COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF KENTUCKY POWER)COMPANY FOR APPROVAL OF AN AMENDED)COMPLIANCE PLAN FOR PURPOSES OF)RECOVERING ADDITIONAL COSTS OF)POLLUTION CONTROL FACILITIES AND TO)AMEND ITS ENVIRONMENTAL COST RECOVERY)SURCHARGE TARIFF)

CASE NO. 2006-00307

SECOND DATA REQUEST OF COMMISSION STAFF TO KENTUCKY POWER COMPANY

Kentucky Power Company ("Kentucky Power"), pursuant to 807 KAR 5:001, is requested to file with the Commission the original and 5 copies of the following information, with a copy to all parties of record. The information requested herein is due on or before October 3, 2006. 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. Refer to the response to the Staff's First Data Request dated August 24, 2006 ("Staff's First Request"), Item 2(a). Concerning the multi-emissions compliance optimization ("MECO") model:

a. Kentucky Power indicates that the MECO model was developed as part of an Electric Power Research Institute tailored collaboration project. Explain what is meant by the phrase "tailored collaboration project."

b. Kentucky Power states that, "The AEP MECO model is not available to the rest of the electric industry." Is a non-American Electric Power Company ("AEP") specific version of MECO available to the electric industry? Explain the response.

2. Refer to the response to the Staff's First Request, Item 6.

a. Would Kentucky Power agree that the processes contained in flue gas desulphurization equipment ("scrubber") that remove sulfur dioxide ("SO₂") from a generating station's emissions will accomplish the reduction regardless of the sulfur mix in the coal burned? Explain the response.

b. If there is a fully operational scrubber on a generating station removing SO₂, to what extent does the existence or absence of coal blending facilities impact the generating station's ability to comply with the requirements of Title IV, 40 CFR 72-78 and the Clean Air Interstate Rule, 40 CFR 96? Explain the response.

3. Refer to the response to the Staff's First Request, Item 9(e).

a. Based on the response to Item 9(e), would Kentucky Power agree that for the six generating stations shown on page 3 of 62, AEP cannot determine whether there has been, or is expected to be, a significant increase in the emission of sulfuric acid (" H_2SO_4 ") as a result of installing scrubbers or Selective Catalytic Reduction equipment ("SCR")? Explain the response.

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b. The results shown in the table on page 3 of 62 are stated in "ppmdv." Convert the results into the equivalent amounts of tons per year and provide the workpapers showing the conversion.

c. Explain why it is reasonable to assume all of the sulfur trioxide ("SO₃") in the flue gases will be converted to H_2SO_4 prior to exiting the stack.

d. If AEP does not have the SO₃ and H_2SO_4 emission data for any time periods prior to the installation of scrubbers and SCRs, how can it accurately determine whether there has been a significant increase in the release of H_2SO_4 ? Explain the response.

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DATED September 21, 2006

cc: All Parties