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R. Michael Sullivan  
P. Marcum Willis  
Bryan R. Reynolds  
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May 17, 2006

**Via Federal Express**

Ms. Elizabeth O'Donnell  
Executive Director  
Public Service Commission  
211 Sower Boulevard, P.O. Box 615  
Frankfort, Kentucky 40602-0615

**RECEIVED**  
MAY 18 2006  
PUBLIC SERVICE  
COMMISSION

Re: In the Matter of: Consideration of the Requirements  
of the Federal Energy Policy Act of 2005 Regarding  
Time-Based Metering, Demand Response, and  
Interconnection Service, Administrative Case No. 2006-00045

Dear Ms. O'Donnell:

Enclosed on behalf of Big Rivers Electric Corporation, Jackson Purchase Energy Corporation, Kenergy Corp., and Meade County Rural Electric Cooperative Corporation are an original and ten copies of the direct testimony of each of Travis D. Housley and Russ Pogue. I certify that copies of these documents have been served on the attached service list.

Sincerely yours,



Tyson Kamuf

TAK/ej  
Enclosures

cc: Service List

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**COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION**

**RECEIVED**

MAY 18 2006

PUBLIC SERVICE  
COMMISSION

**In the Matter of:**

**CONSIDERATION OF THE REQUIREMENTS )  
OF THE FEDERAL ENERGY POLICY ACT OF )  
2005 REGARDING TIME-BASED METERING, )  
DEMAND RESPONSE, AND INTERCONNECTION )  
SERVICE )**

**CASE NO.  
2006-00045**

**DIRECT TESTIMONY OF  
TRAVIS D. HOUSLEY, P.E., AND RUSS POGUE  
ON BEHALF OF BIG RIVERS ELECTRIC CORPORATION,  
JACKSON PURCHASE ENERGY CORPORATION,  
KENERGY CORP., AND  
MEADE COUNTY RURAL ELECTRIC COOPERATIVE  
CORPORATION**

**May 18, 2006**



**COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION**

**In the Matter of:**

**CONSIDERATION OF THE REQUIREMENTS )  
OF THE FEDERAL ENERGY POLICY ACT OF )  
2005 REGARDING TIME-BASED METERING, )  
DEMAND RESPONSE, AND INTERCONNECTION )  
SERVICE )**

**CASE NO.  
2006-00045**

**DIRECT TESTIMONY OF  
TRAVIS D. HOUSLEY, P.E.**

**May 18, 2006**





1 duties as assigned by Big Rivers' President and CEO. I am additionally responsible for  
2 providing engineering consulting service to Big Rivers' three distribution member cooperatives:  
3 Jackson Purchase Energy Corporation ("JPEC"), Kenergy Corp. ("Kenergy"), and Meade  
4 County Rural Electric Cooperative Corporation ("Meade County RECC") (together, the  
5 "Member Cooperatives").

6 **Q3. What is the purpose of your testimony?**

7 Response: The purpose of my testimony is to provide information, and to explain the  
8 position and concerns of Big Rivers, JPEC, Kenergy, and Meade County RECC, with respect to  
9 the Commission's investigation into possibly implementing an interconnection standard pursuant  
10 to the Energy Policy Act of 2005 ("EPAct 2005").

11 **Q4. What is the relationship between Big Rivers and its Member Cooperatives with**  
12 **respect to their transmission and distribution systems?**

13 Response: Big Rivers is a generation and transmission electric cooperative, which is  
14 cooperatively owned by its three member distribution cooperatives, which are, in turn owned by  
15 their retail member customers. The member distribution cooperatives own and operate the  
16 electrical distribution systems to which their retail member customers are connected, and from  
17 which they take retail electrical service. Big Rivers owns and operates the electrical  
18 transmission system to which its member distribution cooperatives are connected and over which  
19 they receive their wholesale electricity purchases.

20 **Q5. What is your understanding of the requirements of the EPAct 2005 with respect to**  
21 **the adoption of an interconnection standard?**

22 Response: Section 1254 of the EPAct 2005 amends Section 111(d) of the Public  
23 Utility Regulatory Policies Act of 1978 (16 U.S.C. 2621(d)) ("PURPA") to require

1 nonjurisdictional utilities and state regulatory authorities to consider whether to adopt standards  
2 and procedures for “interconnection service.” As the Commission stated in its Order initiating  
3 this administrative proceeding:

4       EPAAct 2005 defines interconnection service as service to an electric consumer  
5       under which an on-site generating facility on the consumer's premises shall be  
6       connected to the local distribution facilities. The service is to be offered based on  
7       standards developed by the Institute of Electrical Electronics Engineers: IEEE  
8       Standard 1547 for Interconnecting Distributed Resources with Electric Power  
9       Systems. The standard provides for just and reasonable agreements and  
10       procedures to be established so the services offered promote current best practices  
11       of interconnection for distributed generation.

12  
13 Order dated February 24, 2006, at 3. Thus, EPAAct 2005 requires covered entities to consider  
14 whether to adopt interconnection standards and procedures, but only for distributed generation.

15 **Q6. Do the interconnection provisions of the EPAAct 2005 apply to Big Rivers and its**  
16 **Member Cooperatives?**

17       Response: Pursuant to Section 102 of PURPA, the interconnection provisions of the  
18 EPAAct 2005 apply only to electric utilities with retail sales exceeding 500 million kilowatt-hours  
19 in a calendar year. *See* PURPA § 102, 16 U.S.C. § 2612. Kenergy and JPEC are utilities  
20 covered by PURPA; however, Big Rivers and Meade County RECC are not. Big Rivers has no  
21 retail sales, and is therefore not a utility covered by PURPA or by the EPAAct 2005. Additionally,  
22 the interconnection provisions of the EPAAct 2005 apply only to distribution facilities, and so a  
23 utility, such as Big Rivers, with only transmission facilities would not be covered. Meade  
24 County RECC is not covered by PURPA or by the EPAAct 2005 because its retail sales do not  
25 exceed the threshold amount.

26       Because Big Rivers and Meade County RECC are not covered utilities, the Commission  
27 exempted them from the Commission’s initial proceeding implementing PURPA. *See In the*  
28 *Matter of: The Filing of Plans by Electric Utilities Concerning the Feasibility of Implementing*

1 *Certain Rate Design Standards and Methods*, Administrative Case No. 203, Order dated  
2 February 8, 1980. For that reason, Big Rivers and Meade County RECC request that any  
3 findings ultimately made by the Commission in this matter acknowledge Big Rivers and Meade  
4 County RECC's exempt status, and that Big Rivers and Meade County RECC be exempted from  
5 any Commission orders requiring compliance with or implementing the EAct 2005  
6 interconnection provisions.

7 **Q7. If the Commission were to establish a statewide interconnection standard, what**  
8 **should be included at a minimum, what should be included as a maximum, and is the IEEE**  
9 **1547 standard sufficient?**

10 Response: Whether referred to as a minimum or a maximum, the adoption of a  
11 statewide interconnection standard causes great concerns for Big Rivers and its Member  
12 Cooperatives. The Commission must be careful to ensure that any standard it may adopt does  
13 not prevent utilities from being able to protect the safety and reliability of their transmission or  
14 distribution systems. Any standard should also not prevent utilities, especially non-profit electric  
15 cooperatives that have no shareholders to absorb the costs of new programs, from recovering all  
16 costs arising as a result of the interconnection from the customer requesting the interconnection.

17 The IEEE 1547 standard recognizes that electric power systems were not designed to  
18 accommodate active generation and storage at the distribution level, and it attempts to develop  
19 technical requirements for distributed resource ("DR") interconnection that address safety,  
20 performance, operation, testing, and maintenance considerations. The standard describes  
21 systems that a DR must have in place and in good working order to assure the quality of the  
22 generation, its safe and timely shut down during times of distribution line faults, and the timely  
23 disconnection of the DR from the distribution system during faults on the DR system. These

1 systems are essential for the reliability and quality of service of the distribution grid, and for the  
2 safety of the electric utility workers during times of distribution line faults. Therefore, any  
3 implementation of the EAct 2005 must effectively require compliance with the IEEE 1547  
4 standard to ensure not only that the described protection and monitoring systems will be  
5 installed, but also that those systems will be routinely inspected and maintained.

6         However, even with the IEEE 1547 standard, safety would still be a concern. Electric  
7 utilities specialize in the generation and delivery of electricity, and devote a tremendous amount  
8 of time and expense to training their electrical workers to work safely in the generation and  
9 delivery of electricity. In spite of the utilities' best efforts, however, some electrical accidents  
10 still occur. Given that the primary function of many DRs will not be the generation and delivery  
11 of electricity, there is a concern that adequate attention will not be given to electrical safety and  
12 safety training, increasing the likelihood of electrical accidents.

13         Additionally, the IEEE 1547 standard is not comprehensive. It does not, for example,  
14 state the maximum capacity of DR generation that can be interconnected to any particular  
15 distribution system, it does not apply to interconnections to network systems, and it only  
16 provides general statements as to the necessary performance of DR generation and protective  
17 equipment, meaning additional tests or standards may be required to ensure safety and reliability.  
18 The IEEE 1547 standard also does not address the methods used for performing electric utility  
19 impact studies of DR or associated tariff issues, which are additional issues that must be  
20 addressed with any possible implementation of the EAct 2005.

21         Moreover, electric utilities have state and federal regulatory agencies to prescribe safety  
22 and reliability standards and to ensure that proper attention is given to safety and maintenance  
23 needs. The price that a DR would realize from its generation (i.e., the avoided cost to the

1 interconnected utility) will be very small. This is especially true in this state since Kentucky is  
2 one of the lowest cost electric power producers in the country. With the cost pressure of a low  
3 avoided cost, DR's will be under great pressure to cut costs where possible and will be greatly  
4 tempted to under emphasize their safety and maintenance needs at the expense of safety and  
5 distribution grid reliability or quality of service.

6 Thus, the IEEE 1547 standard alone would not be sufficient to ensure the safety and  
7 reliability of the transmission and distribution systems in Kentucky. If the Commission adopts  
8 the IEEE 1547 standard or some other interconnection standard, it should not limit the ability of  
9 utilities to protect the safety and reliability of their systems.

10 Additionally, the cost impact of interconnecting DR facilities is of particular concern to  
11 electric cooperatives such as Big Rivers and its Member Cooperatives because they are non-  
12 profit entities with no shareholders to absorb the costs of new programs. Any such costs would  
13 be passed on, directly or indirectly, to the retail member consumers. Moreover, the costs can be  
14 significant. For example, a distribution line that is sized sufficiently for the rural electric  
15 cooperative to serve a sparsely populated area would have no incremental capacity to handle a  
16 proposed DR without costly upgrades.

17 No DR project should be subsidized by non-participating members, either directly or  
18 indirectly through costs incurred by the member owned electric cooperative. To insure against  
19 subsidization, the DR should bear all costs of interconnection, including all initial  
20 implementation cost, the utility's administrative cost of billing and inspection, and the initial and  
21 ongoing cost of testing and maintaining the protection systems described in the IEEE 1547  
22 standard. Any regulation proposed to implement the EPAct in Kentucky should require that an  
23 engineering study be performed at the expense of the DR to determine the adequacy of the

1 distribution line to handle the proposed generation. If there is generation net of the local load  
2 that will be absorbed into the distribution system, and the host distribution line is not sized to  
3 safely handle the generation, then all system improvements required to handle the generation  
4 should be the expense of the DR, and the cost of these system improvements should be assured  
5 before the interconnection is allowed. Any standards or procedures adopted by the Commission  
6 should not prevent cooperatives from fully recovering the costs of interconnection from the DR.

7 **Q8. Is a statewide interconnection standard necessary?**

8 Response: No. Like other utilities, Big Rivers and its Member Cooperatives  
9 currently have interconnection standards and procedures in place. Even without implementation  
10 of the EPAct 2005, Big Rivers and its Members are willing to assist any retail member consumer  
11 with the ability to utilize available resources to its betterment through electric generation. As it  
12 now stands, Big Rivers and its Member Systems are able to interconnect to a retail member's DR  
13 facilities while satisfying their obligations to prevent such generation from placing a burden on  
14 the retail member's neighboring member consumers, or from placing the consumer or its  
15 neighbors, or the transmission and distribution systems on which they rely, in an unsafe  
16 situation.

17 **Q9. Do you have any other recommendations if the Commission determines it is**  
18 **necessary to adopt an interconnection standard?**

19 Response: Yes. Because Big Rivers' member cooperatives' wholesale electric  
20 requirements are largely supplied under all requirements wholesale contracts with Big Rivers, if  
21 the EPAct is implemented by Kentucky, all sales of generation should be between the DR and  
22 Big Rivers to maintain the integrity of those contracts. Power that enters the distribution grid  
23 should be netted out of the wholesale meter that measures the wholesale consumption of the host

1 member cooperative, and the generation received into the distribution grid should be purchased  
2 from the DR by Big Rivers at the avoided cost of Big Rivers and its Member Cooperatives.

3 **Q10. Do Big Rivers and its Member Cooperatives currently comply with the EPAct**  
4 **2005's interconnection standard?**

5 Response: Yes.

6 **Q11. Is there any reasonable program than can be developed to take advantage of the**  
7 **generation owned by open transition customers in case of a dire emergency?**

8 Response: There could be value in a program of reliable centrally controlled  
9 distributed generation. It is not known at this time whether the value would be worth the cost.  
10 The vast majority of stand-by and emergency generation in the field is available at the poultry  
11 houses and is diesel powered so the generation cost is high compared to coal fired generation.  
12 To implement such a program would require reliable generation and a reliable communication  
13 and control scheme.

14 **Q12. Does this conclude your testimony?**

15 Response: Yes.

**VERIFICATION**

I verify, state, and affirm that the foregoing testimony is true and correct to the best of my knowledge and belief.

Travis D. Housley  
Travis D. Housley

STATE OF KENTUCKY            )  
COUNTY OF HENDERSON        )

SUBSCRIBED AND SWORN TO before me by Travis D. Housley on this the 16<sup>th</sup> day of May, 2006.

Paula Mitchell  
Notary Public, Kentucky State At Large  
My commission expires: 1-12-09





**COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION**

**In the Matter of:**

**CONSIDERATION OF THE REQUIREMENTS )  
OF THE FEDERAL ENERGY POLICY ACT OF )  
2005 REGARDING TIME-BASED METERING, )  
DEMAND RESPONSE, AND INTERCONNECTION )  
SERVICE )**

**CASE NO.  
2006-00045**

**DIRECT TESTIMONY OF  
RUSS POGUE**

**May 18, 2006**

1 **TESTIMONY OF RUSS POGUE**

2 **Q1. Please state your name, occupation, and business address.**

3 Response: My name is Russ Pogue. My current position is Manager of Commercial  
4 and Industrial Services at Big Rivers Electric Corporation (“Big Rivers”). My business address  
5 is 201 Third Street, Henderson, Kentucky 42420.

6 **Q2. Please describe your educational background and experience in the electric utility**  
7 **industry.**

8 Response: I received a Bachelor of Science Degree in Engineering  
9 Management/Mechanical Engineering from the University of Missouri – Rolla in 1987. For  
10 nearly 20 years I have worked with large commercial and industrial customers to measure and  
11 improve energy efficiency and power quality. Since 1997 I have worked for Big Rivers Electric  
12 Corporation as Manager of Commercial and Industrial Services.

13 In my current position with Big Rivers I am responsible for development and delivery of  
14 commercial and industrial services including: billing, energy efficiency, power quality, power  
15 factor correction, rate development and safety for Big Rivers and its three distribution member  
16 cooperatives: Jackson Purchase Energy Cooperative (“JPEC”), Kenergy Corp. (“Kenergy”), and  
17 Meade County Rural Electric Cooperative Corporation (“Meade County RECC”) (together, the  
18 “Member Cooperatives”) and their commercial and industrial members. Prior to Big Rivers I  
19 was employed by Associated Electric Cooperative, Inc.

20 **Q3. What is the purpose of your testimony?**

21 Response: The purpose of my testimony is to provide information, and to explain the  
22 position and concerns of Big Rivers and its three distribution member cooperatives (Jackson  
23 Purchase Energy Corporation (“JPEC”), Kenergy Corp. (“Kenergy”), and Meade County Rural

1 Electric Cooperative Corporation ("Meade County RECC") (together, the "Member  
2 Cooperatives"), with respect to the Kentucky Public Service Commission's ("Commission")  
3 investigation into possibly implementing a smart metering/demand response program pursuant to  
4 the Energy Policy Act of 2005 ("EPAct 2005").

5 **Q4. What is your understanding of the requirements of the EPAct 2005 with respect to**  
6 **the adoption of smart metering?**

7 Response: Section 1252 of the EPAct 2005 amends Section 111(d) of the Public  
8 Utility Regulatory Policies Act of 1978 (16 U.S.C. 2621(d)) ("PURPA") to require  
9 nonjurisdictional utilities and state regulatory authorities to consider whether to adopt smart  
10 metering, which involves providing time-based rates, meters and communication devices so that  
11 rates reflect time-based variances in the cost of generating or purchasing electricity, and so that  
12 electric consumers are able to manage their energy use and cost through advanced metering and  
13 communications technology.

14 **Q5. Do the smart metering provisions of the EPAct 2005 apply to Big Rivers and its**  
15 **Member Cooperatives?**

16 Response: Pursuant to Section 102 of PURPA, the smart metering provisions of the  
17 EPAct 2005 only apply to electric utilities with retail sales exceeding 500 million kilowatt-hours  
18 in a calendar year. *See* PURPA § 102, 16 U.S.C. § 2612. Kenergy and JPEC are utilities  
19 covered by PURPA; however, Big Rivers and Meade County RECC are not. Big Rivers has no  
20 retail sales, and is therefore not a utility covered by PURPA or by the EPAct 2005. Meade  
21 County RECC is not covered by PURPA or by the EPAct 2005 because its retail sales do not  
22 exceed the threshold amount.

1           Because Big Rivers and Meade County RECC are not covered utilities, the Commission  
2 exempted them from the Commission's initial proceeding implementing PURPA. *See In the*  
3 *Matter of: The Filing of Plans by Electric Utilities Concerning the Feasibility of Implementing*  
4 *Certain Rate Design Standards and Methods*, Administrative Case No. 203, Order dated  
5 February 8, 1980. For that reason, Big Rivers and Meade County RECC request that any  
6 findings ultimately made by the Commission in this matter acknowledge Big Rivers and Meade  
7 County RECC's exempt status, and that Big Rivers and Meade County RECC be exempted from  
8 any Commission orders requiring compliance with or implementing the EAct 2005 smart  
9 metering provisions.

10 **Q6. What is the position of Big Rivers and its Member Cooperatives on time-based**  
11 **pricing programs, on whether the Commission should adopt the time-based pricing**  
12 **standard in EAct 2005, and on whether the Commission should mandate any form of**  
13 **time-based pricing?**

14           Response: In the past, Big Rivers and its Member Cooperatives have offered time-  
15 based rates; however, currently there is only one customer taking advantage of a time-based  
16 tariff. No customers took advantage of the other tariffs, and they have been withdrawn.

17           Additionally, as the Commission is well aware, costs for electricity in Kentucky are  
18 among the lowest in the country. Currently, in states that have recently pursued a course of  
19 deregulation, significant increases in electricity rates are expected this spring and summer. For  
20 instance, in the mid-Atlantic states of Delaware and Maryland and including the Washington,  
21 D.C. area, electric rates are projected to increase from 30 percent to over 100 percent for certain  
22 rate classes. Obviously, in these regions of the country there is a keen interest in any measures  
23 that help to control energy costs including time-of-use rates and smart metering. However, in a

1 low cost state such as Kentucky there is not much customer interest in these options. In fact, Big  
2 Rivers and its Member Cooperatives have regularly surveyed their commercial and industrial  
3 customers about their interest in a rate discount for off-peak usage only to find there is some  
4 customer interest. However, little or no interest has been demonstrated when time-of-use rates  
5 have been offered.

6 Given the level of customer interest in such programs, along with the fact that Big  
7 Rivers' costs do not vary by time of day, Big Rivers and its Member Cooperatives have not  
8 aggressively pursued time-based rates or smart metering, and have determined that performing  
9 studies of such programs have not been and are not currently warranted.

10 Since Big Rivers and its Member Cooperatives have not thoroughly studied such a  
11 program, the information they can offer is limited. However, it is clear that the cost to  
12 implement an effective smart metering program will be substantial. Recently, the Ontario  
13 Energy Board released its Smart Meter Implementation Plan. In the plan at page 28, it estimates  
14 the smart metering cost for a new single-phase residential meter and communication system at  
15 approximately \$250 per installed meter. The Ontario Board's Smart Meter Implementation Plan  
16 is available at its website [www.oeb.gov.on.ca](http://www.oeb.gov.on.ca).

17 In any event, as non-profit, member-owned enterprises, Big Rivers and its Member  
18 Cooperatives must have some assurance of being able to timely recover the costs associated with  
19 new and experimental programs. Participating customers should bear all costs of  
20 implementation of a time-based or smart metering program, unless benefits to non-participating  
21 customers can actually be identified. Non-participating customers should not be required to  
22 subsidize, directly or indirectly, participation by others in such a program.

1           Given the uncertainty of the costs and benefits of a time-based or smart metering  
2 program, Big Rivers and its Member Cooperatives strongly recommend that the Commission  
3 refrain from mandating a statewide time-based or smart metering program. However, should the  
4 Commission determine that a time-based program is warranted, a pilot program specific to the  
5 circumstances of Big Rivers and its Member Cooperatives should be implemented and the costs  
6 and benefits of such a program be fully explored before a time-based or smart metering program  
7 is mandated.

8 **Q7. Do Big Rivers and its Member Cooperatives have any concerns about smart**  
9 **metering which are particular to their circumstances?**

10           Response: Yes. For one, Meade County RECC is presently in the process of  
11 installing Hunt Technologies TS2 Automated Metering Interface (AMI) system. Currently, the  
12 system has been installed on 6 of Meade County's 16 substations. The system includes 25,668  
13 meters. The cost estimate for total implementation is \$2.8 million with an annual operating cost  
14 of approximately \$46,000.

15           Although the primary purpose of Meade County RECC installing this system was to  
16 allow for automated meter reading, this system can be considered a smart meter system because  
17 it allows for both a peak and an off-peak reading to be taken. Although some additional  
18 investment would be required, this system is compatible with some time-based rate schedules.  
19 Meade County RECC has made a significant investment in this system, and any smart metering  
20 standard which would require Meade County RECC to prematurely replace these meters would  
21 be a financial hardship.

22           Another barrier for Big Rivers and its Members systems is communications. As the  
23 Commission knows, a smart metering program requires a communications feedback loop to the

1 customers to provide them current usage and cost information. However, the territory served by  
2 Big Rivers and its Member Cooperatives is a rural, sparsely populated area where the available  
3 communication systems may not be as robust as in the more urban areas of the state and not as  
4 capable of supporting these communications. Although Big Rivers and its Member Cooperatives  
5 are not aware of any specific limitations of the communications system, there is a general  
6 knowledge that cellular and wireless communications as well as broadband internet services are  
7 not as readily available in the rural sections of the state served by Big Rivers and its Member  
8 Cooperatives.

9 **Q8. Can any time-based pricing programs be implemented without smart meters, and**  
10 **are there different levels of smart meters?**

11 Currently, it is possible to offer time-based pricing using existing metering systems. For  
12 instance, Meade County RECC presently offers an optional time-of-day rate. However, it must  
13 be pointed out that there is no single definition for what constitutes a smart meter. For example,  
14 under some definitions of the term, Meade County RECC's TS2 system would be considered a  
15 smart meter system based on the fact that both a remote reading for peak usage and a remote  
16 reading for off-peak usage can be taken. However, under other definitions of the term, it would  
17 not be a smart meter because it does not have the capacity to be used in conjunction with a real-  
18 time pricing program.

19 Using a broad definition of the term, a variety of smart meters would exist, which would  
20 also allow for a variety of time-based programs. The costs and benefits of the meters and  
21 associated time-based programs would vary depending on the complexity of the meters and the  
22 capabilities they offer. Given the level of customer interest in time-based programs, the  
23 uncertainty of the costs and benefits, and other issues previously described, mandating a time-



1 based program or particular capabilities for smart meters is not warranted at this time.  
2 Additionally, no program or smart meter should be mandated which would require Meade  
3 County RECC to lose the investment it has made in its TS2 system.

4 **Q9. If Big Rivers regains control of its generating facilities, will Big Rivers and its**  
5 **Member Cooperatives' position on time-based or smart metering programs change?**

6 Response: No. Currently, Big Rivers takes most of its power under a wholesale  
7 contract with LG&E Energy Marketing ("LEM") and SEPA, under which the charges do not  
8 vary by time of day. Similarly, Big Rivers' wholesale contracts with its Member Cooperatives  
9 do not time differentiate costs. If Big Rivers and LEM terminate the contracts under which they  
10 are currently operating, Big Rivers will take back control of its generating facilities, after which,  
11 Big Rivers' costs would likely vary by time of day. However, even in that case, given the lack of  
12 customer interest and the unknown costs and benefits, Big Rivers and its Member Cooperatives  
13 would still recommend that no time-based or smart metering program be mandated, and that if  
14 the Commission is considering mandating such a program, that a pilot program be implemented  
15 first to get a better understanding of the actual costs and benefits.

16 **Q10. Provide the number of residential, commercial, and industrial customers on demand**  
17 **response tariffs and an estimate of the associated load available from these customers**  
18 **because of demand response.**

19 Response: A list of current demand response tariffs and riders is attached hereto as  
20 Exhibit A. Currently, only Meade County RECC has such a tariff available. That tariff, "Three  
21 Phase Power Service, 0 KVA – 999 KVA – Optional Time-of-Day ("TOD") Rate," is available  
22 to customers located on or near Meade County's three-phase lines. The rate is available for all  
23 types of usage for any customer willing to contract for a three-year period for time-of-day rates;

1 however, only one customer is currently on the tariff. The associated load available from this  
2 customer because of demand response is approximately 9 KW.

3 **Q11. Of the time-based schedules set forth in EAct 2005, which would more likely result**  
4 **in a shift of load from peak to off peak given the circumstances in Kentucky?**

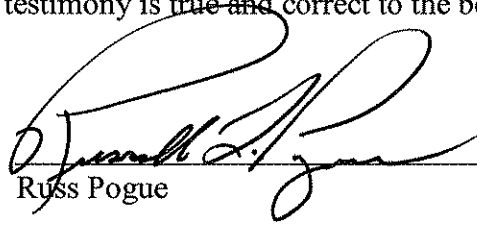
5 Response: The EAct 2005 includes time-of-use pricing, critical peak pricing, real-  
6 time pricing, and credits for consumers with large loads who enter peak load reduction  
7 agreements. The likelihood that any of these pricing mechanisms would result in shifting load  
8 from peak to off-peak depends on the specific circumstances confronted by each of the utilities  
9 in Kentucky. In the case of Big Rivers where the wholesale rate does not vary by time of day,  
10 there is no cost-justification for pursuing time-of-use pricing, critical peak pricing or real-time  
11 pricing. Although Big Rivers is not presently in need of additional capacity, it would seem that  
12 credits for customers with large loads which could be reduced during peak periods would more  
13 likely result in a shift from peak to off-peak.

14 **Q12. Does this conclude your testimony?**

15 Response: Yes.

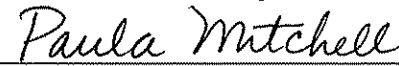
**VERIFICATION**

I verify, state, and affirm that the foregoing testimony is true and correct to the best of my knowledge and belief.

  
\_\_\_\_\_  
Russ Pogue

STATE OF KENTUCKY            )  
COUNTY OF HENDERSON        )

SUBSCRIBED AND SWORN TO before me by Russ Pogue on this the 16<sup>th</sup> day of May, 2006.

  
\_\_\_\_\_  
Notary Public, Kentucky State At Large  
My commission expires: 1-12-09

1  
2  
3  
4  
5  
6  
7  
8 **Exhibit A**

9  
10 **Meade County Rural Electric Cooperative Corporation**  
11 **Time-based Metering/Demand Response Tariff Provisions**

12 **Tariff/Rider** **Description of Service/Provision**

13 **Residential, Commercial & Industrial**

14 Tariff 3A Three Phase Power Service, 0 KVA – 999  
15 KVA – Option Time-of-Day (TOD) Rate  
16  
17  
18

19 **Service Description**

20  
21 This tariff is available to customers located on or near Meade County's three-phase lines,  
22 and the rate is available for all types of usage for any customer willing to contract for a three-  
23 year period for time-of-day rates. The concept with this rate is that if the consumer shifts some  
24 demand to the off-peak hours, then the consumer can save money by avoiding the off-peak  
25 demand charge.