COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

SENERAL ADJUSTMENT OF ELECTRIC RATES OF EAST KENTUCKY POWER COOPERATIVE, INC.)	CASE NO. 2006-00472

FIRST DATA REQUEST OF COMMISSION STAFF TO THE CUMBERLAND CHAPTER OF THE SIERRA CLUB

The Cumberland Chapter of the Sierra Club ("Sierra Club"), pursuant to 807 KAR 5:001, is to file with the Commission the original and 10 copies of the following information, with a copy to all parties of record. The information requested herein is due on or before August 8, 2007. Responses to requests for information shall be appropriately bound, tabbed and indexed. Each response shall include the name of the witness responsible for responding to the questions related to the information provided.

Each response shall be answered under oath or, for representatives of a public or private corporation or a partnership or association or a governmental agency, be accompanied by a signed certification of the preparer or the person supervising the preparation of the response on behalf of the entity that the response is true and accurate to the best of that person's knowledge, information, and belief formed after a reasonable inquiry.

The Sierra Club shall make timely amendment to any prior responses if it obtains information which indicates that the response was incorrect when made or, though correct when made, is now incorrect in any material respect. For any request to which

the Sierra Club fails or refuses to furnish all or part of the requested information, the Sierra Club shall provide a written explanation of the specific grounds for its failure to completely and precisely respond.

Careful attention shall be given to copied material to ensure that it is legible. When the requested information has been previously provided in this proceeding in the requested format, reference may be made to the specific location of that information in responding to this request. When applicable, the requested information shall be separately provided for total company operations and jurisdictional operations.

- Refer to the Prepared Testimony of Geoffrey M. Young ("Young Testimony"), page 8 of 41.
- a. Provide printed copies of the report Mr. Young discusses authored
 by David Moskovitz entitled "Profits and Progress Through Least-Cost Planning,"
 November, 1989.
- b. The referenced report, "Profits and Progress Through Least-Cost Planning" authored by David Moskovitz, was published 18 years ago. Has Mr. Moskovitz issued any updates or revisions to this report since 1989? If yes, provide printed copies of the updates or revisions.
- 2. Refer to the Young Testimony, pages 11 and 12 of 41. Mr. Young states that the result of allowing industrial customers to opt out of utility-assisted demand side management ("DSM") programs and utilities' removal of any plans to develop DSM programs for the industrial sector has deprived that class of the opportunity to participate in utility-assisted DSM programs.

- a. If the industrial customers have opted out of participating in utilitysponsored DSM programs, explain further how industrial customers are deprived when their participation is voluntary.
- b. If known, provide the reasons that industrial customers have given for opting out of the utility-assisted DSM programs.
- c. Could one reason that industrial customers opt out of the programs be that they develop their own DSM programs?
- d. Would Mr. Young agree that given the competitive environment faced by industrial customers, those customers may have already undertaken and implemented every reasonable energy-efficient measure practicable in order to minimize costs and maximize net income? Explain the response.
- e. What percentage of the total sales of the 16 member distribution cooperatives ("16 member coops") is classified as sales to the industrials?
- 3. Refer to the Young Testimony, pages 15 and 16 of 41. Mr. Young states that because DSM is generally a much cheaper energy resource than building new power plants, it may be concluded "with certainty" that plans by East Kentucky Power Cooperative, Inc. ("EKPC") to build plant cannot be the lowest-cost plan for its customers or society as a whole.
- a. Describe the analyses or studies Mr. Young has conducted that support this conclusion concerning EKPC. Provide printed copies of the analyses or studies.
- b. Assume EKPC determines it has a resource need for 300 MW annually. How many residential and commercial customers at the 16 member coops

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would have to participate in cost-effective DSM programs to meet the 300 MW need? Include all workpapers, calculations, assumptions, and sources of information utilized in the response.

- 4. Refer to the Young Testimony, pages 16 through 19 of 41. Mr. Young states that Louisville Gas and Electric Company ("LG&E"), Kentucky Utilities Company ("KU"), and The Union Light, Heat and Power Company ("ULH&P") had pilot decoupling programs in the past.
- a. The Commission authorized the pilot decoupling program for LG&E in Case No. 1993-00150¹ and for ULH&P in Case No. 1995-00312.² Was Mr. Young aware that the Commission never authorized a pilot decoupling program for KU?
- b. Was Mr. Young aware that the LG&E DSM pilot program was established prior to the enactment of KRS 278.285?
- c. Was Mr. Young aware that industrial customers of LG&E were included in its DSM Collaborative?

¹ Case No. 1993-00150, A Joint Application for the Approval of Demand-Side Management Programs, A DSM Cost Recovery Mechanism, and a Continuing Collaborative Process on DSM for Louisville Gas and Electric Company, final Order dated November 12, 1993.

² Case No. 1995-00312, The Joint Application Pursuant to 1994 House Bill No. 501 for the Approval of the Principles of Agreement, Demand Side Management, The Union Light, Heat and Power Company, and for Authority for The Union Light, Heat and Power Company to Implement Various Tariffs to Recover Costs, Lost Revenues and Receive Incentives Associated with Demand Side Management Programs, final Order dated December 1, 1995.

- d. Was Mr. Young aware that in Case No. 1997-00083,³ LG&E and its DSM Collaborative proposed to replace the residential decoupling mechanism with a net lost revenues approach, but the Commission rejected the proposal?
- e. The LG&E residential decoupling mechanism was discontinued in Case No. 1999-00121⁴ and the ULH&P residential decoupling mechanism was discontinued in Case No. 1999-00414.⁵ Is there specific language in either of these Orders discontinuing the decoupling that leads Mr. Young to the "inferences" he provides at page 17 of his testimony?
- f. On page 18 of 41 Mr. Young appears to indicate that LG&E and KU were owned by E.ON at the time LG&E filed its application to discontinue the residential decoupling mechanism. Was Mr. Young aware that E.ON did not acquire LG&E and KU until 2001?
- g. On page 18 of 41, Mr. Young states his recollection of the sequence of events that led to LG&E seeking to discontinue the residential decoupling mechanism. Provide printed copies of all documents that support Mr. Young's statements.

³ Case No. 1997-00083, The Joint Application of the Members of the Louisville Gas and Electric Company Demand-Side Management Collaborative for the Review, Modification, and Continuation of the Collaborative, DSM Programs, and Cost Recovery Mechanism, final Order dated April 27, 1998.

⁴ Case No. 1999-00121, The Application of Louisville Gas and Electric Company for Changes to the Recovery of Demand-Side Management Revenues from Lost Sales Component of Its Demand-Side Management Cost Recovery Mechanism for Residential Electric Customers, final Order dated April 1, 1999.

⁵ Case No. 1999-00414, Demand Side Management Programs and Cost Recovery Filing for Demand Side Management Programs by The Union Light, Heat and Power Company, final Order dated June 29, 2000.

- h. On page 19 of 41, Mr. Young discusses the discontinuation of ULH&P's residential decoupling mechanism.
- (1) Provide Mr. Young's basis for his explanation as to why ULH&P discontinued its decoupling program.
 - (2) Are ULH&P's concerns on record anywhere?
 - 5. Refer to the Young Testimony, pages 19 through 23 of 41.
- a. Provide printed copies of the omitted portions of Eric Hirst's paper "Statistical Recoupling: A New Way to Break the Link Between Electric-Utility Sales and Revenues."
- b. Mr. Hirst's paper is dated September 1993. Has Mr. Hirst issued any updates or revisions to the 1993 paper? If yes, provide printed copies of the updates or revisions.
 - c. Concerning the adoption of statistical recoupling,
- (1) Indicate how many state regulatory commissions have adopted the statistical recoupling approach and how many are currently in effect.
- (2) Describe the circumstances that existed at the time the state regulatory commission authorized statistical recoupling.
- (3) Provide printed copies of the document issued by the state regulatory commission authorizing statistical recoupling.
- 6. Refer to the Young Testimony, page 22 of 41. Mr. Young states that "Statistical recoupling appears to be the decoupling approach that would be most beneficial for Kentucky."

- a. Is Mr. Young's conclusion based solely on the articles he has referenced in his testimony? Explain the response.
- b. Has Mr. Young any personal experience in the development or application of the statistical models or formulas required under the statistical recoupling approach? If yes, describe Mr. Young's experience.
- 7. Refer to the Young Testimony, page 22 of 41. Mr. Young states that as a not-for-profit cooperative, EKPC can return excess net income to its customers and has done so in the past. Specifically identify when EKPC has previously returned excess net income to its customers.
- 8. Refer to the Young Testimony, pages 23 and 24 of 41. Explain the methodology of the measurement and verification protocols.
 - 9. Refer to the Young Testimony, page 24 of 41.
- a. Has Mr. Young developed and run the statistical models required in conjunction with his recommendation that statistical recoupling be adopted for EKPC? Explain the response.
- b. Has Mr. Young provided the statistical models and formulas that would be required as part of the implementation of statistical recoupling for EKPC in this case? Explain the response.
- c. Has Mr. Young provided proposed revisions to EKPC's existing tariffs reflecting his proposed adoption of statistical recoupling? Explain the response.
- d. If none of the items outlined in parts (a) through (c) above have been provided, explain in detail how the Commission can evaluate the reasonableness of the proposal to adopt statistical recoupling for EKPC.

10. On page 24 of 41, Mr. Young states,

Following the example of the decoupling pilot programs that were tried by LG&E, KU, and ULH&P, the Commission could approve a new tariff for EKPC that would add a single line to customers' bills. In order to communicate the purpose and function of this element to customers in the clearest possible way, I propose that this item on customers' bills be called either the "Efficiency Savings Factor" or the "Efficiency Shared Savings Factor."

- a. As proposed by Mr. Young, would this "single line" be added to the power bills from EKPC to the 16 member coops or be added to the bills from the 16 member coops to their member consumers?
- b. Was Mr. Young aware that the rate changes approved in this case will be to the power bills received by the 16 member coops from EKPC?
- c. Was Mr. Young aware that the 16 member coops have filed applications to pass through the change in the rates from EKPC under the provisions of KRS 278.455?
- d. Was Mr. Young aware that KRS 278.455(2) provides that a distribution cooperative may change its rates to reflect a change in the rate of its wholesale supplier if the effects of an increase or decrease are allocated to each class and within each tariff on a proportional basis that will result in no change in the rate design currently in effect?
- e. If Mr. Young's recommendation for a customer bill line item called "Efficiency Savings Factor" or Efficiency Shared Savings Factor" is aimed at the member consumers of the 16 member coops, does Mr. Young believe that this recommendation is beyond the scope of this rate case and the provisions of KRS 278.455(2)? Explain the response.

- 11. Refer to the Young Testimony, page 25 of 41. Concerning Mr. Young's recommendation that EKPC phase out the Electric Thermal Storage ("ETS") program,
- a. Since the ETS program shifts loads to off peak times, would Mr. Young agree that this shift provides for an improved utilization of EKPC's existing generating facilities? Explain the response.
- b. If the ETS program actually shifts loads from on peak to off peak times, explain in detail how this results in boosting energy consumption.
- c. If Mr. Young has relied on independent analyses or studies to reach the conclusion the ETS program should be phased out, provide printed copies of these analyses or studies. If the analyses or studies are more than 7 years old, also explain the relevance of the analyses or studies to today's situation.
- 12. Refer to the Young Testimony, page 32 of 41. Concerning the referenced case study at lines 19 through 23,
 - a. Provide printed copies of the referenced report.
- b. Mr. Young states that "of 65 case studies for which sufficient information existed to include in the report, 58 projects encountered utility related barriers." Was Mr. Young aware that the authors of this case study acknowledge the case study focuses on cases where barriers were present based on the perspective of distributed generator project proponents?
 - 13. Refer to the Young Testimony, page 33 of 41.
- a. How much electricity is represented by 5 percent of the rolling average of EKPC's highest monthly coincident peak demand in each of the prior three 12-month periods?

- b. How much electricity for each of the 16 member coops is represented by 15 percent of the rolling average of each member coop's highest monthly coincident peak demand in each of the prior three 12-month periods?
- c. How much electricity is currently available in Kentucky from qualifying facilities and distributed generation?
- 14. Refer to the Young Testimony, page 34 of 41. Mr. Young states, "Given the set of incentives faced by member cooperatives as a result of EKPC's wholesale tariffs, it would be reasonable to assume that a typical distribution co-op would be willing to pay a cogenerator or small power producer a rate approximately equal to the wholesale rate that the co-op pays to EKPC."
- a. Explain in detail why it would be "reasonable to assume" any of the 16 member coops would make such a purchase from a co-generator or small power producer if the rates are approximately the same as EKPC's wholesale rate.
- b. Since the 16 member coops are the owners of EKPC, explain in detail why any of the member coops would be willing to purchase electricity from a cogenerator or small power producer if the rate was approximately equal to the EKPC wholesale rate.
 - 15. Refer to the Young Testimony, page 35 of 41, lines 7 through 22.
- a. Is Mr. Young aware of any existing tariffs approved by any state regulatory commissions that pay qualifying facilities in the manner he discusses?
 - b. If yes to part (a) above, provide printed copies of the tariff.

c. Explain who would determine whether the technology utilized by a

qualifying facility is an environmentally-sound generation technology or a highly-

polluting technology.

d. Has Mr. Young provided in this case copies of his revised EKPC

qualifying facility tariffs? Explain the response.

16. Refer to the Young Testimony, page 36 of 41.

a. Would Mr. Young's definition of an environmentally-sound

generation technology recognize the installation and operation of any pollution control

equipment, such as scrubbers or selective catalytic reduction equipment, by EKPC?

Explain the response.

b. Who is "Energy Vortex"?

c. Since 807 KAR 5:054 already defines "avoided costs," explain in

detail why it is necessary to consider other definitions of the term.

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DATED July 25, 2007

cc: All Parties