

RECEIVED

MAR 2 0 2008

PUBLIC SERVICE COMMISSION

March 20, 2008

#### HAND DELIVERED

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

Re: PSC Administrative Case No. 2007-00477

Dear Ms. Stumbo:

Please find enclosed for filing with the Commission in the above-referenced case an original and ten (10) copies of the responses of East Kentucky Power Cooperative, Inc., to the Commission Staff's First Data Request in this case, dated March 11, 2008. Please note that responses to certain designated requests are included in the Joint Responses of the Generating Utilities in this case, which will be separately filed with the Commission.

Very truly yours,

have a. Lik

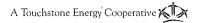
Charles A. Lile Corporate Counsel

Enclosures

Cc: Service List Overland Consulting

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

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



### **COMMONWEALTH OF KENTUCKY**

### **BEFORE THE PUBLIC SERVICE COMMISSION**

#### **IN THE MATTER OF:**

**AN INVESTIGATION OF THE ENERGY AND REGULATORY ISSUES IN SECTION 50 OF KENTUCKY'S 2007 ENERGY ACT** 

ADMINISTRATIVE CASE NO. 2007-00477

#### CERTIFICATE

)

)

)

)

#### STATE OF KENTUCKY ) ) **COUNTY OF CLARK** )

William A. Bosta, being duly sworn, states that he has supervised the preparation of the responses of East Kentucky Power Cooperative, Inc. to the Public Service Commission Staff First Data Requests to Joint Testimony in the above-referenced case dated March 11, 2008, and that the matters and things set forth therein are true and accurate to the best of his knowledge, information and belief, formed after reasonable inquiry.

Villa A Bostz

Subscribed and sworn before me on this  $\underline{ao^{th}}$  day of March, 2008.

<u>Yeany J. Suxtin</u> Notary Public <u>December</u> 8, 2009

My Commission expires:

RECEIVED

MAR 2 0 2008

PUBLIC SERVICE COMMISSION

### RECEIVED

MAR 2 0 2008

PUBLIC SERVICE COMMISSION

#### **COMMONWEALTH OF KENTUCKY**

#### **BEFORE THE PUBLIC SERVICE COMMISSION**

In the Matter of:

AN INVESTIGATION OF THE ENERGY AND REGULATORY ISSUES IN SECTION 50 OF KENTUCKY'S 2007 ENERGY ACT

) ) ADMINISTRATIVE ) CASE NO. 2007-00477 )

FIRST DATA REQUEST OF COMMISSION STAFF TO BIG RIVERS ELECTRIC CORPORATION DUKE ENERGY KENTUCKY, INC. EAST KENTUCKY POWER COOPERATIVE, INC. KENTUCKY POWER COMPANY LOUISVILLE GAS AND ELECTRIC COMPANY AND KENTUCKY UTILITIES COMPANY

PSC Request 1 Page 1 of 5

#### EAST KENTUCKY POWER COOPERATIVE, INC.

### PSC ADMINISTRATIVE CASE NO. 2007-00477 JOINT TESTIMONY FIRST DATA REQUEST RESPONSE

## COMMISSION STAFF'S FIRST DATA REQUEST DATED 3/11/08REQUEST 1RESPONSIBLE PERSON:James C. Lamb, Jr./Jeffrey M. BrandtCOMPANY:East Kentucky Power Cooperative, Inc.

**Request 1.** Refer to the Joint Testimony of Lonnie E. Bellar ("Bellar Testimony"), page 5, which discusses the potential for renewable resource power purchases to result in a net reduction in the amount of new generation utilities propose to build. There are a number of bills pending in the U. S. Congress that may impact the construction of new generation facilities in the future, primarily those bills that would result in federal regulation of the amount of Carbon Dioxide ("CO2") produced by utilities in the generation of electricity.

**Request 1a.** Explain whether each of the Generating Utilities anticipates some form of federal CO2 regulation to be enacted in the near future. Identify which of the pending bills each of the Generating Utilities favor and which of the pending bills, if any, each believes will become law.

**Response 1a.** Currently, there are 7 greenhouse gas emission bills pending in the US Congress. All 7 bills address a cap-and-trade approach to carbon dioxide emissions. The most popular bill, H.R.1590: Safe Climate Act of 2007, sponsored by Rep. Henry Waxman (D-Calif.) and introduced March 20, 2007 has 149 cosponsors. This act directs the EPA Administrator to establish a cap-and-trade system to achieve a 2 percent

reduction in greenhouse gas emissions each year from 2010 through 2050. It also requires that 20 percent of America's electricity come from renewable sources by 2020.

Another popular bill, S.280: Climate Stewardship and Innovation Act of 2007, sponsored by Sen. Joseph Lieberman (I-Conn.) and introduced January 12, 2007, is co-sponsored by Sen. McCain, Sen. Obama and signed on by Sen. Clinton. This bill would establish a Climate Change Credit Corporation and direct the EPA Administrator to create and maintain the National Greenhouse Gas Database, and to determine the rate of decline of the capped emissions. The Secretary of Commerce would be in charge of various efforts to stimulate technologies that result in reduced emissions, as well as specific wording to promote further research in nuclear energy. This bill calls for a database of greenhouse gas emissions to be built in 2010, mandates annual reporting, describes measurement requirements, and begins an allowance program managed by the Climate Change Credit Corporation starting in 2012.

EKPC believes there will be no federally mandated carbon legislation until 2009 or 2010. EKPC supports the National Rural Electric Cooperative Association's ("NRECA") position, which advocates ramping up research and development of carbon capture and sequestration ("CCS") and urges Congress to consider practical time implementation goals and the economics as they craft legislation.

EKPC feels that a cap-and-trade approach with credits apportioned to utilities, similar to the SO2 cap-and-trade program, would be more acceptable than other plans which do not assign such credits. At this time, EKPC cannot predict which, if any, of these competing proposals are likely to be enacted.

**Request 1b.** Explain whether each of the Generating Utilities is currently incorporating the uncertainty and/or potential for CO2 regulation into its respective Integrated Resource Plan demand-side and supply-side planning processes and how this may be affecting the timeline for future construction of new generation.

**Response 1b.** EKPC is attempting to incorporate the uncertainty and/or potential of carbon removal costs in its most recent production cost modeling. Numbers in the range of \$10 per ton to \$30 per ton have been used. Results thus far have indicated a potential shift in preferred generation technology rather than a change in the timeline for future construction of new generation.

**Request 1c.** Using the Generating Utilities' own estimates of the cost of CO2 removal, describe the potential changes in the type of new or expanded demand-side management ("DSM") programs that each believes may become cost effective in Kentucky and the potential energy and demand savings each program is estimated to produce.

**Response 1c.** EKPC's estimate relating to the cost of CO2 removal is uncertain, primarily because there is no proven technology for power plant CO2 removal and storage. In recent production cost modeling, numbers in the range of \$10 per ton to \$30 per ton have been used. Even while EKPC is evaluating possible costs for CO2 removal, providing a meaningful answer to this request is difficult.

No direct link exists between the potential costs of CO2 removal and the costs of DSM programs, so the relative costs of various existing DSM programs are not likely to change, when such programs are evaluated against more expensive generating alternatives which include CO2 removal costs. EKPC has not ranked DSM programs in this manner since

its last Integrated Resource Plan was filed in 2006, and does not currently have a reliable basis for estimating the potential energy or demand savings that might be produced by DSM programs which may become cost-effective as a result of potential increases in the costs of building and operating traditional power plants. In order to answer this request appropriately while continuing to respect the idea of least cost power supply, EKPC would have to develop a new expansion plan, using estimates of the avoided cost of capacity and energy which reflect realistic CO2 removal costs, and comparing those costs to available DSM programs. It is not clear how the new expansion plan would view coal generation, natural gas fired generation, DSM, and other types of potential power supply.

EKPC's next integrated resource plan, to be filed April 2009, will have performed the above analysis, based on the best information available at that time, and EKPC will be in a better position to answer this request in a more meaningful manner.

Request 1d.Using each of the Generating Utilities' own estimates of the cost ofCO2 removal, identify the potential changes in the relative cost effectiveness ofrenewable generation, distributed generation and cogeneration in Kentucky.

**Response 1d.** Please see EKPC's response to 1(c).

**Request 1e.** Explain whether each of the Generating Utilities is aware of anything that presently would prevent each of them from developing additional generation capacity from renewable sources, distributed generation sources or cogeneration sources in Kentucky either as sole owner or with an equity stake in these types of projects.

**Response 1e.** EKPC knows of no legal or regulatory reasons why it cannot develop additional generating capacity from renewable resources, distributed generation

sources, or cogeneration sources, to the extent that such generating capacity represents the least cost resource for an identified generating capacity need and would qualify for the issuance of a certificate of public convenience and necessity pursuant to KRS §278.020, if needed.

PSC Request 2 Page 1 of 1

#### EAST KENTUCKY POWER COOPERATIVE, INC.

### PSC ADMINISTRATIVE CASE NO. 2007-00477 JOINT TESTIMONY FIRST DATA REQUEST RESPONSE

# COMMISSION STAFF'S FIRST DATA REQUEST DATED 3/11/08REQUEST 2RESPONSIBLE PERSON:Lonnie E. BellarCOMPANY:Joint Utilities

**Request 2.** Refer to pages 5-6 of the Bellar Testimony. Expand on the scope of work the Generating Utilities anticipate that the proposed task force would consider. For example, explain whether metering and interconnection standards, standard offer contracts, avoided cost analysis, and cost recovery of new meters, renewables, and distributed generation would be considered as part of the scope of work for the task force. What groups do the Generating Utilities expect would be members of the task force?

**<u>Response 2</u>**. Please see the joint response from Mr. Bellar.

.

### PSC Request 3 Page 1 of 2

### EAST KENTUCKY POWER COOPERATIVE, INC.

### PSC ADMINISTRATIVE CASE NO. 2007-00477 JOINT TESTIMONY FIRST DATA REQUEST RESPONSE

# COMMISSION STAFF'S FIRST DATA REQUEST DATED 3/11/08REQUEST 3RESPONSIBLE PERSON:Lonnie E. BellarCOMPANY:Joint Utilities

**<u>Request 3.</u>** Refer to the Bellar Testimony, page 2, lines 8-14.

**<u>Request 3a.</u>** Mr. Bellar states that, with the exception of Duke Energy Kentucky ("Duke"), the Generating Utilities do not believe that additional legislation is necessary or desirable to eliminate the impediments to cost-effective DSM strategies. Is it the position of the Generating Utilities, other than Duke, that additional incentives for DSM would not result in the adoption of additional DSM programs or the expansion of any current DSM programs?

**Response 3a.** Please see the joint response from Mr. Bellar.

**Response 3b.** The Generating Utilities also believe that the current planning and certificating processes are adequate to ensure the utilities consider such programs. The Integrated Resource Plan ("IRP") regulation 807 KAR 5:584, Section 8(4)(a)(6), requires each generating utility to provide the reductions or increases in peak demand from new conservation and load management or other demand-side management programs. Cite any requirement included in the certificate process that requires such documentation.

PSC Request 3 Page 2 of 2

**<u>Response 3b.</u>** Please see the joint response from Mr. Bellar.

PSC Request 4 Page 1 of 2

### EAST KENTUCKY POWER COOPERATIVE, INC.

### PSC ADMINISTRATIVE CASE NO. 2007-00477 JOINT TESTIMONY FIRST DATA REQUEST RESPONSE

### COMMISSION STAFF'S FIRST DATA REQUEST DATED 3/11/08 REQUEST 4 RESPONSIBLE PERSON: James C. Lamb, Jr. (4 a, b)/Lonnie E. Bellar (4 c, d) COMPANY: East Kentucky Power Cooperative, Inc./Joint Utilities

**<u>Request 4.</u>** Refer to the Bellar Testimony, page 2, line 17 to page 4, line 7.

**Request 4a.** Mr. Bellar states that the Generating Utilities have an impressive array of successful energy efficiency and DSM strategies. Are there any programs that have not been implemented by every Generating Utility? If yes, describe each such program, identify the generating utility that has not adopted the program, and explain the reason why that utility has not adopted that program.

**Response 4a.** EKPC's DSM programs are in large measure similar to the other programs offered by other utilities in the state. There are two items to note:

One, EKPC's commercial programs were inadvertently excluded from the response to Staff's First data request Item 4, but have been provided previously to the Commission in Response No. 1, to the Commission Staff's First Data Request, filed on March 23, 2006, in PSC Case 2006-00045. These programs are similar to programs utilized by other utilities.

Two, EKPC's member systems do not have programs filed under the DSM statute that relate specifically to assistance to low-income (or income-qualified as Duke describes them) customers.

**<u>Request 4b.</u>** If not addressed in 4(a) above, identify the Generating Utilities with residential or commercial load control programs (for example, air-conditioners, water heaters, pool pumps). Explain why the Generating Utilities without such load control programs do not offer such direct load control.

**Response 4b.** EKPC completed a Direct Load Control (DLC) pilot program for residential customers in 2007 that included air-conditioners and water heaters. EKPC has requested resumption of the program (Case No. 2007-0553) and is in the process of preparing an Application for approval of a permanent program.

**<u>Request 4c.</u>** Explain where consideration of renewables is specifically required in the IRP or certificate process.

**Response 4c.** Please see the joint response of Mr. Bellar.

**Request 4d.** Explain the relevance to this proceeding of the fact that the report "Kentucky's Energy Opportunities for Our Future: A Comprehensive Energy Strategy," a document released in February 2005, does not mention revision of any utility planning process.

**<u>Response 4d.</u>** Please see the joint response of Mr. Bellar.

PSC Request 5 Page 1 of 1

### EAST KENTUCKY POWER COOPERATIVE, INC.

### PSC ADMINISTRATIVE CASE NO. 2007-00477 JOINT TESTIMONY FIRST DATA REQUEST RESPONSE

# COMMISSION STAFF'S FIRST DATA REQUEST DATED 3/11/08REQUEST 5RESPONSIBLE PERSON:James C. Lamb, Jr.COMPANY:East Kentucky Power Cooperative, Inc.

Request 5.Refer to the discussion of "full-cost accounting" included on pages6 and 7 of the Bellar Testimony. Identify the specific externalities that the GeneratingUtilities incorporate in their planning processes.

**Response 5.** EKPC, in its planning process, incorporates the cost of complying with known environmental regulations and laws. EKPC is attempting to model the potential cost of greenhouse gas emissions, but due to the uncertainty surrounding this matter, has not formally incorporated it into the planning process. EKPC does not include any "social" cost nor "social" benefits in its planning process.

PSC Request 6 Page 1 of 1

### EAST KENTUCKY POWER COOPERATIVE, INC.

### PSC ADMINISTRATIVE CASE NO. 2007-00477 JOINT TESTIMONY FIRST DATA REQUEST RESPONSE

## COMMISSION STAFF'S FIRST DATA REQUEST DATED 3/11/08REQUEST 6RESPONSIBLE PERSON:William A. BostaCOMPANY:East Kentucky Power Cooperative, Inc.

**<u>Request 6.</u>** Although the Generating Utilities see no need to modify rate structures for achieving energy efficiency, what is the Generating Utilities' position regarding "revenue decoupling?"

**Response 6.**EKPC's position on various forms of revenue decoupling isoutlined in the Rebuttal Testimony of Dr. Laurence D. Kirsch filed in PSC Case No.2006-00472 on August 20, 2007.

PSC Request 7 Page 1 of 1

#### EAST KENTUCKY POWER COOPERATIVE, INC.

### PSC ADMINISTRATIVE CASE NO. 2007-00477 JOINT TESTIMONY FIRST DATA REQUEST RESPONSE

### COMMISSION STAFF'S FIRST DATA REQUEST DATED 3/11/08REQUEST 7RESPONSIBLE PERSON:William A. BostaCOMPANY:East Kentucky Power Cooperative, Inc.

**<u>Request 7</u>**. Refer to the Bellar Testimony at page 7, lines 15-17. Explain whether additional opportunities exist to encourage the further development of energy efficiency and DSM programs through rate structures and cost recovery. Include in the explanation a discussion of the position of the Generating Utilities on the use of inclining block rates as well as other rate design techniques to discourage usage.

**Response 7.** EKPC is amenable to exploring alternative rate structures and cost recovery mechanisms and will continue to actively participate in studies or programs of this nature. EKPC believes that it is important to offer prices that reflect the cost of providing service. That is why EKPC endorses the proposed Real-Time Pricing Pilot about to be offered to large industrial customers. Such prices are marginally- cost based and customers will respond to higher prices during on-peak periods by reducing energy and demand levels. For residential customers, EKPC would certainly look for ways to discourage wasteful consumption and would also acknowledge the need for cost-based rates. In the case of inclining block residential rates, for example, the question would be whether a higher level of demand-related cost could be assigned to high use blocks of energy. That determination would be based on an analysis of the cost of providing service to residential customers.

PSC Request 8 Page 1 of 1

### EAST KENTUCKY POWER COOPERATIVE, INC.

### PSC ADMINISTRATIVE CASE NO. 2007-00477 JOINT TESTIMONY FIRST DATA REQUEST RESPONSE

### COMMISSION STAFF'S FIRST DATA REQUEST DATED 3/11/08REQUEST 8RESPONSIBLE PERSON:William A. BostaCOMPANY:East Kentucky Power Cooperative, Inc.

**Request 8.** Refer to the discussion on page 2, line 9, through page 3, line 16, of the Bellar Testimony filed on behalf of Kentucky Utilities Company ("KU") and Louisville Gas and Electric Company ("LG&E"). Mr. Bellar essentially supports annual reviews of utilities financial results to ensure that utility revenues remain consistent. What is the position of the Generating Utilities regarding such reviews?

**Response 8.** EKPC does not object to Mr. Bellar's suggestion on lines 14-16 of page 3 that the Commission explore this rate-making approach.

PSC Request 9 Page 1 of 1

### EAST KENTUCKY POWER COOPERATIVE, INC.

### PSC ADMINISTRATIVE CASE NO. 2007-00477 JOINT TESTIMONY FIRST DATA REQUEST RESPONSE

# COMMISSION STAFF'S FIRST DATA REQUEST DATED 3/11/08REQUEST 9RESPONSIBLE PERSON:William A. BostaCOMPANY:East Kentucky Power Cooperative, Inc.

**<u>Request 9.</u>** Refer to the incentives set forth for energy efficiency on page 4, lines 4-19, of the Bellar Testimony filed on behalf of KU and LG&E. What is the position of the Generating Utilities regarding these incentives?

**Response 9.** EKPC would be open to exploring these financial incentives. If approved, such incentives should be flexible enough to allow for an appropriate TIER allowance under the Cooperative regulatory framework.

PSC Request 10 Page 1 of 1

### EAST KENTUCKY POWER COOPERATIVE, INC.

### PSC ADMINISTRATIVE CASE NO. 2007-00477 JOINT TESTIMONY FIRST DATA REQUEST RESPONSE

## COMMISSION STAFF'S FIRST DATA REQUEST DATED 3/11/08REQUEST 10William A. BostaRESPONSIBLE PERSON:William A. BostaCOMPANY:East Kentucky Power Cooperative, Inc.

Request 10.Refer to the discussion of the proposed treatment of purchasedpower on page 5, lines 1-10, of the Bellar Testimony filed on behalf of KU and LG&E.What is the position of each of the Generating Utilities regarding the treatment proposedby Mr. Bellar?

**<u>Response 10.</u>** See response to Item 9.

### PSC Request 11 Page 1 of 2

### EAST KENTUCKY POWER COOPERATIVE, INC.

### PSC ADMINISTRATIVE CASE NO. 2007-00477 JOINT TESTIMONY FIRST DATA REQUEST RESPONSE

# COMMISSION STAFF'S FIRST DATA REQUEST DATED 3/11/08REQUEST 11RESPONSIBLE PERSON:William A. BostaCOMPANY:East Kentucky Power Cooperative, Inc.

**Request 11.** Refer to the Bellar Testimony on behalf of KU and LG&E. Mr. Bellar discusses the demand-side management statute, KRS 278.285 and notes the "plethora of cost-effective" programs; however, the majority of these programs have been developed for residential and small commercial customers. KRS 278.285(3) states, "The commission shall allow individual industrial customers with energy intensive processes to implement cost-effective energy efficiency measures in lieu of measures approved as part of the utility's demand-side management programs if the alternative measures are not subsidized by other customer classes."

**Request 11a.** Describe in detail the actions taken by each of the Generating Utilities to ensure that its industrial customers are in compliance with this condition.

Response 11a.Industrial customers, in general, operate under a competitivemarket and undertake energy efficiency programs to enable them to reduce their cost ofoperations.EKPC, through its Envision subsidiary, has worked extensively with anumber of its Member Systems' industrial customers to improve energy efficiency.While EKPC has not monitored specific actions from such customers, the level of activity

from our Envision group remains strong and is indicative that industrial customers are taking actions.

**Request 11b**. Have the Generating Utilities utilized any benchmark in terms of dollars spent or in terms of savings, dollars saved or energy saved, in order for industrial customers to qualify for the "opt-out" provision? Explain your response.

**Response 11b.** No. See response to (a) above.