy is used during any fifteen minute interval in the below-listed hours for each month and adjusted for power factor as provided herein:

<u>Months</u>	<u>Hours Applicable for Demand Billing - EST</u>
October through April	7:00 a.m. to 12:00 noon 5:00 p.m. to 10:00 p.m.
May through September	10:00 a.m. to 10:00 p.m.

Billing demand applicable to this section is equal to the load center's contribution to EKPC's system peak demand minus the actual demands of Section B, Section C, and Section E participants coincident with EKPC's system peak demand.

DATE OF ISSUE June 7, 2005 DATE EFFECTIVE: Service rendered on and after June 1, 2005

ISSUED BY [Signature] TITLE President & Chief Executive Officer

Issued by authority of an Order of the Public Service Commission
Case No. 2004-00464 Dated May 24, 2005

PUBLIC SERVICE COMMISSION OF KENTUCKY	
EFFECTIVE	
PURSUANT TO 807 KAR 5:011	
SECTION 9 (1)	
By <u>[Signature]</u>	Executive Director

For All Counties Served
P.S.C. No. 29
Original Sheet No. 6
Canceling P.S.C. No. 28
Original Sheet No. 6

EAST KENTUCKY POWER COOPERATIVE, INC.

Section A (con't.)

Billing Energy

Billing energy applicable to this section is equal to the total energy provided at the load center minus the actual energy provided to Section B, Section C, and Section E participants.

DATE OF ISSUE June 7, 2005 DATE EFFECTIVE: Service rendered on and after June 1, 2005

ISSUED BY Ray M. Halk TITLE President & Chief Executive Officer

Issued by authority of an Order of the Public Service Commission c
Case No. 2004-00464 Dated May 24, 2005

PUBLIC SERVICE COMMISSION OF KENTUCKY	
EFFECTIVE _____	
PURSUANT TO 807 KAR 5:011	
SECTION 9 (1)	
By _____	Executive Director

For All Counties Served

P.S.C. No. 29

Original Sheet No. 15

Canceling P.S.C. No. 28

Original Sheet No. 15

EAST KENTUCKY POWER COOPERATIVE, INC.

Section E

Availability

Available to all cooperative associations which are or shall be members of EKPC. The electric power and energy furnished hereunder shall be separately metered for each point of delivery.

Applicability

Applicable to all power usage at the load center not subject to the provisions of Section A, Section B, or Section C of this tariff.

Monthly Rate - Per Load Center

A cooperative association may select either Option 1 or Option 2 of this section of the tariff to apply to all load centers. The cooperative association must remain on a selected option for at least one (1) year and may change options, no more often than every twelve (12) months, after giving a minimum notice of two (2) months.

	<u>Option 1</u>	<u>Option 2</u>
Demand Charge per kW of Billing Demand	\$6.92	\$5.22
Energy Charge per kWh		
On-Peak kWh	\$0.027620	\$0.034684
Off-Peak kWh	\$0.027118	\$0.027118

On-peak and off-peak hours are provided below:

<u>Months</u>	<u>On-Peak Hours - EST</u>	<u>Off-Peak Hours - EST</u>
October through April	7:00 a.m. to 12:00 noon 5:00 p.m. to 10:00 p.m.	12:00 noon to 5:00 p.m. 10:00 p.m. to 7:00 a.m.
May through September	10:00 a.m. to 10:00 p.m.	10:00 p.m. to 10:00 a.m.

DATE OF ISSUE June 7, 2005 DATE EFFECTIVE: Service rendered on and after June 1, 2005

ISSUED BY Ray M. Talk TITLE President & Chief Executive Officer

Issued by authority of an Order of the Public Service Commission of Kentucky in
Case No. 2004-00464 Dated May 24, 2005

PUBLIC SERVICE COMMISSION OF KENTUCKY	
6/1/2005	
REGULATORY OFFICE 807 KAR 5:011 SECTION 9 (1)	
By <u>[Signature]</u>	Executive Director

For All Counties Served

P.S.C. No. 29

Original Sheet No. 16

Canceling P.S.C. No. 28

Original Sheet No. 16

EAST KENTUCKY POWER COOPERATIVE, INC.

Section E (con't.)

Billing Demand

The billing demand (kilowatt demand) is based on EKPC's system peak demand (coincident peak) which is the highest average rate at which energy is used during any fifteen minute interval in the below listed hours for each month and adjusted for power factor as provided herein:

<u>Months</u>	<u>Hours Applicable for Demand Billing - EST</u>
October through April	7:00 a.m. to 12:00 noon 5:00 p.m. to 10:00 p.m.
May through September	10:00 a.m. to 10:00 p.m.

Billing demand applicable to this section is equal to the load center's contribution to EKPC's system peak demand minus the actual demands of Section A, Section B, and Section C participants coincident with EKPC's system peak demand.

Billing Energy

Billing energy applicable to this section is equal to the total energy provided at the load center minus the actual energy provided to Section A, Section B, and Section C participants.

DATE OF ISSUE June 7, 2005 DATE EFFECTIVE: Service rendered on and after June 1, 2005

ISSUED BY [Signature] TITLE President & Chief Executive Officer

Issued by authority of an Order of the Public Service Commission of Kentucky in
Case No. 2004-00464 Dated May 24, 2005

PUBLIC SERVICE COMMISSION
OF KENTUCKY
6/1/2005
REGULATORY OFFICE
07 KAR 5:011
SECTION 9 (1)

By [Signature]
Executive Director

FOR ALL TERRITORY SERVED
Community, Town or City

P.S.C. KY. NO. 9

11th Revised SHEET NO. 6T

CANCELLING P.S.C. KY. NO. 9

10th Revised SHEET NO. 6T

**FARMERS RURAL ELECTRIC
COOPERATIVE CORPORATION**
(Name of Utility)

RATES AND CHARGES

SCHEDULE RM – RESIDENTIAL OFF-PEAK MARKETING

APPLICABLE: In all territory served by the seller.

AVAILABILITY: Available to consumers eligible for Schedule R - Residential Service. The electric power and energy furnished under Tariff RM Residential Off-Peak Marketing Rate shall be separately metered for each point of delivery and requires an executed contract between the member and the Cooperative. A sample contract is shown following these tariffs as Appendix D. Other power and energy furnished will be billed under Schedule R.

RATES:

Energy Charge: \$0.03672 per kWh (I)

SCHEDULE OF HOURS: This rate is only applicable for the below listed off-peak hours:

<u>MONTHS</u>	<u>OFF-PEAK HOURS - EST</u>
October thru April	12:00 Noon to 5:00 P.M. 10:00 P.M. to 7:00 A.M.
May thru September	10:00 P.M. to 10:00 A.M.

DATE OF ISSUE June 17, 2005
Month / Date / Year

DATE EFFECTIVE Service Rendered Beginning June 1, 2005
Month / Date / Year

ISSUED BY Jacob S. Browning
(Signature of Officer)

TITLE President & CEO

BY AUTHORITY OF ORDER OF THE PUBLIC SERVICE COMMISSION
IN CASE NO. 2004-00472 DATED May 24, 2005

PUBLIC SERVICE COMMISSION
OF KENTUCKY
EFFECTIVE
6/1/2005
PURSUANT TO 807 KAR 5:011
SECTION 9 (1)

By [Signature]
Executive Director

Form for filing Rate Schedules

For All Counties Served
Community, Town or City

P.S.C. No. 9

Original SHEET NO. 6U

Farmers Rural Electric Coop. Corp.
Name of Issuing Corporation

CANCELLING P.S.C. NO. _____

_____ SHEET NO. _____

CLASSIFICATION OF SERVICE	
Schedule RM - Residential Off-Peak Marketing	RATE PER UNIT
<p><u>FUEL ADJUSTMENT CLAUSE:</u></p> <p>All rates are applicable to the Fuel Adjustment Clause and may be increased or decreased by an amount per KWH equal to the fuel adjustment amount per KWH as billed by the Wholesale Power Supplier plus an allowance for line losses. The allowance for line losses will not exceed 10% and is based on a twelve-month moving average of such losses. This Fuel Clause is subject to all other applicable provisions as set out in 807 KAR 5:056.</p> <p><u>TERMS OF PAYMENT:</u></p> <p>The above rates are net, the gross rates are 10% higher, but not more than \$5.00 on the unpaid amount. If the current monthly bill is not paid by the 15th of the month following the meter reading date, the gross rates shall then apply. No delayed payment charge shall be applicable to schools, churches and community buildings.</p> <p><u>TERMS AND CONDITIONS:</u></p> <p>Schedule RM - Residential Off-Peak Marketing Rate applies only to programs which are expressly approved by the Kentucky Public Service Commission to be offered under the Marketing Rate of East Kentucky Power's Wholesale Power Rate Schedule A.</p> <div style="text-align: right;"> <p>PUBLIC SERVICE COMMISSION OF KENTUCKY EFFECTIVE</p> <p>AUG 01 1989</p> <p>PURSUANT TO 5:011, SECTION 111</p> <p>BY: <i>[Signature]</i> PUBLIC SERVICE COMMISSION MANAGER</p> </div>	

DATE OF ISSUE August 15, 1989 DATE EFFECTIVE August 1, 1989

ISSUED BY Jackie B. Browning TITLE Manager
Name of Officer

Issued by authority of an Order of the Public Service Commission of Ky. in
Case No. 89-158 dated August 1, 1989

For All Counties Served

P.S.C. No. 29

Original Sheet No. 23

Canceling P.S.C. No. 28

First Revised Sheet No. 23

EAST KENTUCKY POWER COOPERATIVE, INC.

Section DSM - 1

Touchstone Energy Manufactured Home Program

Purpose

The Touchstone Energy Manufactured Home Program is a conservation program that encourages the sale of more energy-efficient manufactured homes. It is based on the *Energy Star* standards for manufactured homes, a nationally recognized symbol of energy efficiency and quality developed and operated jointly by the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Energy (DOE).

Availability

This program is available in all service territory served by EKPC.

Eligibility

To qualify as a Touchstone Energy Manufactured Home under EKPC's program, the participating manufactured home must be located in the service territory of a participating Member System and meet the *Energy Star* standards by including additional floor, wall and ceiling insulation, double pane windows and an electric heat pump.

Rebate

EKPC will provide an incentive for retail customers of our Member Systems to participate in this program by offering a one-time rebate. EKPC will rebate \$250 per certified manufactured home to the participating Member System. Rebates will be paid to the participating Member Systems upon written certification that the retail participant has met the *Energy Star* standards for newly constructed manufactured homes.

Annual Reports

EKPC will submit annual reports on the Program that contain the number of participants from each Member System, the annual costs, including the costs of the rebates, and the status of the rebate provision. EKPC will file the first report by March 31, 2004, and annually thereafter.

Term

The Touchstone Energy Manufactured Home Program will remain in effect through 2007. If EKPC should decide to continue the rebate provision of the Program beyond 2004 or the entire program beyond 2007, an application for approval from the Kentucky Public Service Commission will be filed 6 months prior to the date of continuation.

DATE OF ISSUE June 7, 2005 DATE EFFECTIVE: Service rendered on and after June 1, 2005

ISSUED BY *Ray M. Paek* TITLE President & Chief Executive Officer

Issued by authority of an Order of the Public Service Commission c
Case No. 2004-00464 Dated May 24, 2005

PUBLIC SERVICE COMMISSION OF KENTUCKY	
EFFECTIVE 6/7/2005	
PURSUANT TO 807 KAR 5:011 Section 9 (1)	
By <u><i>[Signature]</i></u>	Executive Director

EAST KENTUCKY POWER COOPERATIVE, INC.

Section DSM - 2

Touchstone Energy Home Program

Purpose

The Touchstone Energy Home Program is a conservation program that encourages the sale of more energy-efficient homes. It is based on *Energy Star* standards for homes, a nationally recognized symbol of energy efficiency and quality developed and operated jointly by the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Energy (DOE).

Availability

This program is available in all service territory served by EKPC.

Eligibility

To qualify as a Touchstone Energy Home under EKPC's program, the participating home must be located in the service territory of a participating Member System and meet the *Energy Star* standards by including additional floor, wall and ceiling insulation, double pane windows and an electric heat pump.

Rebate

EKPC and its Member Systems will provide an incentive to retail customers to build or purchase a Touchstone Energy home. Member System Cooperatives may elect to offer a rebate of up to \$500 for each participant. EKPC will match the rebate offered by the member system cooperative up to a maximum of \$500, resulting in a maximum rebate of \$1,000 for each participant. Rebates will be paid to each participant upon written certification that the newly constructed home has met the *Energy Star* standards.

Annual Reports

EKPC will submit annual reports on the Program that contain the number of participants from each Member System, the annual costs, including the costs of the rebates, and the status of the rebate provision. EKPC will file the first report by June 30, 2005, and annually thereafter.

Term

The Touchstone Energy Home Program will remain in effect through 2009. If EKPC should decide to continue the rebate provision of the Program beyond 2006 or the entire program beyond 2009, an application for approval from the Kentucky Public Service Commission will be filed 6 months prior to the date of continuation.

DATE OF ISSUE June 7, 2005 DATE EFFECTIVE: Service rendered on and after June 1, 2005

ISSUED BY [Signature] TITLE President & Chief Executive Officer PURSUANT TO 807 KAR 5:011 SECTION 9 (1)

Issued by authority of an Order of the Public Service Commission c
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Attachment 2

Variable Costs

East Kentuck Member System	Meter Reading	Meter Replacement	Meter Install and Testing	Total Costs	Customers	2% on TOU	Recurring Annual Metering Reading Costs
Farmers Electric	Manual	\$154,000	\$66,000	\$220,000	22,000	440	\$5,280
Fleming Mason Electric	Manual	\$105,000	\$45,000	\$150,000	15,000	300	\$3,600
Inter-County Electric	Manual	\$168,000	\$72,000	\$240,000	24,000	480	\$5,760
Owen Electric	Manual	\$371,000	\$159,000	\$530,000	53,000	1,060	\$12,720
Shelby Energy	Manual	\$98,000	\$42,000	\$140,000	14,000	280	\$3,360
South Kentucky Electric	Manual	\$420,000	\$180,000	\$600,000	60,000	1,200	\$14,400
Taylor County Electric	Manual	\$168,000	\$72,000	\$240,000	24,000	480	\$5,760

East Kentuck Member System	Meter Reading	Meter Replacement	Reprogramming Costs	Total Costs	Customers	2% on TOU	AMR System
Big Sandy	Automatic		\$48,000	\$48,000	12,000	240	TWACS
Blue Grass Energy	Automatic		\$26,000	\$26,000	52,000	1,040	TS2
Clark Energy	Automatic	\$275,000	\$75,000	\$350,000	25,000	500	TS1
Cumberland Valley Electric	Automatic	\$242,000	\$66,000	\$308,000	22,000	440	TS1
Grayson Electric	Automatic	\$165,000	\$45,000	\$210,000	15,000	300	TS1
Jackson Energy	Automatic		\$200,000	\$200,000	50,000	1,000	TWACS
Licking Valley Electric	Automatic	\$176,000	\$48,000	\$224,000	16,000	320	TS1
Nolin Electric	Automatic		\$14,500	\$14,500	29,000	580	TS2
Salt River Electric	Automatic	\$462,000	\$126,000	\$588,000	42,000	840	TS1

Assumptions:

- 2% of existing customers will opt for Time of Use rates
- Additional cost for meter reading is \$1 average for all co-ops
- \$350 meter replacement cost
- \$550 meter replacement cost for TS1 AMR (\$100 per AMR module, 2 required)
- \$150 meter testing and installation
- AMR reprogramming costs:
 - \$150/meter for TS1 AMR
 - \$25/meter for TS2 AMR
 - \$200/meter for TWACS

Fixed Costs

East Kentuck Member System	Meter Reading	Self Read	Contract	Meter Reading	Accounting Software	Customer	Total Costs
			Meter Readers	Device Software		Billing Software	
Farmers Electric	Manual	\$3,000			\$5,000	\$10,000	\$18,000
Fleming Mason Electric	Manual		\$5,000	\$1,000	\$5,000	\$10,000	\$21,000
Inter-County Electric	Manual		\$5,000	\$1,000	\$5,000	\$10,000	\$21,000
Owen Electric	Manual		\$5,000	\$1,000	\$5,000	\$10,000	\$21,000
Shelby Energy	Manual		\$5,000	\$1,000	\$5,000	\$10,000	\$21,000
South Kentucky Electric	Manual		\$5,000	\$1,000	\$5,000	\$10,000	\$21,000
Taylor County Electric	Manual	\$3,000			\$5,000	\$10,000	\$18,000

East Kentuck Member System	Meter Reading	AMR System	AMR Software	Accounting Software	Customer	Total Costs
					Billing Software	
Big Sandy	Automatic	TWACS	\$10,000	\$5,000	\$10,000	\$25,000
Blue Grass Energy	Automatic	TS2	\$5,000	\$5,000	\$10,000	\$20,000
Clark Energy	Automatic	TS1	\$5,000	\$5,000	\$10,000	\$20,000
Cumberland Valley Electric	Automatic	TS1	\$5,000	\$5,000	\$10,000	\$20,000
Grayson Electric	Automatic	TS1	\$5,000	\$5,000	\$10,000	\$20,000
Jackson Energy	Automatic	TWACS	\$10,000	\$5,000	\$10,000	\$25,000
Licking Valley Electric	Automatic	TS1	\$5,000	\$5,000	\$10,000	\$20,000
Nolin Electric	Automatic	TS2	\$5,000	\$5,000	\$10,000	\$20,000
Salt River Electric	Automatic	TS1	\$5,000	\$5,000	\$10,000	\$20,000

Assumptions:

Self Read: Includes bill stub/post card update and instructional flier

Contract Meter Readers: Meter reading device reprogramming; \$200/device, 25 devices/co-op