

# Goss • Samford PLLC



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December 9, 2013

**VIA HAND DELIVERY**

Mr. Jeff Derouen  
Executive Director  
Kentucky Public Service Commission  
P.O. Box 615  
Frankfort, Kentucky 40602

RE: Case No. 2013-00259

Dear Mr. Derouen:

Enclosed for filing, please find one original and ten copies of the public version of East Kentucky Power Cooperative, Inc. ("EKPC") Information Request to Sonia McElroy and Sierra Club (collectively "Environmental Intervenors") in the above referenced case. One confidential version copy of the Information Request is enclosed in a sealed envelope.

If you have any questions or require additional information, please contact me.

Very truly yours,

Mark David Goss

Enclosures

cc: Hon. Michael L. Kurtz  
Hon. Joe Childers  
Hon. Kristin Henry  
Hon. Shannon Fisk  
Hon. Matthew E. Gerhart

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

**In the Matter of:**

<b>AN APPLICATION OF EAST KENTUCKY POWER</b>	)	
<b>POWER COOPERATIVE, INC. FOR A CERTIFICATE</b>	)	
<b>OF PUBLIC CONVENIENCE AND NECESSITY FOR</b>	)	
<b>ALTERATION OF CERTAIN EQUIPMENT AT THE</b>	)	<b>CASE NO.</b>
<b>COOPER STATION AND APPROVAL OF A</b>	)	<b>2013-00259</b>
<b>COMPLIANCE PLAN AMENDMENT FOR</b>	)	
<b>ENVIRONMENTAL SURCHARGE COST</b>	)	
<b>RECOVERY</b>	)	

**EAST KENTUCKY POWER COOPERATIVE, INC.  
INFORMATION REQUESTS TO  
SONIA MCELROY AND SIERRA CLUB (PUBLIC VERSION)**

Sonia McElroy and Sierra Club (collectively “Environmental Intervenors”), pursuant to the Order dated November 25, which revised the Procedural Schedule in Case No. 2013-00259 are requested to file responses to the following requests for information by December 18, 2013, with copies to the Commission and to all parties of record, and in accordance with the following:

1. 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.
2. If any request appears confusing, please request clarification directly from EKPC.
3. The responses provided should first restate the question asked and also identify the person(s) supplying the information.
4. Please answer each designated part of each information request separately. If you do not have complete information with respect to any interrogatory, so state and give as much information as you do have with respect to the matter inquired about, and

identify each person whom you believe may have additional information with respect thereto.

5. To the extent that the specific document, workpaper or information does not exist as requested, 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 the Companies object to any request on the grounds that the requested information is proprietary in nature, or for any other reason, please notify EKPC as soon as possible.

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

9. "Document" means the original and all copies (regardless of origin and whether or not including additional writing thereon or attached thereto) of memoranda, reports, books, manuals, instructions, directives, records, forms, notes, letters, notices, confirmations, telegrams, pamphlets, notations of any sort concerning conversations, telephone calls, meetings or other communications, bulletins, transcripts, diaries, analyses, summaries, correspondence investigations, questionnaires, surveys, worksheets, and all drafts, preliminary versions, alterations, modifications, revisions, changes, amendments and written comments concerning the foregoing, in whatever form, stored or contained in or on whatever medium, including computerized memory or magnetic media. A request to identify a document means to state the date or dates, author or originator, subject matter, all addressees and recipients, type of document (e.g., letter, memorandum, telegram, chart, etc.), code number thereof, or other means of identifying it and its present location and custodian. If any such document was, but is no longer in the Companies' possession or subject to its control, state what disposition was made of it, including the date of such disposition.

10. "Study" means any written, recorded, transcribed, taped, filmed, or graphic matter, however produced or reproduced, either formally or informally, considering or evaluating a particular issue or situation, in whatever detail, whether or not

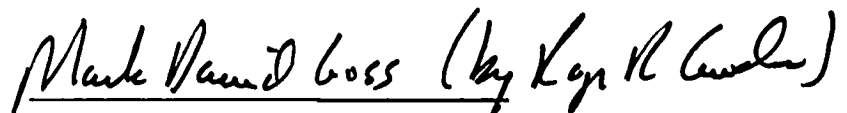
the study of the issue or situation is in a preliminary stage, and whether or not the study discontinued prior to completion.

11. "Person" means any natural person, corporation, professional corporation, partnership, association, joint venture, proprietorship, firm, or the other business enterprise or legal entity. A request to identify a natural person means to state his or her full name and residence address, his or her present last known position and business affiliation at the time in question. A request to identify a person other than a natural person means to state its full name, the address of its principal office, and the type of entity.

12. "And" and "or" should be considered to be both conjunctive and disjunctive, unless specifically stated otherwise. "Each" and "any" should be considered to be both singular and plural, unless specifically stated otherwise. Words in the past tense should be considered to include the present, and words in the present tense include the past, unless specifically stated otherwise. "You" or "your" means the person whose filed testimony is the subject of these interrogatories and, to the extent relevant and necessary to provide full and complete answers to any request, "you" or "your" may be deemed to include any person with information relevant to any interrogatory who is or was employed by or otherwise associated with the witness or who assisted, in any way, in the preparation of the witness' testimony.

13. Respondent means the Companies and/or any of their officers, directors, employees, or agents who may have knowledge of the particular matter addressed.

Respectfully submitted,



Mark David Goss  
Goss Samford, PLLC  
2365 Harrodsburg Road  
Suite B325  
Lexington, KY 40504  
*Counsel for East Kentucky Power Cooperative, Inc.*

**CERTIFICATE OF SERVICE**

This is to certify that an original and 10 copies of the foregoing Petition for Confidential Treatment of Information in the above-styled case were hand delivered to the office of the Public Service Commission, 211 Sower Boulevard, Frankfort, KY 40601 this 9th day of December, 2013.

Joe Childers  
Joe F. Childers & Associates  
300 Lexington Building  
201 West Short Street  
Lexington, KY 40507

Shannon Fisk  
Earthjustice  
1617 JFK Boulevard, Suite 1675  
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Kristin Henry  
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85 Second Street  
San Francisco, CA 94105

Michael L. Kurtz  
Boehm, Kurtz and Lowry  
36 East Seventh Street, Suite 1510  
Cincinnati, OH 45202

  
Mark Daniel Boss (by Royal Under)  
Counsel for East Kentucky Power Cooperative, Inc.

The following questions are directed to Sonia McElroy.

1. Please indicate how long Ms. McElroy has been a member of Shelby Energy Cooperative, Inc (“Shelby Energy”).
2. Please provide the following information concerning Ms. McElroy’s residence on Lee Port Road in Milton, Kentucky:
  - a. What is the total square footage of the residence?
  - b. Is the residence heated using electricity?
  - c. What was the average monthly electric usage, in kWh, from September 1, 2011 through August 31, 2013 for the residence?
3. Please indicate whether Ms. McElroy has undertaken any of the following energy efficiency activities in her residence prior to September 2013:
  - a. Replaced incandescent light bulbs with compact fluorescent light (“CFL”) bulbs. If yes, please indicate the total number of light bulbs in use in the residence and how many of that total has been changed to CFL bulbs?
  - b. Unplugged electronics that are not in use.
  - c. Utilized smart power strips.
  - d. Purchased Energy Star appliances and equipment. If yes, please provide a listing of the Energy Star appliances and equipment purchased.
  - e. Applied weather-stripping and caulking to the residence.
  - f. Had an energy audit performed for the residence.
4. Please indicate if Ms. McElroy has availed herself of the following demand-side management and energy efficiency programs offered by Shelby Energy:
  - a. Net Metering Program.
  - b. Button-Up Weatherization Program.
  - c. Heat Pump Retrofit Program.
  - d. Direct Load Control Program.
  - e. EnviroWatts Program.

The following questions are directed to the Cumberland Chapter of the Sierra Club (“Cumberland Chapter”).

5. Please provide the following information concerning the Cumberland Chapter:

a. The name and mailing address of the Chairman, President, or chief officer of the Cumberland Chapter.

b. Of the approximately 5,000 members of the Cumberland Chapter, indicate how many of this total are members of the 16 Distribution Cooperatives of EKPC. Provide this count by each Distribution Cooperative and in total.

c. If the information requested in part b is not available, please explain in detail why the Cumberland Chapter does not have information concerning the electricity providers of its members.

d. Using the Cumberland Chapter member counts provided in part b above, indicate how many of the following demand-side management and energy efficiency programs each of these members have participated in. Provide these counts by Distribution Cooperative and in total.

- 1) EnviroWatts Program.
- 2) Net Metering Program.
- 3) Touchstone Energy Home Program.
- 4) Direct Load Control Program.
- 5) Button-Up Weatherization Program.
- 6) Heat Pump Retrofit Program.
- 7) HVAC Duct Sealing Program.
- 8) Touchstone Energy Manufactured Home Program.

e. If the information requested in part d is not available, please explain in detail why the Cumberland Chapter does not have information concerning its members participation in the demand-side management and energy efficiency programs offered by the members' electricity providers.

6. Please provide copies of the board resolution or other documentation approved by the Cumberland Chapter authorizing intervention in this proceeding. If there was no board resolution or other documentation authorizing the intervention, please explain how it was decided that the Sierra Club and the Cumberland Chapter would intervene in this proceeding.

7. Please provide copies of the monthly newsletter "The Cumberland" for the months of August 2012 through December 2013. Identify every article, advertisement, or notice that:

a. Provides links to Kentucky electric utility websites that discuss and promote the various demand-side management and energy efficiency programs offered by the utility. If these links are not included in the newsletter, please explain in detail why this information is not routinely included as part of the newsletter.

b. Provides information to the reader encouraging contact with their electricity provider to find out what demand-side management or energy efficiency programs are available. If this information is not included in the newsletter, please explain in detail why this information is not routinely included as part of the newsletter.

c. Provides information concerning financial or other resources available to the reader to encourage the deployment of demand-side management or energy efficiency measures. If this information is not included in the newsletter, please explain in detail why this information is not routinely included as part of the newsletter.

8. As of November 27, 2013 the Sierra Club's website, <http://www.sierraclub.org>, lists under "Goals" the following priority campaigns: "Beyond Coal," "Beyond Oil," "Beyond Natural Gas," and "Our Wild America." Several layers within the "Beyond Coal" campaign is a webpage labeled "Efficiency" which suggests four things residential customers could do: use CFL bulbs, unplug electronics when not in use, weatherize the home, and have an energy audit. Does the Cumberland Chapter believe the information presented on the "Efficiency" webpage found on the Sierra Club's website under the "Beyond Coal" priority campaign constitutes an aggressive promotion of demand-side management and energy efficiency programs to residential customers? Please explain the response.

9. Also under the "Goals" section of the website is listed 13 other programs covering a variety of topics including electric vehicles, environmental law, genetic engineering, global population, and nuclear free campaign. However, the promotion of demand-side management and energy efficiency programs are not included on that list. To the extent the Cumberland Chapter is aware, please explain in detail why the promotion of demand-side management and energy efficiency programs is not listed as a major program emphasis of the national Sierra Club.

10. Please provide the following information for calendar years 2010 through 2013:

- a. The national and Kentucky budgets for the "Beyond Coal" campaign.
- b. The national and Kentucky actual expenditures for the "Beyond Coal" campaign.



c. The national and Kentucky budgets of the Sierra Club and the Cumberland Chapter for programs directly promoting demand-side management and energy efficiency programs.

d. The national and Kentucky actual expenditures of the Sierra Club and Cumberland Chapter for programs directly promoting demand-side management and energy efficiency programs.

The following questions are directed to Tyler Comings.

11. Please provide a copy of the contract, memorandum of understanding, or other documentation between the Sierra Club and Synapse Energy Economics, Inc. (“Synapse”) related to the analysis and testimony performed in conjunction with this case. Specifically, provide the sections of the applicable documents that govern the analysis to be performed by Synapse.

a. Was Synapse directed by the Sierra Club to produce a totally independent and objective analysis of the proposed EKPC Cooper Unit 1 project or was Synapse directed by the Sierra Club to produce an analysis that conformed with and complimented the “Beyond Coal” campaign? Please explain the response in detail.

12. Please describe any affiliated relationships between the Sierra Club and Synapse. Affiliated relationships can include, but are not limited to:

a. Investment in Synapse by the Sierra Club.  
b. Corporate ownership of Synapse in total or part by the Sierra Club.  
c. Officers and officials of the Sierra Club holding seats on the Synapse board of directors.

13. Please refer to page 1 of the Comings Direct Testimony and Exhibit TFC-1.

a. It appears that Mr. Comings’ work experience, training, and educational background has been primarily focused in the areas of mathematics and economics. Is this correct?

b. Does Mr. Comings have any work experience, training, or educational background in the fields of electrical or environmental engineering? If yes, please describe.

c. On page 1 Mr. Comings states he performed an economic impact analysis for a proposed Renewable Portfolio and Efficiency Standard in Kentucky for Mountain Association for Community Economic Development. However, Mr. Comings’ profile on

[http://www.synapse-energy.com/expertise/staff\\_comings.shtml](http://www.synapse-energy.com/expertise/staff_comings.shtml) states “At Synapse, Mr. Comings has performed economic impact modeling for Vermont’s Comprehensive Energy Plan and its energy efficiency investments, and for Kentucky’s renewable and energy efficiency portfolio standard.” Would Mr. Comings agree that to date Kentucky has not adopted nor established a renewable and energy efficiency portfolio standard?

d. Refer to Exhibit TFC-1. For the period 2005 through 2010, please provide a detailed listing of all the renewable energy projects or other energy-related projects Mr. Comings worked, the duration of each project, and the status of each project.

14. Refer to page 2 of the Comings Direct Testimony.

a. Please provide a copy of Mr. Comings’ testimony before the Indiana Regulatory Commission in Cause No. 44339.

b. Please identify every regulatory proceeding where Mr. Comings has been a witness. Include the state commission, the case number and styling, the date Mr. Comings’ testimony was provided, and a copy of that testimony. If a final decision has been issued in any of these other proceedings, please include a copy of the commission’s final decision.

15. Refer to pages 6 and 7 of the Comings Direct Testimony. Beginning on line 24 of page 6, Mr. Comings states “I have substituted the Company’s energy price forecasts with a more reasonable forecast based on the relationship of the Company’s broker values for energy from 2013 through 2017 compared to its projected natural gas prices for that period.”

a. Please provide the basis for Mr. Comings’ contention that using the historic relationship between brokered values for energy compared to the projected natural gas prices constitutes a “more reasonable” forecast. Include any analysis, studies, or other evaluations performed by Mr. Comings that support his contention.

b. Is this conclusion based solely on Mr. Comings’ professional experience and opinion? Please explain the response.

16. Refer to page 7 of the Comings Direct Testimony. At line 1 Mr. Comings states “This adjusted forecast also matches closely with the Company’s actual bid prices for energy from 2013 through 2017.” What does Mr. Comings mean by “the Company’s actual bid prices”?

17. Refer to page 10 of the Comings Direct Testimony, lines 11 through 17. Mr. Comings states “The Company appears to be attempting to maximize net revenues from energy and capacity markets rather than focusing on meeting its own capacity and energy requirements.” He

further states “In this way, the Company is making a decision very much like a merchant generator, except that captive ratepayers are ‘on the hook’ if EKPC’s market projections are incorrect.”

a. Please explain the basis and rationale for these statements. How is “attempting to maximize net revenues from energy and capacity markets” inconsistent with “focusing on meeting its own capacity and energy requirements”?

b. Is Mr. Comings suggesting that the ratepayers are not at risk if the Company does not acquire additional energy and capacity resources?

c. Is Mr. Comings suggesting that ratepayers are not at risk if the Company selects one or more proposals other than the Cooper Unit 1 remediation proposal?

d. Did Mr. Comings review EKPC’s response to the Commission Staff’s Initial Data Request, Response 5 that shows the “Ratio of Generation to Load” column in AA of worksheet “Proposal Evaluation\_Energy Production”?

e. Does that information not indicate that the Company is indeed viewing the amount of generation each proposal would provide in relation to its native load requirements?

18. Refer to page 10 of the Comings Direct Testimony, lines 18 through 20. Mr. Comings states that EKPC has not provided the projected costs of operating the Cooper Unit 1. Does Mr. Comings understand that the Cooper Unit 1 retrofit was one of the proposals submitted in response to the Request for Proposals (“RFP”) and the costs for that project were provided in the same manner as for other proposals submitted in response to the RFP?

19. Refer to page 11 of the Comings Direct Testimony, lines 7 through 9. Mr. Comings states that “In the worst case (if Cooper unit 1 is not dispatched sufficiently to cover its own costs), ratepayers will also be stuck with stranded investments.”

a. What does Mr. Comings believe will happen to the investment already made in Cooper Unit 1 if it is not retrofitted but is rather retired?

b. How does the magnitude of that stranded investment compare to the amount requested for the retrofit?

20. Refer to page 12 of the Comings Direct Testimony. In discussing the energy price forecasts used in EKPC’s analysis, Mr. Comings states that the approach used for a specific two-year period appears “unreasonable and arbitrary”.

a. Please provide the basis for Mr. Comings' contention the approach is "unreasonable and arbitrary". Include any analysis, studies, or other evaluations performed by Mr. Comings that support his contention.

b. Is this conclusion based solely on Mr. Comings' professional experience and opinion? Please explain the response.

c. Please provide all energy price forecasts that are publicly available and are from recognized sources that he is personally familiar with and accepts as reasonable.

21. Refer to page 13 of the Comings Direct Testimony. In response to the question "Where does the Company obtain its energy market price forecasts?" Mr. Comings responds "The energy price forecast is produced by ACES Power Marketing ('ACES'), an 'energy marketing agent' owned by EKPC and other cooperatives. EKPC President and CEO, Mr. Anthony Campbell, serves as a board member of ACES." Mr. Comings further points out that an independent auditor "expressed some concern ... that ACES may not be sufficiently independent."

a. How does Mr. Comings think the independence of ACES Power Marketing, or lack thereof, affects the energy price forecasts it provides to EKPC? What is the basis for your opinion?

b. How does Mr. Comings think the independence of ACES Power Marketing, or lack thereof, affects the energy price forecasts Wood Mackenzie provides to ACES Power Marketing? What is the basis for your opinion?

22. Refer to pages 13 and 14 of the Comings Direct Testimony, beginning at line 7 on page 13. Mr. Comings states "It is notable that in the docket wherein EKPC requested membership in PJM (Case No. 2012-00169), the Company noted that an independent auditor (Liberty Consulting Group) 'recommended that 'EKPC should hire an independent consultant to determine the costs and benefits of ISO membership,' and further 'expressed some concern in its report that ACES may not be sufficiently independent.'"

a. Was Mr. Comings aware that EKPC hired Charles River Associates to be its independent consultant for the benefit cost analysis of joining an ISO?

b. Please explain the relevance of Mr. Comings' statements to the current case and EKPC's use of the ACES energy price forecast?

23. Refer to pages 14 through 16 of the Comings Direct Testimony, where Mr. Comings discusses his adjustments to the energy price forecast.

a. On page 14, lines 5 and 6, Mr. Comings states that an indicated price jump in the ACES energy market price forecast is unreasonable and unlikely. Please provide the basis for this conclusion. Include any analysis, studies, or other evaluations performed by Mr. Comings that support his conclusion.

b. On page 14, lines 6 through 8, Mr. Comings challenges the reasonableness of the long-term Wood Mackenzie forecast. Would Mr. Comings agree that the firm of Wood Mackenzie is an established firm, it is accepted as an industry expert, and its forecasts are widely accepted in the electric power industry? If the response to any part is “no”, please explain why in detail.

c. On page 14, lines 10 through 15, Mr. Comings discusses his methodology using an implied marginal heat rate applied to natural gas prices going forward. He states “This methodology assumes that the energy prices in the future will continue to track with natural gas prices in a similar manner.” Please explain in detail why it is reasonable to assume this relationship will continue in the future. Include any analysis, studies, or other evaluations performed by Mr. Comings that support this assumption.

d. On page 15, line 6, Mr. Comings states “[I]n recent years, energy and natural gas prices have been correlated.” Please explain the basis for this statement. If it is based on numerical analysis of electric energy and natural gas price data, please identify the data used and the analysis applied to reach this conclusion, including the delivery points for electricity and natural gas, the start and end dates of the analysis period, the frequency of the data (i.e., hourly, daily, monthly), the computational procedure(s) used, and the numerical results.

e. On page 16, lines 10 through 12, Mr. Comings cites a pair of factors that allegedly make his adjusted energy price forecast reasonable. Please explain in detail how the cited factors support the conclusion that his adjusted energy price forecast is reasonable.

24. Refer to page 15 of the Comings Direct Testimony, lines 6 through 9. Mr. Comings states “Given the [REDACTED] in energy prices shown in the Company’s energy price forecast, one would expect a [REDACTED] in natural gas prices or a major policy change – such as the addition of a carbon policy.”

a. How does Mr. Comings define the [REDACTED] as he applied it to energy prices?

b. Are natural gas prices and “major policy changes” the only factors that can cause a [REDACTED] in electric energy prices? If the answer is “yes”, please provide the basis for Mr.

Comings' opinion. If the answer is "no", please identify the other factors that could cause this "change" in energy prices.

c. Do environmental regulations in place and/or prospective environmental regulations constitute "major policy changes"? If so, did Mr. Comings consider the possibility that they are the cause of the [REDACTED] in the energy price forecast provided by ACES Power Marketing?

d. Aside from the alternative energy price forecast Mr. Comings constructed for his direct testimony in this case, did Mr. Comings consider any third-party energy price forecasts? If so, please identify those forecasts and explain why Mr. Comings chose not to use them for purposes of his valuation analysis in this case.

25. Refer to page 16 of the Comings Direct Testimony, lines 8 through 10. Mr. Comings states "In fact, the Company has chosen to use a forecast that [REDACTED]. [REDACTED]. What is the basis for Mr. Comings' conclusion that the ACES Power Marketing electric energy price forecast does not include costs associated with a [REDACTED] [REDACTED]?"

26. At several points in Mr. Comings' direct testimony he refers to "the Company's" energy price forecast (e.g. page 15, line 8) and "the Company's" natural gas price forecast (e.g. page 15, line 12). Given that Mr. Comings identified ACES Power Marketing as the source of the price forecasts, does he mean to suggest that ACES Power Marketing provides different price forecasts depending on the identity of its client?

27. Mr. Comings insists throughout his testimony that EKPC has ignored potential carbon costs in the future, as well as other environmental costs. EKPC stated that the future market prices should have a reflection of what the market thinks appropriate costs should be. However, Mr. Comings is adamant that the price forecast used is overstated because it does not follow the recent gas to power price ratio format.

a. Does the current gas to power price ratio include the future costs of environmental rules?

b. If not, why is it unreasonable to think that the forecast supplied is incorrect?

c. The label on the workbook indicated that an explicit adder for carbon was not taken into account in the forecast. Please explain in detail why Mr. Comings apparently assumed that the market indicators did not factor in the expected impacts of carbon.

d. Please explain in detail why Mr. Comings believes that the current gas to power price ratio will remain constant into the future with the addition of new environmental regulations.

28. Refer to page 20 of the Comings Direct Testimony, lines 12 through 17. “Cooper unit 1 and the rest of the Company’s fleet are subject to economic dispatch among other plants in PJM. Generally, the PJM energy price must be sufficient to cover the operating cost of each unit for it to operate. The adjusted energy prices would mean Cooper unit 1 would get dispatched less often than with the Company’s energy price forecast, further decreasing the valuation of the project.” Please explain why correcting Mr. Comings’ valuation numbers for the economic dispatch corresponding to his adjusted energy prices would decrease his valuation of Cooper Unit 1.

29. Refer to pages 23 through 25 of the Comings Direct Testimony, where Mr. Comings discusses the capacity price projections. In this discussion, Mr. Comings states that he substituted the projected capacity price for the 2016/2017 delivery year with the May 24, 2013 results from the PJM capacity auction for 2016/2017. However, for the remaining years of the analysis, Mr. Comings did not adjust or alter the capacity price projections.

a. Please explain in detail why it is reasonable to adjust only the 2016/2017 projected capacity price to the actual results of the PJM capacity auction for that time period.

b. If the results of the PJM capacity auction for 2016/2017 had been higher than the projected capacity price, would Mr. Comings have adjusted the projected capacity price for that year? Please explain the response.

c. Given how the results of the 2016/2017 PJM capacity auction were different than the projected capacity price for that period, please explain in detail why Mr. Comings was willing to keep the capacity prices the same as the EKPC forecast for delivery years after 2016/2017. Include any analysis, studies, or other evaluations performed by Mr. Comings that support this approach.

30. Refer to pages 25 through 27 of the Comings Direct Testimony. On page 26, line 5 is the question “What are the key risks and benefits associated with the wind PPA?” Mr. Comings replies “The wind PPA carries the risk that energy market prices will be even lower than the cost of energy quoted in the PPA (see Figure 10, above). However, the energy cost of the wind remains lower than even my adjusted all-hours energy price forecast; therefore this risk is low.”

a. After factoring in the 2016/2017 PJM capacity auction results and Mr. Comings adjusted energy price forecast, provide the revised NPV of the wind PPA.

b. What is the probability in each year from 2015 through 2035 that the all-hours energy price outcome is below Mr. Comings' adjusted all-hours energy price forecast for the same year?

c. Did Mr. Comings consider risks associated with the cost and availability of transmission incorporated in his assessment of the wind PPA? If not, explain why not. If so, explain how Mr. Comings came to the conclusion that these risks were not "key"?

d. Did Mr. Comings consider risks associated with changes in PJM markets and market rules in his assessment? If not, explain why not. If so, explain how Mr. Comings came to the conclusion that these risks were not "key"?

e. Did Mr. Comings consider the risk of supplier default in his assessment? If not, explain why not. If so, explain how Mr. Comings came to the conclusion that this risk was not "key"?

f. Would Mr. Comings agree that there are credit risks associated with entering into a long-term PPA? Please explain the response.

g. Please refer to Figure 10 on page 26. Based on the information contained on this graphic, please indicate whether the greatest value of the wind PPA occurs at the beginning or end of the period.

h. When considering forecasts of market prices, please indicate whether the near-term or long-term price forecasts are likely to be more accurate.

31. Refer to pages 28 through 40 of the Comings Direct Testimony. In this section of his testimony, Mr. Comings criticizes EKPC for not including in its analysis any compliance costs associated with the following environmental regulations:

- 1) Emerging National Ambient Air Quality Standards ("NAAQS").
- 2) Re-issuance of the Cross State Air Pollution Rule ("CSAPR").
- 3) Rules governing the disposal of Coal Combustion Residuals ("CCR").
- 4) Provisions of the Clean Water Act, Section 316(b), governing cooling water intake structures.
- 5) Clean Water Act effluent limitation guidelines for scrubber and ash handling wastewater at steam electric generating units.



a. Would Mr. Comings agree that none of the five listed environmental regulations has been finalized and currently in force? Please indicate “yes” or “no” for each regulation.

b. Would Mr. Comings agree that it is likely that each of the five listed environmental regulations could face challenges in the court system after being finalized? For any regulation where Mr. Comings’ response is “no”, please explain in detail why the response is no.

c. Would Mr. Comings agree that until each of the five listed environmental regulations are finalized and in force, the specific compliance plan to satisfy the regulation cannot be determined? For any regulation where Mr. Comings’ response is “no”, please explain in detail why the response is no.

d. Would Mr. Comings agree that until each of the five listed environmental regulations are finalized and in force, the specific costs of compliance cannot be determined? For any regulation where Mr. Comings’ response is “no”, please explain in detail why the response is no.

32. Refer to page 31 of the Comings Direct Testimony, lines 4 through 9. Mr. Comings acknowledges that the impact of these various environmental rules cannot be known with absolute certainty. He further states “Until each rule is finalized, and until the state and EPA determine compliance mechanisms for electric generating units that violate these rules, the exact timing and impact of these rules is unknown.”

a. Given this acknowledgment by Mr. Comings, please explain in detail why he believes EKPC should have evaluated “proxy” compliance costs.

b. Would Mr. Comings agree that while several of these regulations are in draft form, until the regulations are finalized, survived court challenges, and in force, the appropriate compliance approach and associated compliance costs cannot be accurately determined?

33. Refer to page 32 of the Comings Direct Testimony, lines 13 through 17. Concerning the NAAQS, Mr. Comings identifies the standard that “most likely” will impact EKPC’s solid-fueled assets in this case. Please explain in detail how Mr. Comings determined which NAAQS would “most likely” impact EKPC. Include any analysis, studies, or other evaluations performed by Mr. Comings that support his conclusion.

34. On April 2, 2012, the Big Rivers Electric Corporation (“Big Rivers”) filed with the Commission Case No. 2012-00063, an application seeking a Certificate of Public Convenience

and Necessity (“CPCN”) for several capital projects it proposed to construct that would bring its generating units into compliance with the requirements of CSAPR and the Mercury and Air Toxics Standards rule. The total capital investment was \$283.49 million. On August 21, 2012, the U.S. Court of Appeals for the District of Columbia Circuit vacated CSAPR. On August 22, 2012, the Sierra Club and other intervenors in the case filed motions requesting that the Commission deny without prejudice Big Rivers’ CPCN citing the decision of the D.C. Circuit Court of Appeals.

a. Was Mr. Comings aware of this Kentucky proceeding?

b. Mr. Comings argues that EKPC should be incorporating compliance costs for the yet to be reissued CSAPR, which has not been finalized and could undergo court challenges once it is issued. However, when the Sierra Club was an intervenor in a case that was based on complying with the original CSAPR while it was on appeal, as soon as an appellate court vacated the original CSAPR, the Sierra Club moved that the application be denied without prejudice. Would Mr. Comings agree that there appears to be some inconsistency between his position and the position his client has taken in a previous case? If no, please explain why not.

35. Refer to page 37 of the Comings Direct Testimony, concerning the potential cost of compliance with rules governing the disposal of CCR.

a. Please explain in detail why it is appropriate to utilize the estimated costs of compliance estimated for the Tennessee Valley Authority as a surrogate for the potential compliance costs at Cooper Unit 1.

b. Beginning at line 9 Mr. Comings states “While I do not have specific engineering knowledge of the conditions at Cooper unit 1, I assume that compliance with the CCR rule at Cooper unit 1 would cost approximately \$41 million (2012\$), assuming conversion to dry ash handling will be required.” Since Mr. Comings acknowledges he has no specific engineering knowledge of the conditions at Cooper Unit 1, please explain in detail how he can offer any reasonable estimate of the potential compliance cost for CCR.

36. Refer to page 40 of the Comings Direct Testimony, lines 10 through 27.

a. Beginning at line 12, Mr. Comings states “Under lenient to strict environmental regimes, the Company could see capital compliance obligations of anywhere from \$8 to \$92 million or more at Cooper unit 1.” Does not a range of compliance costs of \$84 million support

EKPC's position that determining these compliance costs at this time is subject to much uncertainty and speculation? Please explain the response.

b. Beginning at line 24, Mr. Comings states in part "It is my opinion that a reasonable mid-level estimate of future obligations is the more lenient implementation of environmental rules." Is Mr. Comings in effect suggesting the compliance obligation should be \$50 million? Please explain the response and also explain in detail why the amount is reasonable. Include any analysis, studies, or other evaluations performed by Mr. Comings that support his conclusions.

37. Refer to pages 41 through 49 of the Comings Direct Testimony.

a. Despite all the activity concerning the mitigation of carbon dioxide ("CO<sub>2</sub>") pollution, would Mr. Comings agree that to date there has been no regulations finalized or in force dealing with CO<sub>2</sub>?

b. Would Mr. Comings agree that regardless of how regulations addressing CO<sub>2</sub> pollution are developed and what statutory authority is utilized to support those regulations, it is likely that any finalized regulations will be challenged in the court system?

c. Have there already been legal challenges to the EPA's interpretation of the Clean Air Act as it applies to CO<sub>2</sub>?

d. If the regulations are not finalized and are not in force, can Mr. Comings at this time identify the exact compliance strategy and the specific compliance costs for CO<sub>2</sub> EKPC would incur? If yes, please identify the compliance strategy and provide a detailed breakdown of the specific compliance costs. Include any analysis, studies, workpapers, or other evaluations performed by Mr. Comings to support his identified compliance strategy and compliance costs.

38. Refer to page 42 of the Comings Direct Testimony, lines 11 through 15, and Exhibit TFC-4, page 12. While the Idaho Public Utilities Commission ("Idaho Commission") did state that it seemed likely the EPA would move forward and enact additional regulations regarding CO<sub>2</sub>, the Idaho Commission also stated "The Commission also acknowledges that recent history has demonstrated that attempts by energy analysts to predict carbon pricing is fraught with failure and uncertainty." Does Mr. Comings agree with the Idaho Commission's observation concerning energy analysts' attempts at predicting carbon pricing? Please explain the response.

39. Refer to page 47 of the Comings Direct Testimony, beginning at line 18, and Exhibit TFC-3.

a. Does Mr. Comings agree that EPA has indicated it would seek state input in developing CO<sub>2</sub> emission standards under Section 111(d) of the Clean Air Act?

b. On page 2 of the October 22, 2013 letter to EPA Administrator McCarthy, Secretary Peters states: “Kentucky is committed to reducing its greenhouse gas emissions, but we will not put our citizens and industries in the untenable position of having to forego economic prosperity to achieve these reductions.” Secretary Peters also states: “As the state most-dependent on coal-fired generation and one with the most energy-intensive manufacturing economy, Kentucky has much at stake if national policies do not take into account the variations among the states in establishing existing source guidelines.” Would Mr. Comings agree that Secretary Peters clearly argues that any existing source CO<sub>2</sub> regulations need to take into consideration the specific situation existing in each of the states?

c. Would Mr. Comings agree that carbon price forecasts such as Synapse’s 2013 Carbon Dioxide Forecast, Exhibit TFC-10, addresses carbon prices from a national point of view rather than a state by state approach?

40. Refer to page 48 of the Comings Direct Testimony, lines 14 through 20.

a. Please provide copies of any analysis, evaluations, or other documents by parties independent of Synapse that establishes that the Synapse 2013 Carbon Dioxide Forecast is “a reasonable carbon price forecast”.

b. Since Mr. Comings did not utilize the Synapse 2013 Carbon Dioxide Forecast in his evaluation of the proposed Cooper Unit 1 project, please explain why this document was submitted as part of his direct testimony.

41. Refer to page 50 of the Comings Direct Testimony.

a. Please explain whether Mr. Comings is familiar with the corporate structure of an electric cooperative.

b. Was Mr. Comings aware that EKPC is a generation and transmission cooperative that is owned by the 16 member distribution cooperatives it sells power to?

c. Was Mr. Comings aware that the EKPC board of directors is comprised of representatives of each of the 16 member distribution cooperatives?

d. Was Mr. Comings aware that the EKPC board of directors approved the Cooper Unit 1 project, as shown in Exhibit 2 to the Application?

The following questions are directed to Jeffrey Loiter.

42. Please provide a copy of the contract, memorandum of understanding, or other documentation between the Sierra Club and Optimal Energy, Inc. (“Optimal”) related to the analysis and testimony performed in conjunction with this case. Specifically, provide the sections of the applicable documents that govern the analysis to be performed by Optimal.

a. Was Optimal directed by the Sierra Club to produce a totally independent and objective analysis of the proposed EKPC Cooper Unit 1 project or was Optimal directed by the Sierra Club to produce an analysis that conformed with and complimented the “Beyond Coal” campaign? Please explain the response in detail.

43. Please describe any affiliated relationships between the Sierra Club and Optimal. Affiliated relationships can include, but are not limited to:

- a. Investment in Optimal by the Sierra Club.
- b. Corporate ownership of Optimal in total or part by the Sierra Club.
- c. Officers and officials of the Sierra Club holding seats on the Optimal board of directors.

44. Refer to pages 2 and 3 of the Loiter Direct Testimony and Exhibit JML-1.

a. On page 3 of the Loiter Direct Testimony, Mr. Loiter states he has submitted written testimony and/or testified before utility commissions in Arkansas, Virginia, West Virginia, Ohio, Kansas, and Maryland. However, on page 1 of Exhibit JML-1, Mr. Loiter’s resume states he has submitted expert testimony in case filings in Virginia, Ohio, Arkansas, Pennsylvania, Maryland, and Missouri. Please explain why there are differences in these two listings and indicate exactly which states Mr. Loiter has submitted written testimony and/or testified before utility commissions.

b. For each state identified in part a above where Mr. Loiter has submitted written testimony, please provide a copy of the written testimony and identify the case docket number and case style, the utility commission, the utility in the case, and on whose behalf Mr. Loiter was filing testimony. If a final commission order or decision has been issued in the case, please also provide a complete copy of the utility commission’s final order or decision.

c. For each state identified in part a above where Mr. Loiter provided testimony before a utility commission, provide a copy of the transcript of Mr. Loiter’s testimony and identify the case docket number and case style, the utility commission, the utility in the case, and on whose behalf Mr. Loiter was testifying. If a final commission order or decision has been

issued in the case, please also provide a complete copy of the utility commission's final order or decision.

d. On page 2 of Exhibit JML-1 it is stated that Mr. Loiter managed Optimal's participation in a team developing a Five-Year Energy Efficiency and Demand Response Plan for the Tennessee Valley Authority ("TVA").

1) Please describe Optimal's and Mr. Loiter's role and responsibility in this team. Were Mr. Loiter and Optimal the team leaders on this project?

2) Did TVA eventually adopt this plan? Please explain the response.

45. Refer to page 4 of the Loiter Direct Testimony. Does Mr. Loiter agree that absolute least cost is not the standard by which CPCN applications are evaluated?

46. Refer to pages 6 through 12 of the Loiter Direct Testimony.

a. Was Mr. Loiter retained by the Sierra Club to perform the analysis of EKPC's 2012 Integrated Resource Plan ("IRP") in Case No. 2012-00149?

b. If he was not, did Mr. Loiter have access to the workpapers, analyses, evaluations, and other work product prepared by the Sierra Club experts in Case No. 2012-00149 or are his comments, observations, and criticisms in his testimony based solely on his own independent analysis of the Case No. 2012-00149 record?

47. Refer to page 10 of the Loiter Direct Testimony, lines 1 through 3. Please provide a detailed listing of the specific jurisdictions to which Mr. Loiter refers and please provide a copy of the regulatory agency's orders and/or utility tariffs upon which Mr. Loiter's assertions are based.

48. Refer to pages 12 and 13 of the Loiter Direct Testimony.

a. The provided link to the American Council for an Energy-Efficient Economy ("ACEEE") State Energy Efficiency Scorecard is a single page document titled "2013 Spending Tables" and notes as the source document "2013 State Energy Efficiency Scorecard". Please explain in detail why Mr. Loiter only provided what appears to be a single page of the scorecard?

b. On page 13, at lines 2 through 4, Mr. Loiter states "There is no reason why EKPC's programs should be limited to 0.15% each year for five years." Is this statement based solely on the comparison of the net incremental savings from electricity efficiency for the states listed on pages 12 and 13 of his direct testimony?

c. According to the United States Energy Information Administration (“EIA”), its Electric Power Monthly report released on November 20, 2013, the average retail price of electricity to residential customers and all sectors for September 2013<sup>1</sup> was:

- 1) Tennessee – 9.89 cents and 9.40 cents per kWh.
- 2) North Carolina – 11.47 cents and 9.46 cents per kWh.
- 3) Indiana – 11.10 cents and 8.72 cents per kWh.
- 4) Ohio – 12.21 cents and 9.25 cents per kWh.
- 5) Michigan – 14.99 cents and 11.06 cents per kWh.
- 6) Kentucky – 9.94 cents and 7.89 cents per kWh.

Would Mr. Loiter agree that the average price of electricity would influence the success of any demand-side management or energy efficiency programs? Please explain the response in detail.

49. Refer to pages 13 and 14 of the Loiter Direct Testimony. Please provide all workpapers, analyses, studies, assumptions, and other documentation utilized by Mr. Loiter to arrive at his estimated 2017 cumulative annual savings of 244,000 MWh and his estimated 2021 savings of 533,000 MWh.

50. Refer to page 14 of the Loiter Direct Testimony, lines 12 through 31.

a. Please explain in detail why it is reasonable for Mr. Loiter to add the summer peak reductions of 36 MW and 78 MW from the 2012 IRP to the currently planned 50 MW of summer peak reduction.

b. Please provide all the calculations, assumptions, workpapers, and other documentation that supports Mr. Loiter’s determination that \$1.7 million per year could produce a sustained additional 22 MW of summer peak demand reduction. Include with this response a detailed listing of the specific programs and activities that would produce the 22 MW reduction.

c. Please provide all the calculations, assumptions, workpapers, and other documentation that supports Mr. Loiter’s determination that in 2017 the total peak demand reduction would equal 58 MW. Include with this response a detailed listing of the specific programs and activities that would produce the 58 MW reduction.

51. Refer to page 16 of the Loiter Direct Testimony. In the previously referenced EIA Electric Power Monthly report, the average retail price of electricity for residential customers in New England for September 2013 was 17.40 cents per kWh and for all sectors was 15.07 cents

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<sup>1</sup> [http://www.eia.gov/electricity/monthly/epm\\_table\\_grapher.cfm?t=epmt\\_5\\_6\\_a](http://www.eia.gov/electricity/monthly/epm_table_grapher.cfm?t=epmt_5_6_a).

per kWh. Would Mr. Loiter agree that the price of electricity in New England would significantly influence the success of any energy efficiency programs? Please explain the response in detail.

52. Refer to Exhibit JML-2 of the Loiter Direct Testimony.

a. Was this study prepared at the request of any agency of the Commonwealth of Kentucky? If no, please identify the entities that requested the development of the “Technical Assistance Program – Energy Efficiency Cost-Effective Resource Assessment for Kentucky.”

b. Does Mr. Loiter have access to the workpapers, assumptions, analyses, and other documentation that support the evaluations and conclusions contained in Exhibit JML-2?

c. Is Mr. Loiter prepared to make the authors of Exhibit JML-2 available for discovery or cross-examination if there are questions concerning the assumptions, evaluations, or conclusions contained in the report?

d. The first page of the Executive Summary states that this assessment is the first of three documents that comprise the ACEEE’s energy efficiency potential study for Kentucky. Please indicate when the remaining two documents are expected to be completed.

53. Are Mr. Comings or Mr. Loiter aware of any utility that has been able to retain 116 MW of capacity for an investment of \$15 million?