EAST KENTUCKY POWER COOPERATIVE

March 7, 2007

HAND DELIVERED

Ms. Elizabeth O'Donnell
Executive Director
Public Service Commission
211 Sower Boulevard
Post Office Box 615
Frankfort, KY 40602

Re: PSC Case No. 2006-00471

Dear Ms. O'Donnell:

Please find enclosed for filing with the Commission in the above-referenced case, an original and eight copies of the Responses of East Kentucky Power Cooperative, Inc., to the Commission Staff's Second Data Requests dated February 15, 2007, and the Attorney General's Requests for Information dated February 7, 2007.

Very truly yours,

Charles A. Lile
Senior Corporate Counsel

Enclosures

Cc: Parties of Record

4775 Lexington Road 40391
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COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE 2006 INTEGRATED RESOURCE PLAN OF EAST KENTUCKY POWER COOPERATIVE, INC.	)))	Case No. 2006-00471

ATTORNEY GENERAL'S REQUESTS FOR INFORMATION

Comes now the intervenor, the Attorney General of the Commonwealth of Kentucky, by and through his Office of Rate Intervention, and submits this Request for Information to East Kentucky Power Cooperative, Inc. ["EKPC"], to be answered by the date specified in the Commission's Order of Procedure, and in accord with the following:

(1) In each case where a request seeks data provided in response to a staff request, reference to the appropriate request item will be deemed a satisfactory response.

(2) Please identify the witness who will be prepared to answer questions concerning each request.

(3) These requests shall be deemed continuing so as to require further and supplemental responses if the company receives or generates additional information within the scope of these requests between the time of the response and the time of any hearing conducted hereon.

(4) If any request appears confusing, please request clarification directly from the Office of Attorney General.

(5) To the extent that the specific document, workpaper or information as requested does not exist, but a similar document, workpaper or information does exist, provide the similar document, workpaper, or information.

(6) To the extent that any request may be answered by way of a computer printout, please identify each variable contained in the printout which would not be self evident to a person not familiar with the printout.

(7) If EKPC objects to any request on the grounds that the requested information is proprietary in nature, or for any other reason, please notify the Office of the Attorney General as soon as possible.

(8) For any document withheld on the basis of privilege, state the following: date; author; addressee; indicated or blind copies; all persons to whom distributed, shown, or explained; and, the nature and legal basis for the privilege asserted.

(9) In the event any document called for has been destroyed or transferred beyond the control of the company, please state: the identity of the person by whom it was destroyed or transferred, and the person authorizing the destruction or transfer; the time, place, and method of destruction or transfer; and, the reason(s) for its destruction or transfer. If destroyed or disposed of by operation of a retention policy, state the retention policy.

(10) Please provide written responses, together with any and all exhibits pertaining thereto, in one or more bound volumes, separately indexed and tabbed by each response.

Respectfully submitted,

GREGORY D. STUMBO
ATTORNEY GENERAL

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Certificate of Service and Filing

Counsel certifies that an original and ten photocopies of the foregoing were served and filed by hand delivery to Beth O'Donnell, Executive Director, Public Service Commission, 211 Sower Boulevard, Frankfort, Kentucky 40601; counsel further states that true and accurate copies of the foregoing were mailed via First Class U.S. Mail, postage pre-paid, to:

Hon. Charles A. Lile
Senior Corporate Counsel
East Kentucky Power Cooperative, Inc.
P. O. Box 707
Winchester, KY 40392-0707

Hon. Michael L. Kurtz
Attorney at Law
Boehm, Kurtz & Lowry
36 E. 7th St.
Ste. 1510
Cincinnati, OH 45202

this 7th day of February, 2007.

Assistant Attorney General

Attorney General's Requests for Information
Case No. 2006-00471

1. Ref page 5-4: Please describe the 3,200 kW distributed generation unit in Clinton County.

2. Ref: page 5-7: Please reconcile the statement in Para. 1 that EKPC's member systems will add customers at the rate of 2.3 percent per year with the statement in Para. 2 that the regional population will increase by only 0.7 percent per year.

3. Ref: page 5-10: What is the basis for the apparent assumption that growth rates in load will moderate after 2011 and even more so after 2016?

4. Ref: page 5-11: EKPC's resource planning process evaluates the economics of available options to meet the needs of Member Systems at the lowest practical cost. Please define lowest practical cost? Is lowest practical cost the same as least cost? Does it minimize long run costs of providing adequate and reliable services to customers?

5. Ref: page 5-16: The 2006 IRP has not yet addressed the uncertainties of carbon dioxide regulation. How does EKPC plan to address these uncertainties?

6. Ref: pages 6-1, 6-2: Why were 300 MW to be added in 2006 and 2007 in the 2003 IRP and not in the 2006 IRP, when the downward revision in peak load between the two IRPs was only 65 MW?

7. Ref: page 6-2: This page shows Smith CTs being added in 2008, while page 5-13 shows them all added in 2009. Which is correct?

8. What assumptions, if any, has EKPC made with respect to the penetration of natural gas distribution service during the coming two decades?

9. Ref: page 7-8 and 7-10: Why are total residential sales for the years 2006, 2007 and 2008 in Table 7.(4)(c) different than the total residential sales for these years depicted in Table 7. (4)(a)-1 ?

10. Ref page 7-12: Does NOAA provide the normalized weather data, or is it developed by EKPC?

Attorney General's Requests for Information
Case No. 2006-00471

11. Ref page 7-16: A regression approach is used to estimate total new large loads at the system level. What are the variables used in this regression analysis?

12. Ref page 7-17: What price elasticity factors does EKPC use?

13. Ref page 8-1: Does EKPC evaluate environmental compliance options along with supply-side and demand-side programs during the resource planning process? In other words does EKPC incorporate environmental compliance planning into the resource planning process?

14. Ref page 8-3: EKPC submitted a "Clean Air Act Compliance Study" that was submitted as an attachment to the 1993 IRP. Has EKPC performed any clean air compliance study or studies since 1993? If so, please provide a copy of those studies.

15. What is EKPC's relationship with surrounding Regional Transmission Organizations? Does it have plans to join/participate in any such organization?

16. Ref page 8-12: Please describe the process supporting the selection of the plants shown in Table 8.(2)(c). What was the basis for the selection of these particular units? Did EKPC solicit any bids for merchant power? How did the projected capital costs of the other power supply resources compare with the costs of the units selected?

17. Ref page 8-14: What specific non-utility generation has EKPC evaluated since the last IRP?

18. Ref: page 8-15: The 2006 IRP includes nine existing DSM programs. Has EKPC or its member systems performed evaluations of these programs? Do these include process and impact evaluations? If so please provide the results of these evaluations. Please identify the level of participation in each of the existing DSM programs since the last IRP.

19. Ref response to PSC Request 7 dated 12/20/07: Please explain what is meant by "market efficiencies have been improving relative to program target efficiencies."

20. Has EKPC implemented all of the DSM programs found cost-effective in previous IRPs? If not, which cost-effective programs were not implemented and why?

Attorney General's Requests for Information
Case No. 2006-00471

21. Please describe the present status of the implementation of each of the 18 new cost-effective DSM programs.

22. What entities, EKPC or its members, are responsible for implementing the DSM programs? If members are responsible, what is their commitment to these programs?

23. Has EKPC determined the member interest in the 18 new DSM programs? If so, what is the level of interest for each?

24. What was the level of member participation in the selection and evaluation of DSM programs?

25. Ref: page 8-49 and 5-12: Why are the EKPC Projected Capacity Needs on page 5-12 somewhat different than the EKPC Projected Capacity Needs on page 8-49?

26. Ref: page 8-49: How would EKPC's Projected Capacity Needs change if the impact of New DSM programs is included into the load forecast?

27. Ref: page 8-52: EKPC used RT Sim's Resource Optimizer to determine the optimum resource plan. Did EKPC provide both demand side and supply side measures as inputs to Resource Optimizer or were only supply side measures provided as alternatives for the resource plan?

28. Ref: page 8-52 and 8-12: Did EKPC provide only the supply side options listed in Table 8.(2)(c) as resource alternatives to Resource Optimizer? If EKPC provided other resource alternatives as inputs please provide a listing and description of those inputs.

29. Ref: page 8-52: How were environmental impacts included in the selection of supply side resources?

30. Ref. page 8-60: DSM programs which pass the Quantitative Evaluation are passed on to the integrated analysis for inclusion in the IRP. Please explain how these DSM programs are included in the IRP. Were the programs treated as competing alternatives to the supply side additions that EKPC is proposing in the 2006 IRP?

31. Ref. page 8-66: What is the value of unserved energy based on the 2000 Christensen Associates study and 2004 EKPC report?

Attorney General's Requests for Information
Case No. 2006-00471

32. Ref. page 8-67: Is EKPC's decision to remain at the 12% reserve margin level affected by Warren RECC declining to join EKPC?

33. Ref. page 8-70: EKPC is trying to determine the best strategy for reducing emissions from Dale Station and Cooper Station. Is this strategy a least-cost strategy? Has EKPC attempted to study the interactions between its compliance and capacity options to reach a least-cost solution?

34. Ref. page 8-70: EKPC is considering fuel switching, emission control equipment, repowering and retirement as environmental compliance options. Is EKC considering other options such as power purchases, clean coal technologies, DSM for compliance purposes?

35. Please describe the sampling procedure used in the biennial residential customer surveys.

36. Ref. page 77 Load Forecast: Why was the weather-adjusted winter peak in 2004 lower than the weather-adjusted winter peak in 2003?

37. Ref. response to PSC request 1b dated 12/20/07 and PSC request 3 dated 1/5/07: The generation construction plans and schedules without Warren show a shift in the addition of Smith CTs 10-12 to the 2012 to 2014 time period. Is there any other impact on the 2006 Integrated Resource Plan (IRP) without Warren? Are there any other delays or deletions of generation units in the updated 2006 IRP as a result of removing the Warren demand from the EKPC system?

38. Ref. first paragraph page DSM – 13 Technical Appendix to the 2006 IRP: EKPC has accounted for the impacts of New DSM programs in the integrated resource plan. How has EKPC accounted for the Load Impacts of the New DSM Programs in the 2006 integrated resource plan. Will these new programs impact any planned generation additions in the 2006 IRP?

39. Were the New DSM programs included as resource options in the 2006 integrated resource planning analysis such that they could replace in whole or part any of the projected capacity additions?

40. Was the 2006 Integrated Resource Plan tested for sensitivity to various input assumptions such as changes in the level of DSM, environmental and legislative conditions, capital costs of resource options. If so, please provide a description and results of these analyses.

41. Please describe EKPC's capability to import power from surrounding grids. Identify the transmission constraints both within and outside of EKPC's own system.

42. Describe fully EKPC's access to commercial power markets. Describe these markets, their liquidity and the capacity that is available during EKPC's winter and summer peaks. Where, if at all, is this resource discussed in the IRP?

43. Please provide a schedule listing EKPC's imports and exports of power during the last three years.

44. Describe fully the basis for EKPC's decision not to join MISO.

45. What accounts for the double-digit large commercial load growth in the Inter-county and Salt River member cooperatives between 2006 and 2011?

46. Are the large commercial and industrial customers on EKPC's system able to purchase power from third party vendors other than EKPC? If so, how, if at all, does this capability affect EKPC's supply-side planning?

47. The IRP states that EKPC has, in the past, built to meet its summer load even though its highest peak is in the winter. The stated reason is that surrounding systems have summer peaks and therefore available capacity in the winter. Please explain fully the apparent decision now to build to meet the winter peak.

48. Please provide a schedule of imported winter peaking power during the last five years. Identify the capacity, the energy and the sources of the purchases.

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE 2006 INTEGRATED RESOURCE PLAN OF)	**CASE NO.**
EAST KENTUCKY POWER COOPERATIVE, INC)	**2006-00471**

EAST KENTUCKY POWER COOPERATIVE, INC.

PSC CASE 2006-00471

INITIAL DATA REQUEST RESPONSE

ATTORNEY GENERAL'S INFORMATION REQUEST DATED 2/7/07

In response the Attorney General's request for information, East Kentucky Power Cooperative, Inc. (EKPC) submits its responses to the questions contained therein.

EAST KENTUCKY POWER COOPERATIVE, INC.

PSC CASE NO. 2006-00471

INFORMATION REQUEST RESPONSE

ATTORNEY GENERAL'S INFORMATION REQUEST DATED 2/7/07

REQUEST 1

RESPONSIBLE PERSON: **James C. Lamb, Jr.**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 1. Ref page 5-4: Please describe the 3,200 kW distributed generation unit in Clinton County.

Response 1. The 3,200 kW distributed generation unit in Clinton County consists of two diesel generators local on the property of the Cagle Corporation's Albany chicken processing plant. These units were placed in operation in 1998 and serve as emergency power backup.

EAST KENTUCKY POWER COOPERATIVE, INC.

PSC CASE NO. 2006-00471

INFORMATION REQUEST RESPONSE

ATTORNEY GENERAL'S INFORMATION REQUEST DATED 2/7/07

REQUEST 2

RESPONSIBLE PERSON: **James C. Lamb, Jr.**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 2. Ref page 5-7: Please reconcile the statement in Para. 1 that EKPC's member systems will add customers at the rate of 2-3 percent per year with the statement in Para. 2 that the regional population will increase by only 0.7 percent per year.

Response 2. Residential customers are related to regional population in the following way: household formation rates are applied to population in order to project total regional household growth, which is then multiplied by member distribution cooperatives' share of the region.

While regional population is projected to grow by 0.7% a year, member distribution cooperatives are serving a larger and larger share of the region, as subdivisions and commercial growth spill over into their services areas. Resulting customer growth of 2.3% per year reflects (1) household growth and (2) an increasing share of regional development.

EAST KENTUCKY POWER COOPERATIVE, INC.

PSC CASE NO. 2006-00471

INFORMATION REQUEST RESPONSE

ATTORNEY GENERAL'S INFORMATION REQUEST DATED 2/7/07

REQUEST 3

RESPONSIBLE PERSON: **James C. Lamb, Jr.**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 3. Ref page 5-10: What is the basis for the apparent assumption that growth rates in load will moderate after 2011 and even more so after 2016?

Response 3. Please note that moderating growth rates for load are not an assumption, but rather an outcome of EKPC's electric power forecast modeling. The slowdown in load growth is due in large part to a view that household formation in the future will occur more slowly than in the past. EKPC uses both the Kentucky State Data Center and Global Insight to collect demographic trends. Both firms indicate that household formation will slow in the future. Since EKPC's member systems serve mostly residential customers, its system load growth is tied to residential customer growth, which is tied to long-term demographic trends.

EAST KENTUCKY POWER COOPERATIVE, INC.

PSC CASE NO. 2006-00471

INFORMATION REQUEST RESPONSE

ATTORNEY GENERAL'S INFORMATION REQUEST DATED 2/7/07

REQUEST 4

RESPONSIBLE PERSON: **James C. Lamb, Jr.**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 4. Ref page 5-11: EKPC's resource planning process evaluates the economic of available options to meet the needs of Member Systems at the lowers practical cost. Please define lowest practical cost? Is lowest practical cost the same as least cost? Does it minimize long run-costs of providing adequate and reliable services to customers?

Response 4. EKPC's resource planning process evaluates resource alternatives on a risk-adjusted basis. An option that is least cost in a base case scenario may not necessarily perform as well in other scenarios. The objective is to find alternatives that are robust in terms of addressing various types of risk, yet are among the lower cost alternatives evaluated and provide dependable and reliable service.

EAST KENTUCKY POWER COOPERATIVE, INC.

PSC CASE NO. 2006-00471

INFORMATION REQUEST RESPONSE

ATTORNEY GENERAL'S INFORMATION REQUEST DATED 2/7/07

REQUEST 5

RESPONSIBLE PERSON: **James C. Lamb, Jr.**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 5. Ref page 5-16: The 2006 IRP has not yet addressed the uncertainties of carbon dioxide regulation. How does EKPC plan to address these uncertainties?

Response 5. At this point, EKPC is monitoring the potential for carbon dioxide regulation and gathering information on the range of prices that might be expected for carbon dioxide allowances assuming a cap and trade system would be implemented. Some preliminary sensitivity analysis is being done to determine potential impacts of various carbon dioxide allowance prices. As legislation progresses EKPC will begin to study potential impacts of carbon dioxide legislation on its generating resources in more detail. EKPC will also monitor changes or advances in generating technology especially regarding carbon dioxide mitigation.

EAST KENTUCKY POWER COOPERATIVE, INC.

PSC CASE NO. 2006-00471

INFORMATION REQUEST RESPONSE

ATTORNEY GENERAL'S INFORMATION REQUEST DATED 2/7/07

REQUEST 6

RESPONSIBLE PERSON: **James C. Lamb, Jr.**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 6. Ref page 6-1, 6-2: Why were 300 MW to e added in 2006 and 2007 in the 2003 IRP and not in the 2006 IRP, when the downward revision in peak load between the two IRPs was only 65 MW

Response 6. EKPC issued an RFP in April 2004 requesting both peaking and baseload capacity. The peaking capacity requested was a total of 600 MW in three equal increments beginning in June 2006, June 2007, and June 2008. The 2008 increment was to meet the peaking needs of Warren RECC, and now is no longer needed in that timeframe. The 65 MW peak reduction equates to a reduction of about 73 MW in capacity needs when reserves are included. At the time the 2006 IRP was being developed the schedule for the peaking capacity that was anticipated for the 2006 and 2007 timeframe had slipped to 2008 due to delays in receiving regulatory approvals and contracts executed with the successful bidder in the RFP became void. The schedule has now slipped to June 2009 for Smith CTs 8-9 and EKPC is still seeking the necessary approvals.

EAST KENTUCKY POWER COOPERATIVE, INC.

PSC CASE NO. 2006-00471

INFORMATION REQUEST RESPONSE

ATTORNEY GENERAL'S INFORMATION REQUEST DATED 2/7/07

REQUEST 7

RESPONSIBLE PERSON: **James C. Lamb, Jr.**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 7. Ref page 6-2: This page shows Smith CTs being added in 2008, while page 5-13 shows them all added in 2009. Which is correct?

Response 7. The table on page 5-13 is a somewhat more generic version of the table on page 6-2. At this time neither is correct. EKPC plans to install Smith CTs 8-9 by June 2009 and Smith CTs 10-12 in the 2012-14 timeframe.

EAST KENTUCKY POWER COOPERATIVE, INC.

PSC CASE NO. 2006-00471

INFORMATION REQUEST RESPONSE

ATTORNEY GENERAL'S INFORMATION REQUEST DATED 2/7/07

REQUEST 8

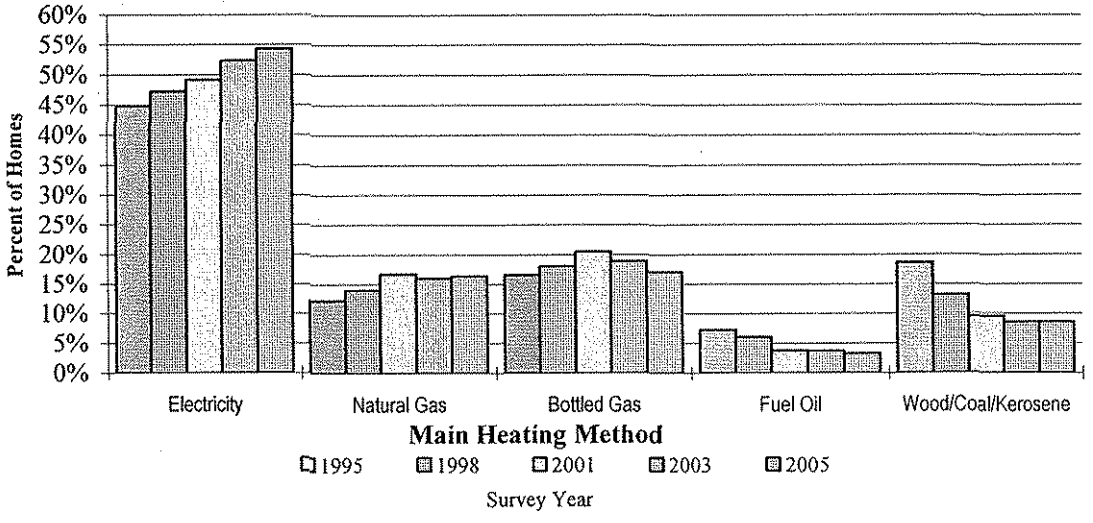
RESPONSIBLE PERSON: **James C. Lamb, Jr.**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 8. What assumptions, if any, has EKPC made with respect to the penetration of natural gas distribution service during the coming two decades?

Response 8 . While EKPC does not explicitly forecast natural gas penetration, the End-use Survey does provide information EK uses to evaluate trends. The following table is from the most recent survey, 2005 Member System End Use Survey.

Changes in Main Heating Method
EKPC Weighted Average



EAST KENTUCKY POWER COOPERATIVE, INC.

PSC CASE NO. 2006-00471

INFORMATION REQUEST RESPONSE

ATTORNEY GENERAL'S INFORMATION REQUEST DATED 2/7/07

REQUEST 9

RESPONSIBLE PERSON: **James C. Lamb, Jr.**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 9. Ref page 7-8 and 7-10: Why are total residential sales for the years 2006, 2007, and 2008 in Table 7.(4)(c) different that the total residential sales for these years depicted in Table 7(4)(a)-1?

Response 9 . The residential sales on page 7-10 is the summation of residential, seasonal, and public building sales shown on page 7-8. Most member systems include these customers in the residential class, however, for those that do break them out, separate models are constructed. Page 7-8 shows the results of each of the models.

EAST KENTUCKY POWER COOPERATIVE, INC.

PSC CASE NO. 2006-00471

INFORMATION REQUEST RESPONSE

ATTORNEY GENERAL'S INFORMATION REQUEST DATED 2/7/07

REQUEST 10

RESPONSIBLE PERSON: **James C. Lamb, Jr.**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 10. Ref page 7-12: Does NOAA provide the normalized weather data, or is it developed by EKPC?

Response 10 . EKPC uses normalized weather data constructed by the forecasting branch of ITRON, a consultant with forecasting software, for 6 weather stations.

EAST KENTUCKY POWER COOPERATIVE, INC.

PSC CASE NO. 2006-00471

INFORMATION REQUEST RESPONSE

ATTORNEY GENERAL'S INFORMATION REQUEST DATED 2/7/07

REQUEST 11

RESPONSIBLE PERSON: **James C. Lamb, Jr.**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 11. Ref page 7-16: A regression approach is used to estimate total new large loads at the system level. What are the variables used in this regression analysis?

Response 11. The dependent variable is historical industrial number of customers from 1986 to current. The independent variable is a moving average of total employment, which is forecast using EKPC's regional economic model.

EAST KENTUCKY POWER COOPERATIVE, INC.

PSC CASE NO. 2006-00471

INFORMATION REQUEST RESPONSE

ATTORNEY GENERAL'S INFORMATION REQUEST DATED 2/7/07

REQUEST 12

RESPONSIBLE PERSON: **James C. Lamb, Jr.**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 12 Ref page 7-17: What price elasticity factors does EKPC use?

Response 12. The price elasticity factor used is -.2.

EAST KENTUCKY POWER COOPERATIVE, INC.

PSC CASE NO. 2006-00471

INFORMATION REQUEST RESPONSE

ATTORNEY GENERAL'S INFORMATION REQUEST DATED 2/7/07

REQUEST 13

RESPONSIBLE PERSON: **James C. Lamb, Jr.**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 13. Ref page 8-1: Does EKPC evaluate environmental compliance options along with supply-side and demand-side programs during the resource planning process? In other words does EKPC incorporate environmental compliance planning into the resource planning process?

Response 13. EKPC did not explicitly evaluate compliance options with resource options in developing the resource plan. EKPC has been doing separate evaluations of compliance options. Those evaluations led to the addition of SCRs for NOx control on Spurlock 1 and 2, and plans to add scrubbers for SO2 control on those units as well. The scrubbers are currently under construction on both units and are expected to be operational by 2009. Comparative analysis of compliance options includes the cost of any SO2 and NOx allowances to meet regulatory requirements.

EAST KENTUCKY POWER COOPERATIVE, INC.

PSC CASE NO. 2006-00471

INFORMATION REQUEST RESPONSE

ATTORNEY GENERAL'S INFORMATION REQUEST DATED 2/7/07

REQUEST 14

RESPONSIBLE PERSON: **James C. Lamb, Jr.**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 14. Ref page 8-3:EWC submitted a "Clean Air Act Compliance Study" that was submitted as an attachment to the 1993 IRP. Has EKPC performed any clean air compliance study or studies since 1993? If so, please provide a copy of those studies.

Response 14. In 2002 EKPC participated in a nationwide emissions compliance analysis conducted by the National Rural Electric Cooperatives Association ("NRECA"). The NRECA analysis evaluated the most economical compliance alternatives for Generation and Transmission Cooperatives nationwide. The study is discussed beginning on page 160 of EKPC's 2003 IRP.

EAST KENTUCKY POWER COOPERATIVE, INC.

PSC CASE NO. 2006-00471

INFORMATION REQUEST RESPONSE

ATTORNEY GENERAL'S INFORMATION REQUEST DATED 2/7/07

REQUEST 15

RESPONSIBLE PERSON: **James C. Lamb, Jr.**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 15. What is EKPC's relationship with surrounding Regional Transmission Organizations? Does it have plans to join/participate in any such organization?

Response 15. EKPC is designated as a market participant in the Midwest ISO and PJM. As a market participant, EKPC can buy from or sell into those markets. However, EKPC retains control of its assets by not having full membership. A recent study of membership in PJM indicated that EKPC was better off being a participant than a full member. By not being a full member, EKPC has the choice of transacting with either of those markets or utilities to the south, depending on market prices and transmission availability, rather than being locked into only one market.

EAST KENTUCKY POWER COOPERATIVE, INC.
PSC CASE NO. 2006-00471
INFORMATION REQUEST RESPONSE

ATTORNEY GENERAL'S INFORMATION REQUEST DATED 2/7/07
REQUEST 16
RESPONSIBLE PERSON: **James C. Lamb, Jr.**
COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 16. Ref page 8-12: Please describe the process supporting the selection of the plants shown in Table 8.(2)(c). What was the basis for the selection of these particular units? Did EKPC solicit any bids for merchant power? How did the projected capital costs of the other power supply resources compare with the costs of the units selected?

Response 16. EKPC considered technologies that were mature or potentially could be mature within the near future. The estimated capital costs of resources in the subject table were thought to be reasonable and achievable at the time the IRP was developed. EKPC did not have a credible estimate of the capital cost of IGCC, for example, and therefore did not include it in the optimization. EKPC does not solicit bids for the purpose of developing an IRP. However, EKPC did receive an updated power purchase proposal from a bidder in the 2004 RFP. The resources included serve as proxies for baseload, intermediate, and peaking capacity, and their selection by the optimization model helps identify the need for and timing of those types of capacity. EKPC uses the RFP process to evaluate and select specific resources to add to the system.

EAST KENTUCKY POWER COOPERATIVE, INC.

PSC CASE NO. 2006-00471

INFORMATION REQUEST RESPONSE

ATTORNEY GENERAL'S INFORMATION REQUEST DATED 2/7/07

REQUEST 17

RESPONSIBLE PERSON: **James C. Lamb, Jr.**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 17. Ref page 8-14: What specific non-utility generation has EKPC evaluated since the last IRP?

Response 17. In April 2004 EKPC issued an RFP for baseload and peaking resources. A few of the companies responding were electric or gas utilities, but a large percentage of them were independent power producers or equipment manufacturers with engineering, design, and construction capability. There were also proposals for DSM programs and distributed generation. There were approximately 30 proposals that were not from gas or electric utilities. The proposals were evaluated by EKPC and independently by EKPC's consultant on the RFP project.

EAST KENTUCKY POWER COOPERATIVE, INC.

PSC CASE NO. 2006-00471

INFORMATION REQUEST RESPONSE

ATTORNEY GENERAL'S INFORMATION REQUEST DATED 2/7/07

REQUEST 18

RESPONSIBLE PERSON: **James C. Lamb, Jr.**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 18. . Ref: page 8-15: The 2006 IRP includes nine existing DSM programs. Has EKPC or its member systems performed evaluations of these programs? Do these include process and impact evaluations? If so please provide the results of these evaluations. Please identify the level of participation in each of the existing DSM programs since the last IRP.

Response 18. No, neither EKPC nor its member systems have performed process or impact evaluations of each program. EKPC has performed impact evaluations in the past for certain of the DSM programs. EKPC performed an end use metering impact analysis for its Electric Thermal Storage program in 1998. EKPC is currently performing an end use metering impact analysis for its Direct Load Control Demonstration project.

The following table shows the level of participation in each of the existing DSM programs since the last IRP:

DSM Program	Participation		
	2003	2004	2005
Electric Thermal Storage	205	132	244
Water Heater	876	686	678
Geothermal	190	157	144
Air Source Heat Pump	646	816	515
Tune Up	338	508	331
Button Up	496	497	418

EAST KENTUCKY POWER COOPERATIVE, INC.

PSC CASE NO. 2006-00471

INFORMATION REQUEST RESPONSE

ATTORNEY GENERAL'S INFORMATION REQUEST DATED 2/7/07

REQUEST 19

RESPONSIBLE PERSON: **James C. Lamb, Jr.**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 19. Ref response to PSC Request 7 dated 12/20/07: Please explain what is meant by "market efficiencies have been improving relative to program target efficiencies."

Response 19. "Market efficiencies" refers to the average efficiency of equipment that is available for sale in the market. "Program target efficiencies" refers to the efficiency of the equipment that is targeted by the program. For example, in 2007, the market efficiency for new air source heat pumps and central air conditioners is SEER 13, while the program target efficiency is SEER 15.

EAST KENTUCKY POWER COOPERATIVE, INC.

PSC CASE NO. 2006-00471

INFORMATION REQUEST RESPONSE

ATTORNEY GENERAL'S INFORMATION REQUEST DATED 2/7/07

REQUEST 20

RESPONSIBLE PERSON: **James C. Lamb, Jr.**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 20. Has EKPC implemented all of the DSM programs found cost-effective in previous IRPs? If not, which cost-effective programs were not implemented and why?

Response 20. EKPC has implemented all but one of the DSM programs found cost-effective in the 2003 IRP. The Demand Response program has not yet been implemented as a distinct new program. However, member systems can utilize existing rate structures with East Kentucky to provide similar benefits to customers and the system. These include Industrial time-of-day rates, interruptible rates, and special contracts. EKPC has entered the first stage of implementing Direct Load Control (DLC) with its DLC Demonstration Project.

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REQUEST 21

RESPONSIBLE PERSON: **James C. Lamb, Jr.**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 21. Please describe the present status of the implementation of each of the 18 new cost-effective DSM programs.

Response 21. The following table describes the present status of the implementation of each of the 18 new cost-effective DSM programs:

Program Name	Class	Present Status
Compact Fluorescent Lighting	Residential	Implemented
Touchstone Energy Geothermal Heat Pump Home	Residential	Implemented
Touchstone Energy Air Source Heat Pump Home	Residential	Implemented
Touchstone Energy Manufactured Home	Residential	Implemented
Direct Load Control for Air Conditioners and Water Heaters	Residential	Demonstration project
ENERGY STAR Clothes Washer	Residential	In Review
ENERGY STAR Room Air Conditioner	Residential	In Review
ENERGY STAR Refrigerator	Residential	In Review
Programmable Thermostat with Electric Furnace Retrofit	Residential	In Review
Dual Fuel Air Source Heat Pump with Propane Retrofit	Residential	In Review
Commercial Lighting	Commercial	Implemented
C&I Demand Response	Commercial	In Review

Program Name	**Class**	**Present Status**
Commercial Efficient HVAC	Commercial	Implemented
Commercial Building Performance	Commercial	Implemented
Commercial New Construction	Commercial	In Review
Commercial Efficient Refrigeration	Commercial	In Review
Industrial Premium Motors	Industrial	Implemented
Industrial Variable Speed Drives	Industrial	In Review

EKPC and its member systems have formed a DSM working group to take a closer look at the new DSM programs.

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REQUEST 22

RESPONSIBLE PERSON: **James C. Lamb, Jr.**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 22. What entities, EKPC or its members, are responsible for implementing the DSM programs? If members are responsible, what is their commitment to these programs?

Response 22. Member systems are responsible for implementation of DSM programs. EKPC works with its member systems in implementing programs that the members choose to offer their customers. EKPC provides technical and administrative services, and incentive payments, to member systems in support of the DSM programs. Member systems are highly committed to the DSM programs, which are targeted to meet their customer and system needs. EKPC serves sixteen independent member systems, each with their own particular features and needs. EKPC offers a menu of DSM programs to cover that variety of needs, and member cooperatives select to implement those DSM programs which best meet the needs of their customer/owners.

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REQUEST 23

RESPONSIBLE PERSON: **James C. Lamb, Jr.**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 23. Has EKPC determined the member interest in the 18 new DSM programs? If so, what is the level of interest for each?

Response 23. EKPC has not yet formally determined the member interest in the 18 new DSM programs. One objective of the DSM working group is to determine the level of interest.

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REQUEST 24

RESPONSIBLE PERSON: **James C. Lamb, Jr.**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 24. What was the level of member participation in the selection and evaluation of DSM programs?

Response 24. Member systems contribute suggestions for new program ideas to screen.

In order to maintain a consistent technical approach, EKPC performs the DSM screening and quantitative analysis for the IRP on behalf of its members.

Once cost-effective DSM resources have been identified, member systems also participate in designing specific program features.

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REQUEST 25

RESPONSIBLE PERSON: ***James C. Lamb, Jr.***

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 25. Ref page 8-49 and 5-12: Why are the EKPC Projected Capacity Needs on page 5-1 2 somewhat different than the EKPC Projected Capacity Needs on page 8-49?

Response 25. The primary difference between the capacity needs in the two tables is a power purchase that was included in one but not the other. At the time the table on page 5-12 was developed, EKPC had not extended the purchase of the output of Greenup Hydro from Duke Energy-Ohio, and therefore the purchase was excluded. By the time the table on page 8-49 was developed, discussions with Duke Energy-Ohio had progressed enough that it appeared likely that the purchase would be extended through 2010, and the purchase was included. The other difference in the data on page 8-49 is that an assumption on the amount of derating on a coal fired unit due to the addition of a scrubber increased by 2 MW, which was not reflected in the table on page 5-12.

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REQUEST 26

RESPONSIBLE PERSON: **James C. Lamb, Jr.**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 26. Ref: page 8-49: How would EKPC's Projected Capacity Needs change if the impact of New DSM programs is included into the load forecast?

Response 26. The potential amount of reduction in peak demand from new DSM programs is shown on page 8-50 in Table 8.(4)(a)6. This reduction is approximately the capacity of one of the gas turbines evaluated in the resource plan. It is possible that if the peak demand reductions could be reliably achieved, they could replace one of the peaking units in the plan.

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REQUEST 27

RESPONSIBLE PERSON: **James C. Lamb, Jr.**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 27. Ref page 8-52: EKPC used RT Sim's Resource Optimizer to determine the optimum resource plan. Did EKPC provide both demand side and supply side measures as inputs to Resource Optimizer or were only supply side measures provided as alternatives for the resource plan?

Response 27. Only supply side resources were provided as alternatives for the Resource Optimizer.

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REQUEST 28

RESPONSIBLE PERSON: **James C. Lamb, Jr.**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 28. Ref: page 8-52 and 8-12: Did EKPC provide only the supply side options listed in Table 8.(2)(c) as resource alternatives to Resource Optimizer? If EKPC provided other resource alternatives as inputs please provide a listing and description of those inputs.

Response 28. The resources shown in the table on page 8-12 were the only ones evaluated by the Resource Optimizer.

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REQUEST 29

RESPONSIBLE PERSON: **James C. Lamb, Jr.**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 29. Ref: page 8-52: How were environmental impacts included in the selection of supply side resources?

Response 29. The cost of SO2 allowances was factored into the analysis. Projected allowance prices are used to calculate emission dispatch adders that affect dispatch of the units. The greater the SO2 emissions from a unit, the greater the dispatch adder and the more the unit is impacted by having a higher dispatch cost. The comparison of plans in the Resource Optimizer includes the cost of SO2 allowances. NOx allowance prices were not used in the optimization analysis, but will be incorporated in the future. However, as discussed in the response to Request No. 13 above, detailed comparisons of compliance options include the cost of any SO2 and NOx allowances needed to meet regulatory requirements.

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REQUEST 30

RESPONSIBLE PERSON: **James C. Lamb, Jr.**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 30. Ref. page 8-60: DSM programs which pass the Quantitative Evaluation are passed on to the integrated analysis for inclusion in the IRP. Please explain how these DSM programs are included in the IRP. Were the programs treated as competing alternatives to the supply side additions that EKPC is proposing in the 2006 IRP?

Response 30. The impacts of existing DSM programs are incorporated into the load forecast and affect future resource requirements by their impact on the forecast. The same is true for any new programs that the member systems have decided to implement. The DSM programs were not treated as competing alternatives to supply side additions.

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REQUEST 31

RESPONSIBLE PERSON: **James C. Lamb, Jr.**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 31. Ref. page 8-66: What is the value of unserved energy based on the 2000 Christensen Associates study and 2004 EKPC report?

Response 31. The value of unserved energy used in the reserve margin analysis based on the Christensen Associates study and the EKPC "Member System Consumers and Energy Sales" report was $20,000/MWh. Scenarios were run at $15,000/MWh and $25,000/MWh.

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REQUEST 32

RESPONSIBLE PERSON: **James C. Lamb, Jr.**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 32. Ref. page 8-67: Is EKPC's decision to remain at the 12% reserve margin level affected by Warren RECC declining to join EKPC?

Response 32. EKPC plans to remain at the 12% reserve margin level without WRECC. Two of the primary reasons for using the 12% reserve margin based on winter peak are to reduce reliance on market purchases and reduce the risk associated with transmission availability. Those reasons are not affected by WRECC.

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REQUEST 33

RESPONSIBLE PERSON: **James C. Lamb, Jr.**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 33. Ref. page 8-70: EKPC is trying to determine the best strategy for reducing emissions from Dale Station and Cooper Station. Is this strategy a least-cost strategy? Has EKPC attempted to study the interactions between its compliance and capacity options to reach a least-cost solution?

Response 33. . EKPC evaluates compliance options based on a least-cost strategy that includes other factors such as maintaining the stability of the transmission system, fuel availability and delivery, and space limitations. Compliance alternatives are evaluated based on their total cost including the cost of any emission allowances that would need to be purchased for compliance so that the least cost alternatives can be further evaluated.

EKPC established a team in 2006 to investigate compliance options for Cooper Station related to the Clean Air Interstate Rule ("CAIR"). The options considered were the addition of Selective Catalytic Reduction ("SCR"), Flue Gas Desulfurization ("FGD or scrubber"), repowering, or purchasing allowances. Plant retirement was excluded as a viable option early in the process. Due to the forecasted SO2 and NOx allowance prices, capital expenditures for the options, and operation and maintenance costs it was determined that purchasing allowances was the best alternative for EKPC.

A similar team has been established to investigate options for Dale Station. To date, no conclusions have been drawn. Dale Station remains valuable to EKPC for voltage stability and power generation in the Central Kentucky area.

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REQUEST 34

RESPONSIBLE PERSON: **James C. Lamb, Jr.**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 34. Ref. page 8-70: EKPC is considering fuel switching, emission control equipment, repowering and retirement as environmental compliance options. Is EKC considering other options such as power purchases, clean coal technologies, DSM for compliance purposes?

Response 34. Power purchases and re-powering with circulating fluidized bed ("CFB") technology were among the options considered in the evaluation for Cooper Station in Response No. 33. CFB is one of the cleanest coal burning technologies available today. DSM has not been explicitly studied as a compliance option.

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REQUEST 35

RESPONSIBLE PERSON: **James C. Lamb, Jr.**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 35. Please describe the sampling procedure used in the biennial residential customer surveys.

Response 35. The End-use Survey is conducted every two years. The survey is designed for residential households but the residential class is composed of households and non-households. Non-households, such as churches, barns, schools, and others are removed from the population database prior to sampling. In addition, accounts with an average monthly usage of less than 75 kWh or more than 10,000 kWh are not included in the population. Sample size is determined using the following:

$$n = \frac{\frac{Z^2 * P * (1-P)}{B^2}}{R}$$

Where: n = sample size

Z	=	1.96	=	critical value for 95% confidence
P	=	0.5	=	expected occurrence of population characteristic
B	=	0.05	=	bounds of sampling error
R	=	0.5	=	expected response rate.

EKPC uses SAS software to randomly generate survey recipients from the population.

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REQUEST 36

RESPONSIBLE PERSON: **James C. Lamb, Jr.**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 36. Ref. page 77 Load Forecast: Why was the weather-adjusted winter peak in 2004 lower than the weather-adjusted winter peak in 2003?

Response 36. At the time of the reported 2003 peak, the temperature was 5 degrees and EK's largest interruptible load was running. Had the large load not been running, the peak would have occurred on a different day when the temperature was –6 degrees. The adjustment would then have been:

	EKPC Peak MW	Adjusted Peak MW
2003	2,504	2,440
2004	2,610	2,562

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REQUEST 37

RESPONSIBLE PERSON: **James C. Lamb, Jr.**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 37. Ref. response to PSC request lb dated 12/20/07 and PSC request 3 dated 1/5/07: The generation construction plans and schedules without Warren show a shift in the addition of Smith CTs 10-12 to the 2012 to 2014 time period. Is there any other impact on the 2006 Integrated Resource Plan (IRP) without Warren? Are there any other delays or deletions of generation units in the updated 2006 IRP as a result of removing the Warren demand from the EKPC system?

Response 37. The load impacts and construction plans are discussed in the referenced response to the PSC's January 5, 2007 request. The most current commercial operation dates are as follows:

Spurlock 4	April 2009
Smith CTs 8-9	June 2009
Smith CFB 1	June 2011
Smith CTs 10-12	October of 2011, 2012, & 2013 respectively.

There are several other changes in the updated plan. In the plan shown on page 8-50 of the 2006 IRP, the baseload unit shown in 2013 is now deleted, the 2015 baseload unit is shifted to 2017, and the 2019 baseload unit is shifted to 2023. The two gas fired units

(CTs with Steam Injection) in the IRP in 2016 and 2017 are replaced by gas-fired units (CTs) in 2016 and 2020.

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REQUEST 38

RESPONSIBLE PERSON: **James C. Lamb, Jr.**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 38. Ref. first paragraph page DSM -13Technical Appendix to the 2006 IRP: EKPC has accounted for the impacts of New DSM programs in the integrated resource plan. How has EKPC accounted for the Load Impacts of the New DSM Programs in the 2006 integrated resource plan? Will these new programs impact any planned generation additions in the 2006 IRP?

Response 38. The impacts of existing programs that are continuing and any new programs that are known to be in the implementation stage are incorporated in the load forecast. Otherwise, new DSM programs are evaluated as part of the IRP development process, and incorporated to determine the overall impact on the supply side plan as discussed on pages 8-47 and 8-48 of the 2006 IRP. Also see the response to Request No. 26 above.

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REQUEST 39

RESPONSIBLE PERSON: ***James C. Lamb, Jr.***

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 39. Were the New DSM programs included as resource options in the 2006 integrated resource planning analysis such that they could replace in whole or part any of the projected capacity additions?

Response 39. The new DSM programs were not included as resource options in the resource optimization analysis.

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REQUEST 40

RESPONSIBLE PERSON: ***James C. Lamb, Jr.***

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 40. Was the 2006 Integrated Resource Plan tested for sensitivity to various input assumptions such as changes in the level of DSM, environmental and legislative conditions, capital costs of resource options? If so, please provide a description and results of these analyses.

Response 40. The optimization analysis used in developing the 2006 IRP plan is discussed on page 8-52 and 8-53 of the 2006 IRP. The model incorporates variations in loads, market prices, and natural gas prices in both the optimization analysis and production cost analysis. The optimization evaluated 3500 expansion plans with a detailed production cost simulation to determine the lowest cost plans. A sensitivity analysis of various levels of DSM was not evaluated. Compliance with known environmental regulations is included in the analysis, but sensitivities on potential future regulations were not done. The capital costs used in the 2006 IRP were primarily based on EKPC's most current estimates for Spurlock 4, Smith CFB 1, Smith CTs 8-12, and IPP proposals. Those estimates were the result of an RFP issued in 2004 and subsequent negotiations with bidders and vendors. Some estimates were from public project cost information and EPRI Technical Assessment Guide data. EKPC considered the estimates to be current and reasonable and therefore did not do a sensitivity analysis on capital

costs. However, the impact of regulatory delays may have been an appropriate sensitivity to evaluate.

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REQUEST 41

RESPONSIBLE PERSON: **James C. Lamb, Jr.**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 41. Please describe EKPC's capability to import power from surrounding grids. Identify the transmission constraints both within and outside of EKPC's own system.

Response 41. EKPC has imported from external systems up to 350 MW during the most recent summer season and up to 1000 MW during recent winter seasons. The majority of limitations that restrict import capability occur during the summer season. Non-firm transactions are commonly curtailed during the summer season due to transmission system congestion. Firm transmission service must be obtained to provide assurance that power can be imported when needed. Firm transmission service is generally not available from the systems north of EKPC (the Midwest ISO and PJM Pool). Therefore, EKPC has recently secured some firm transmission service from the TVA system to allow the ability to import power when desired.

Power flow analysis indicates that EKPC's import capability based on internal system constraints ranges from 0 MW to 700 MW in the summer and 0 MW to 1300 MW in the winter. The ability to import power is substantially influenced by many factors in the region, such as specific generation dispatch, transmission contingencies, load level, and magnitude of regional transfers.

The transmission constraints within EKPC that limit the capability to import include the following facilities:

- Avon 345-138 kV transformer
- Blue Lick-Bullitt County 161 kV line
- Dale-Fawkes 138 kV line
- Marion County 161-138 kV transformer
- Spurlock-Kenton 138 kV line
- Spurlock-Maysville Jct. 138 kV line
- Transmission system low voltages – risk of voltage collapse

The transmission constraints in neighboring systems that could limit EKPC's ability to import power include the following facilities:

- Goddard-Rodburn 138 kV line (EON)
- Smith-Hardin County 345 kV line (EON)
- Brown South-Fawkes 138 kV line (EON)
- Pierce 345-138 kV transformer (OVEC)
- Pierce-Foster 345 kV line (OVEC)
- Paddys West-Paddys Run 138 kV line (EON)
- Sequoyah-Watts Bar 500 kV line (TVA)
- Miami Fort 345-138 kV transformer (Duke Energy)
- Frankfort East-Tyrone 138 kV line (EON)
- Clifty Creek-Trimble County 345 kV line (OVEC-EON)
- Blue Lick 345-161 kV transformer (EON)
- Ghent-West Lexington 345 kV line (EON)
- Cloverport-Hardinsburg 138 kV line (EON)
- Cumberland-Davidson 500 kV line (TVA)
- Cumberland-Johnsonville 500 kV line (TVA)

EKPC has two construction projects in progress that will mitigate some of these constraints. First, EKPC is constructing a 138 kV line from the Cranston Substation to the Rowan County Substation. This line will provide some additional import capability, and in particular will relieve the constraints on EON's Goddard-Rodburn 138 kV line. Second, EKPC is constructing a new 345 kV line from the J.K. Smith Substation to a new substation named North Clark. This line will also provide some additional import capability, and will in particular relieve the loading issues on the Avon 345-138 kV transformer.

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REQUEST 42

RESPONSIBLE PERSON: **James C. Lamb, Jr.**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 42. Describe fully EKPC's access to commercial power markets. Describe these markets, their liquidity and the capacity that is available during EKPC's winter and summer peaks. Where, if at all, is this resource discussed in the IRP?

Response 42. EKPC is a registered market participant in the Midwest ISO ("MISO") and PJM pool and as such can buy power from or sell power into those pools. However, EKPC retains control over its assets. EKPC also transacts with other utilities not in those pools. MISO and PJM are considered to be very liquid markets for those companies that are full members. However, the final prices for transactions are not known until after the fact once transmission congestion charges are applied. Capacity available in MISO and PJM at the time of EKPC's winter and summer peaks depends on weather conditions, unit outages and other transactions taking place in the pools. Firm transmission from MISO and PJM is rarely available for EKPC's winter and summer peak periods. Therefore most of the power purchased by EKPC from PJM is non-firm and subject to being cut hourly. EKPC's purchases from MISO have diminished considerably due to lack of transmission availability. These markets are not discussed as resources in the 2006 IRP.

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REQUEST 43

RESPONSIBLE PERSON: **James C. Lamb, Jr.**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 43. Please provide a schedule listing EKPC's imports and exports of power during the last three years.

Response 43. The table below shows EKPC's total power imports and exports for the years 2004 through 2006.

EKPC Power Imports and Exports (MWh)

Year	Imports	Exports
2004	3,212,889	53,466
2005	1,881,468	144,197
2006	1,523,645	77,010

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REQUEST 44

RESPONSIBLE PERSON: **James C. Lamb, Jr.**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 44. Describe fully the basis for EKPC's decision not to join MISO.

Response 44. On August 22, 2003, EKPC filed a motion with the Public Service Commission requesting to withdraw its application for membership from MISO. EKPC conducted an evaluation of the economics of MISO membership and the benefit/cost analysis indicated a substantial net cost to join.

The Public Service Commission granted an Order on September 17, 2003, allowing EKPC to withdraw its then pending application.

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REQUEST 45

RESPONSIBLE PERSON: **James C. Lamb, Jr.**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 45. What accounts for the double-digit large commercial load growth in the Inter-county and Salt River member cooperatives between 2006 and 2011?

Response 45. Inter-County Energy and Salt River ECC have information on specific large loads intending to locate in their service areas over the next 5 years, resulting in double digit load growth forecasts. Please note that in the case of Inter-County Energy, their historical base of large commercial sales is quite small, so that a double digit forecast does not necessarily imply large kWh growth.

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REQUEST 46

RESPONSIBLE PERSON: **James C. Lamb, Jr.**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 46. Are the large commercial and industrial customers on EKPC's system able to purchase power from third party vendors other than EKPC? If so, how, if at all, does this capability affect EWC's supply-side planning?

Response 46. All large commercial and industrial retail customers in Kentucky are subject to the Territorial Act (KRS 278.016-.018) and must purchase power from the retail electric supplier in the certified service territory in which they are located. With the exception of buy-through provisions in interruptible service contracts, such customers of EKPC member systems do not have the option of purchasing power from any source outside of the EKPC system. Under such contracts, EKPC locates and provides such power supplied from outside the system during service interruptions. The customer does not purchase directly from the outside supplier.

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REQUEST 47

RESPONSIBLE PERSON: **James C. Lamb, Jr.**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 47. The IRP states that EWC has, in the past, built to meet its summer load even though its highest peak is in the winter. The stated reason is that surrounding systems have summer peaks and therefore available capacity in the winter. Please explain fully the apparent decision now to build to meet the winter peak.

Response 47. As discussed above in the response to Request 42, the availability of firm transmission has decreased substantially over the last few years making it much more difficult to import firm power to meet native load requirements. In addition, market power prices have approximately doubled over the past few years for the winter peak months. For these reasons a change was made to improve reliability to EKPC's member systems and reduce high cost purchases.

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REQUEST 48

RESPONSIBLE PERSON: **James C. Lamb, Jr.**

COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 48. Please provide a schedule of imported winter peaking power during the last five years. Identify the capacity, the energy and the sources of the purchases.

Response 48. Attached is a schedule of firm monthly power purchases for the months of January, February, and December for 2002 through 2006. Daily and hourly purchases were also made to meet operating requirements and for economics but are not included in the attached data.

January 2002 Purchases

		Total Mw	Average Mw/Hour
100 MWS	**Long Term Purchases** CAPP1-LEM-AEP/CIN/LGEE/TVA	48400	65
		48400	**65**

February 2002 Purchases

		Total Mw	Average Mw/Hour
100 MWS	**Long Term Purchases** CAPP1-LEM-AEP/CIN/LGEE/TVA	50000	67
		50000	**67**

December 2002 Purchases

		Total Mw	Average Mw/Hour
100 MWS	**Long Term Purchases** CAPP1-LEM	65100	88
		65100	**88**

January 2003 Purchases

	Long Term Purchases	Total Mw	Average Mw/Hour
50 MWS	BREC-5X16	17248	23
100 MWS	CAPP1-LEM-AEP/CIN/LGEE/TVA	68617	92
		85865	115

February 2003 Purchases

		Total Mw	Average Mw/Hour
100 MWS	**MISO-DTE (Call Options)**	4800	6
50 MWS	**BREC-5X16**	15680	21
100 MWS	**CAPP1-LEM-AEP/CIN/LGEE/TVA**	65015	87
		85495	**115**

December 2003 Purchases

	Total Mw	Average Mw/Hour
100 MWS **CAPP1-TVA-5X16**	35200	47
100 MWS **FDP01-TVA-7X24**	19300	26
	54500	**73**

January 2004 Purchases

		Total Mw	Average Mw/Hour
50 MWS	**CAPP1-CIN-5X16**	9079	12
100 MWS	**CAPP2-CIN-5X16**	10882	15
50 MWS	**CAPP3-CIN-5X16**	14048	19
100 MWS	**CAPP1-LGEE-5X16**	16808	23
30 MWS	**CAPP1-LGEE-5X16**	461	1
50 MWS	**CAPP1-TVA-5X16**	3912	5
		55190	**74**

February 2004 Purchases

		Total Mw	Average Mw/Hour
100 MWS	**CAPP1-CIN-5X16**	31241	42
50 MWS	**CAPP2-CIN-5X16**	10388	14
50 MWS	**CAPP3-CIN-5X16**	784	1
50 MWS	**CAPP1-LGEE-5X16**	2408	3
50 MWS	**CAPP1-LGEE-5X16**	808	1
		45629	**61**

December 2004 Purchases

	Total Mw	Average Mw/Hour
100 MWS **CAPP1-TVA-5X16**	36800	49
		0
	36800	**49**

January 2005 Purchases

	Total Mw	Average Mw/Hour
100 MWS **CAPP1-TVA-5X16**	33600	45
	33600	**45**

February 2005 Purchases

	Total Mw	Average Mw/Hour
100 MWS **CAPP1-TVA-5X16**	32000	43
	32000	**43**

December 2005 Purchases

		Total Mw	Average Mw/Hour
7X16	**INTERNAL GREENUP HYDRO**	30702	41
		30702	**41**

January 2006 Purchases

		Total Mw	Average Mw/Hour
7X24	**INTERNAL GREENUP HYDRO**	15185	20
100 MWS	**CAPP1-MISO-7X24**	56400	76
		71585	**96**

February 2006 Purchases

		Total Mw	Average Mw/Hour
7X24	**INTERNAL GREENUP HYDRO**	18842	25
		18842	**25**

December 2006 Purchases

		Total Mw	Average Mw/Hour
7X24	**INTERNAL GREENUP HYDRO**	34434	46
50 MWS	**CAPP1-PJM-7X16**	14400	19
50 MWS	**CAPP1-TVA-7X16**	19376	26
50 MWS	**CAPP2-TVA-7X16**	23808	32
50 MWS	**CAPP3-TVA-7X16**	8512	11
		100530	**135**

EAST KENTUCKY POWER COOPERATIVE

March 7, 2007

HAND DELIVERED

Ms. Elizabeth O'Donnell
Executive Director
Public Service Commission
211 Sower Boulevard
Post Office Box 615
Frankfort, KY 40602

Re: PSC Case No. 2006-00471

Dear Ms. O'Donnell:

Please find enclosed for filing with the Commission in the above-referenced case, an original and eight copies of the Responses of East Kentucky Power Cooperative, Inc., to the Commission Staff's Second Data Requests dated February 15, 2007, and the Attorney General's Requests for Information dated February 7, 2007.

Very truly yours,

Charles A. Lile
Senior Corporate Counsel

Enclosures

Cc: Parties of Record

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

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

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE 2006 INTEGRATED RESOURCE PLAN OF EAST KENTUCKY POWER COOPERATIVE, INC.	))	CASE NO. 2006-00471

SECOND DATA REQUEST OF COMMISSION STAFF TO EAST KENTUCKY POWER COOPERATIVE, INC.

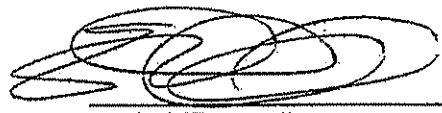
East Kentucky Power Cooperative, Inc. ("EKPC"), pursuant to 807 KAR 5:001, is requested to file with the Commission the original and 8 copies of the following information, with a copy to all parties of record. The information requested herein is due on or before March 7, 2007. Each copy of the data requested should be placed in a bound volume with each item tabbed. When a number of sheets are required for an item, each sheet should be appropriately indexed, for example, Item 1(a), Sheet 2 of 6. Include with each response the name of the witness who will be responsible for responding to questions relating to the information provided. Careful attention should be given to copied material to ensure that it is legible. Where information requested herein has been provided, in the format requested herein, reference may be made to the specific location of said information in responding to this information request.

1. When evaluating the potential supply side options to meet the system demands determined from the load forecast, explain whether the following events are considered in conjunction with the availability of the particular supply side option. If a sensitivity analysis is performed, explain how the events are incorporated into the analysis.

a. Scheduled outages of a generating unit.

b. Forced outages of a generating unit.

c. Generating unit unavailable for prolonged periods of time. For purposes of this question, a prolonged period means at least 3 months.



Beth O'Donnell
Executive Director
Public Service Commission
P. O. Box 615
Frankfort, KY 40602

DATED February 15, 2007

cc: All Parties

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE 2006 INTEGRATED RESOURCE PLAN OF)	**CASE NO.**
EAST KENTUCKY POWER COOPERATIVE, INC)	**2006-00471**

EAST KENTUCKY POWER COOPERATIVE, INC.

PSC CASE 2006-00471

SECOND DATA REQUEST RESPONSE

PUBLIC SERVICE COMMISSION'S REQUEST DATED 2/15/07

In response to an Order of the Public Service Commission's second data request, East Kentucky Power Cooperative, Inc. (EKPC) submits its responses to the questions contained therein.

EAST KENTUCKY POWER COOPERATIVE, INC.
PSC CASE NO. 2006-00471
SECOND DATA INFORMATION REQUEST RESPONSE

PUBLIC SERVICE COMMISSION REQUEST DATED 2/15/07
REQUEST 1
RESPONSIBLE PERSON: **James C. Lamb, Jr.**
COMPANY: **East Kentucky Power Cooperative, Inc.**

Request 1. When evaluating the potential supply side options to meet the system demands determined from the load forecast, explain whether the following events are considered in conjunction with the availability of the particular supply side option. If a sensitivity analysis is performed, explain how the events are incorporated into the analysis.

Request 1a. Scheduled outages of a generating unit.

Response 1a. The RT Sim production cost model has two methods of handling scheduled outages. One method is to use specific predetermined outages for each unit, and the other method is to have the model automatically schedule the outages based on a specified number of days or weeks per year. EKPC uses a combination of both methods. A discrete maintenance schedule is maintained for all existing units and units expected to become commercial within 3 years. That schedule was input into the model and covered the 2006-08 time period. All units after that time period are included in the automatic maintenance scheduling. All units have a specified number of days or weeks per year of scheduled maintenance, and the model tries to schedule maintenance to maximize the minimum weekly capacity reserves. That is, the maintenance scheduler would not schedule maintenance during peak load periods when capacity reserves are low. Instead,

maintenance would be scheduled mostly in the spring and fall periods when capacity reserves would otherwise be high. The scheduled maintenance logic applies to all units, including resource options in the optimizer.

Request 1b. Forced outages of a generating unit.

Response 1b. The RT Sim production cost model includes a detailed representation of forced outages in every analysis. The model uses a Monte Carlo type analysis such that discrete forced outages are incurred by all units. The amount of forced outage time in a particular year approximately coincides with the forced outage rate input for a particular unit for that year. The model actually simulates each year a number of times (iterations) and reports the average (expected) value of the output data. The random forced outages that occur in each of the individual iterations are different and therefore have a different cost impact depending on when the outage occurs.

Request 1c. Generating unit unavailable for prolonged period of time. For purposes of this question, a prolonged period means at least 3 months.

Response 1c. The RT Sim production cost model has the capability to model the probability of prolonged outages. At this time EKPC does not include the probability of a prolonged outage in the analysis. The probability of such an outage would be small and might not show up in the analysis unless a large number of iterations were run.