COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF KENTUCKY UTILITIES COMPANY FOR CERTIFICATES OF PUBLICE CONVENIENCE AND NECESSITY AND APPROVAL OF ITS 2011 COMPLIANCE PLAN FOR RECOVERY BY ENVIRONMENTAL SURCHARGE))))	CASE NO. 2011-00161
APPLICATION OF LOUISVILLE GAS AND ELECTRIC COMPANY FOR CERTIFICATES OF PUBLIC CONVENIENCE AND NECESSITY AND APPROVAL OF ITS 2011 COMPLIANCE PLAN FOR RECOVERY BY ENVIRONMENTAL SURCHARGE))))	CASE NO. 2011-00162

COMMISSION STAFF'S FIRST REQUEST FOR INFORMATION TO INTERVENORS RICK CLEWETT, RAYMOND BARRY, SIERRA CLUB AND NATURAL RESOURCES DEFENSE COUNCIL

Rick Clewett, Raymond Barry, Sierra Club, and National Resources Defense Council (collectively "Environmental Intervenors"), pursuant to 807 KAR 5:001, are to file with the Commission, in each of the above styled cases, the original and 15 copies of the following information, with a copy to all parties of record. The information requested herein shall be filed no later than October 13, 2011. 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 Environmental Intervenors shall make timely amendment to any prior response if they obtain 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 Environmental Intervenors fail or refuse to furnish all or part of the requested information, they shall provide a written explanation of the specific grounds for their failure to completely and precisely respond. Careful attention shall be given to copied material to ensure that it is legible.

- 1. Refer to page 3 of the Direct Testimony of William Steinhurst, Ph.D. at line 16, where Mr. Steinhurst states that, "[t]he Commission should examine these same issues in its ongoing proceeding regarding the Companies' IRP" and at lines 23-24 where he states that, "[t]he Commission may wish to require that filling be made in its proceeding on the Companies' IRP."
- a. Explain whether Mr. Steinhurst is aware that, pursuant to 807 KAR 5:058, the administrative regulation governing the filing of integrated resource plans ("IRPs") by Kentucky's regulated electric generating utilities, the review of the IRPs is an informal process resulting in a report by the Commission Staff critiquing the IRP, not a Commission Order which makes a formal ruling on the utility's IRP.
- b. Mr. Steinhurst states that, at lines 19-23, "[t]he Commission should direct the Companies to develop resource alternatives that address the concerns identified in the prefiled testimony of witness Fisher and to file it by a single date certain

Case No. 2011-00161 Case No. 2011-00162 along with supporting workpapers and documentation sufficient for the Commission and intervenors to fully evaluate the analytical basis for the alternatives." Given the time constraints and potential lead times related to potential alternatives, by what date does Mr. Steinhurst believe such a filing should be required of Kentucky Utilities Company ("KU") and Louisville Gas and Electric Company ("LG&E")?

- 2. Refer to page 10, lines 7-11, of the Direct Testimony of Jeremy Fisher, Ph.D. ("Fisher Testimony") where Mr. Fisher states that, "we did not evaluate anticipated NO_X and SO₂ prices, the impact of including appropriately-sized capacity expansion options, the effect of including electricity purchases and sales outside of the LG&E/KU system as an option, or a more optimal retirement order."
- a. Based on this statement, explain whether it is accurate to characterize Mr. Fisher's position as one which recommends denial of the KU/LG&E request for Certificates of Public Convenience and Necessity ("CPCN"), but offers nothing for the Commission to consider as alternatives to the KU/LG&E proposals.
- b. Explain whether Mr. Fisher's direction from the Environmental Intervenors was limited to reviewing and critiquing the KU/LG&E proposals.
- 3. Refer to page 11, lines 20-22, and page 42, lines 16-26, of the Fisher Testimony.
- a. On page 11, Mr. Fisher recommends that the Commission deny the KU/LG&E request for CPCNs for Brown Units 1 and 2 and "require the Companies to further analyze the financial risks posed in retrofitting Mill Creek 1 & 2 prior to granting CPCNs on these units." On page 42, lines 16-22, Mr. Fisher says the Commission should deny CPCNs for Brown Units 1 and 2 and Mill Creek Units 1 and 2. On lines 23-

Case No. 2011-00161 Case No. 2011-00162 26, he then says the Commission should deny CPCNs "for any upgrades to the Companies' coal units at this time." Explain why Mr. Fisher's recommendation appears to have changed between when he prepared page 11 of his testimony and when he completed his testimony.

- b. Describe in detail the further analysis of the financial risks of retrofitting Mill Creek Units 1 and 2, which Fisher recommends on page 11, lines 20-22, that the Commission require of KU and LG&E.
- 4. Refer to page 18, line 10, of the Fisher Testimony. Confirm that the exhibit reference in this line should be Exhibit JIF-2 rather than Exhibit JIF-1.
- 5. Refer to page 19, lines 23-26, of the Fisher Testimony, which refers to the drop in natural gas prices in recent years "with the discovery of new plays . . ." and the "continued uncertainty about the future of natural gas prices"
- a. Explain whether "the discovery of new plays" refers to shale gas discoveries that have been credited with increasing U.S. domestic gas supplies.
- b. Various published reports have dealt with environmental concerns related to the issue of "fracking" the method used to recover much of the shale gas. Describe Mr. Fisher's view of how the science and the politics related to the fracking issue are likely to impact access to U.S. domestic shale gas supplies.
- 6. Refer to page 20 of the Fisher Testimony, footnotes 8 through 15, which identify several publicly available forecasts of Henry Hub natural gas prices, and Exhibit JIF-3. The footnotes indicate that some of the forecasts were prepared in 2010 and some were prepared in 2011. On page 1 of the exhibit, the prices from the various

Case No. 2011-00161 Case No. 2011-00162 forecasts have been plotted on a graph along with the prices from the KU/LG&E forecast. For each forecast identified in the footnotes, provide the following:

- a. The forecasted gas prices that are plotted on the graph listed in numeric form for each year covered by each individual forecast; and
- b. Its Henry Hub forecasted natural gas prices plotted on a graph as in Exhibit JIF-3 and listed in numeric form for the same entity's forecast prepared in the year prior to the year identified in the footnote.
 - 7. Refer to page 21 of the Fisher Testimony.
- a. Explain how Mr. Fisher made the decision to use the forecast of Henry Hub gas prices prepared by the Avoided Energy Supply Component Study Group in 2011 in his analysis, rather than one of the other publicly available forecasts.
- b. Explain whether *Strategist* modeling runs were performed using the prices contained in any of the other gas price forecasts.
- 8. At page 23, lines 3-5, and page 28, lines 15-22, of the Fisher Testimony, Mr. Fisher states (1) the Brown Units 1 and 2 should be retired based on his re-analysis using a different gas price forecast and (2) that KU/LG&E should reconsider the decision to retrofit Brown Units 1 and 2 based on his re-analysis of the need to install Selective Catalytic Reduction devices ("SCR") on the coal units that have not previously been retrofitted with SCRs.
- a. In reaching his conclusions as to the possible retirement of Brown Units 1 and 2, describe the consideration Mr. Fisher gave to the configuration of the Brown Generating Station, specifically, that all three generating units at the site share a single Flue Gas Desulfurization ("FGD") system.

- b. If no consideration was given to the three Brown units sharing a single FGD system, either because Mr. Fisher was not aware of it, or for any other reason, explain whether now having the knowledge of this arrangement has any impact on his conclusions.
- 9. Refer to page 26, lines 5-7, and page 27, lines 18-20, where Mr. Fisher states his belief that stronger National Ambient Air Quality Standards for ozone will require adding SCRs to the KU/LG&E coal plants that do not already have SCRs.
 - a. Describe in more specific terms the basis for Mr. Fisher's belief.
- b. For purposes of this question, assume the following: <u>based on Mr. Fisher's analysis of the cost of adding SCRs, the Commission denied the CPCN requests for Brown Units 1 and 2, Ghent Unit 2, and Mill Creek 1 and 2, and this <u>ultimately leads to the retirement of these five units.</u> Explain how Mr. Fisher would recommend the Commission respond if, at a later date, it was shown that his analysis was wrong and that the units should have been granted CPCNs and retrofitted as KU/LG&E propose.</u>
- 10. Refer to page 30, lines 10-15, of the Fisher Testimony, where Mr. Fisher refers to the increasingly contentious politics associated with regulating CO₂ and other greenhouses gases and states, "if the weight of evidence does eventually prevail, it is my opinion that there will be no choice but to find mechanisms to reduce CO₂ emissions" Describe the extent to which Mr. Fisher, as a geological scientist, would typically rely on a single opinion in making a recommendation or decision that would likely have long-term implications.

- 11. Refer to page 31, lines 1-3, of the Fisher Testimony. Explain how Mr. Fisher selected 2018 as the year to include a starting price for CO₂ emissions.
- 12. Refer to page 39, lines 5-7, of the Fisher Testimony. Confirm that a word, or words, should be inserted in the sentence either before or after the word "quickly" and provide the corrected sentence.

Jeff Derouen

Executive Director

Public Service Commission

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DATED SEP 3 0 2011

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