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421 West Main Street  
Post Office Box 634  
Frankfort, KY 40602-0634  
502) 223-3477  
1502) 223-4124 Fax  
www.stites.com

PUBLIC SERVICE  
COMMISSION

2008-00308

July 25, 2008

**HAND DELIVERED**

Stephanie L. Stumbo  
Executive Director  
Public Service Commission of Kentucky  
211 Sower Boulevard  
P.O. Box 615  
Frankfort, KY 40602-0615

Mark R. Overstreet  
(502) 209-1219  
(502) 223-4387 FAX  
moverstreet@stites.com

**RE: Joint Application**

Dear Stephanie:

Enclosed please find and accept for filing the original and ten copies of the Joint Application of Duke Energy Kentucky, Inc., Kentucky Power Company, Kentucky Utilities Company and Louisville Gas and Electric Company for an Order approving accounting practices to permit each of the Joint Applicants to establish regulatory assets and liabilities related to payments by the Joint Applicants to the Carbon Management Research Group and the Kentucky Consortium for Carbon Storage.

If you have any questions please do not hesitate to contact me.

Very truly yours,



Mark R. Overstreet

cc: Amy B. Spiller  
Allyson K. Sturgeon  
Parties on Certificate of Service

KE057:KE199:17260:1:FRANKFORT

RECEIVED

JUL 25 2008

PUBLIC SERVICE  
COMMISSION

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

Joint Application of Duke Energy Kentucky, Inc., )  
 Kentucky Power Company, Kentucky Utilities )  
 Company and Louisville Gas and Electric Company )  
 for an Order Approving Accounting Practices ) Case No. 2008- 00308  
 to Establish Regulatory Assets and Liabilities )  
 Related to Certain Payments Made to the )  
 Carbon Management Research Group and the )  
 Kentucky Consortium for Carbon Storage )

JOINT APPLICATION

Duke Energy Kentucky, Inc., Kentucky Power Company, Kentucky Utilities Company and Louisville Gas and Electric Company (jointly the “Applicants”) move the Public Service Commission of Kentucky (“Commission”) pursuant to KRS 278.030, KRS 278.040 and KRS 278.220 for an Order permitting each Movant to establish regulatory assets and liabilities related to payments by the Applicants to the Carbon Management Research Group and the Kentucky Consortium for Carbon Storage. In support thereof, Applicants state:

Parties

1. Duke Energy Kentucky, Inc. (“Duke”) is a Kentucky Corporation. Its post office address is P.O. Box 960, Cincinnati, Ohio 45201. Duke supplies gas and electric service to retail customers in Kentucky and is a utility within the meaning of KRS 278.020(3)(a) and (b). Its rates and services are regulated by the Commission pursuant to Chapter 278 of the Kentucky Revised Statutes. A certified copy of Duke’s Articles of Incorporation, as amended, was filed

with the Commission in Case No. 2006-0563<sup>1</sup> and is incorporated by reference herein pursuant to 807 KAR 5:001, Section 8(3).

2. Kentucky Power Company (“Kentucky Power”) is a Kentucky corporation. Its post office address is 101A Enterprise Drive, P.O. Box 5190, Frankfort, Kentucky 40602-5190. Kentucky Power supplies electric service to retail and wholesale customers in Kentucky. Kentucky Power is a utility within the meaning of KRS 278.020(3)(a). Its rates and services are regulated by the Commission pursuant to Chapter 278 of the Kentucky Revised Statutes. A certified copy of Kentucky Power’s Articles of Incorporation was filed with the Commission in Case No. 99-149<sup>2</sup> and is incorporated by reference herein pursuant to 807 KAR 5:001, Section 8(3).

3. Kentucky Utilities Company (“KU”) is a Kentucky corporation. Its post office address is One Quality Street, Lexington, Kentucky 40507. KU supplies electric service to retail and wholesale customers in Kentucky. Kentucky Utilities is a utility within the meaning of KRS 278.020(3)(a). Its rates and services are regulated by the Commission pursuant to Chapter 278 of the Kentucky Revised Statutes. A certified copy of KU’s Articles of Incorporation was filed with the Commission in Case No. 2005-00471<sup>3</sup> and is incorporated by reference herein pursuant to 807 KAR 5:001, Section 8(3).

4. Louisville Gas and Electric Company (“LG&E”) is a Kentucky corporation. Its post office address is 220 West Main Street, Louisville, Kentucky 40202. LG&E supplies

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<sup>1</sup> *In the Matter of: Duke Energy Kentucky's Application for an Order Authorizing Its Issuance of Unsecured Debt and Long Term Notes, Execution of Long Term Loan Agreements, and Use of Interest Rate Management Instruments.*

<sup>2</sup> *Joint Application of Kentucky Power Co., American Electric Power Co., Inc. and Central and South West Corporation Regarding a Proposed Merger.*

<sup>3</sup> *In the Matter of: Application of Louisville Gas & Electric Company and Kentucky Utilities Company for Authority to Transfer Functional Control of their Transmission System.*

electric service to retail customers in Kentucky. LG&E is a utility within the meaning of KRS 278.020(3)(a) and (b). Its rates and services are regulated by the Commission pursuant to Chapter 278 of the Kentucky Revised Statutes. A certified copy of LG&E's Articles of Incorporation was filed with the Commission in Case No. 2005-00471<sup>4</sup> and is incorporated by reference herein pursuant to 807 KAR 5:001, Section 8(3).

### **Carbon Management Research Group**

5. The University of Kentucky Center for Applied Energy Research ("CAER") is a multi-disciplinary research center at the University of Kentucky. Its mailing address is 2540 Research Park Drive, Lexington, Kentucky 40511. CAER undertakes applied research and development focusing on the optimal use of the energy resources of Kentucky. The Director of CAER reports to the Vice President for Research for the University of Kentucky who in turn reports to the President of the University. The CAER Advisory Board includes members of the Kentucky General Assembly, academia and industry, including representatives from two of the Applicants. CAER receives funding from federal and state government (including the University of Kentucky) and private industry.

6. CAER includes a Power Generation and Fossil Fuels Group that focuses on developing viable technologies for producing clean electricity and energy from Kentucky's fossil resources and biomass. Its work involves coal cleaning, biomass briquetting, combustion/gasification, carbon management, utilization of animal waste, and pollution control as well as power plant performance improvement.

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<sup>4</sup> *In the Matter of: Application of Louisville Gas & Electric Company and Kentucky Utilities Company for Authority to Transfer Functional Control of their Transmission System.*

7. In Section 52 of HB 1 (Second Extraordinary Session of the 2007 General Assembly) the General Assembly recognized “the importance of proactively addressing the issue of carbon management in existing coal-fired power plants, and carbon emissions in general.” In addition, the General Assembly directed the Commission, Governor’s Office of Energy Policy (now a part of the Department of Energy Development and Independence in the Kentucky Energy and Environment Cabinet), CAER, the Geological Survey at the University of Kentucky and the Environmental and Public Protection Cabinet to produce a report and recommendations to the Legislative Research Commission regarding the management of carbon and carbon dioxide associated with existing coal-fired electric generating facilities in Kentucky. Finally, the General Assembly encouraged the parties producing the report and recommendations “to consult and collaborate with stakeholders, including industry partners, research institutes, and other universities” in performing their work.

8. Following the enactment of HB 1, the Power Generation and Fossil Fuels Group of CAER proposed the creation of the Carbon Management Research Group (“CMRG”), a partnership between academia, state government (including CAER) and the private sector. The CMRG was created to perform pilot scale testing at the CAER’s facility and a series of slip-stream field investigations at selected utility plants using a portable slip-stream post-combustion apparatus. The test sites will be selected based upon system configurations and type of coal burned at each plant. The study is intended to assist with the development and demonstration of practical technologies for reducing CO<sub>2</sub> emissions from Kentucky’s existing fleet of coal-fired power plants.

### Kentucky Consortium for Carbon Storage

9. The Kentucky Geological Survey is created by KRS 151.010 and is a “bureau of geological research and information” within the University of Kentucky. The Kentucky Geological Survey has researched issues involving carbon dioxide storage for seven years and is participating in three United States Department of Energy-funded regional CO<sub>2</sub> storage partnerships and several State government-funded CO<sub>2</sub> storage projects.

10. The former Governor’s Office of Energy Policy, which is now part of the Department of Energy Development and Independence, was created in October, 2006 and charged with, *inter alia*, overseeing “the development and implementation of Kentucky's comprehensive energy strategy.”<sup>5</sup> It also is directed to match federal or private funding “to increase the resources available to support energy research and development.”<sup>6</sup>

11. Section 57 of HB 1 (Second Extraordinary Session of the 2007 General Assembly) appropriated five million dollars to the Governor's Office of Energy Policy (now part of the Department of Energy Development and Independence):

for the purpose of entering into a memorandum of agreement with the Kentucky Geological Survey at the University of Kentucky to conduct research, either itself or in collaboration or under contract with other entities, to quantify the potential for enhanced oil and gas recovery and enhanced coalbed methane recovery using carbon dioxide. The research shall include the drilling of deep wells in both coal fields (Illinois and Appalachian) in Kentucky, and performing the analysis necessary to estimate the potential for enhanced oil and gas recovery, enhanced coalbed methane recovery, or permanent storage of sequestration of carbon dioxide. At least one of the wells will test the Devonian shale for enhanced gas recovery and sequestration potential. The Kentucky Geological Survey is encouraged to use these funds to match available federal and private funds to the extent possible.

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<sup>5</sup> <http://www.energy.ky.gov/about/legmandate.htm>

<sup>6</sup> *Id.*

12. In furtherance of its legislative mandate the Kentucky Geological Survey, working with the then Governor's Office of Energy Policy, created the Kentucky Consortium of Carbon Storage ("KCCS" or Consortium.) The KCCS is administered by the Kentucky Geological Survey with funding and oversight provided by the Department of Energy Development and Independence. The Consortium intends to study the feasibility of geologic storage in the Commonwealth of carbon dioxide from Kentucky coal-fired generation. Beginning in 2008, the KCCS proposes to drill research wells in Kentucky's Appalachian and Illinois coal fields to test the suitability of subsurface reservoirs for carbon dioxide storage as well as test enhanced gas recovery in Devonian Shale using carbon dioxide injection.<sup>7</sup> The research is expected to take up to four years.<sup>8</sup>

#### **Proposed Funding By The Applicants<sup>9</sup>**

13. The KCCS and the CMRG were designed as partnerships with private industry stakeholders.

14. The CMRG sought a ten-year funding commitment from the Applicants to match other funding received by it. Kentucky Power, subject to Commission approval of this application, agreed to provide up to ten year's of funding of up to \$200,000 a year to match equal funding provided by the Commonwealth. After the first year, the funding will be reviewed by

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<sup>7</sup> <http://www.uky.edu/KGS/kyccs/>

<sup>8</sup> *Id.*

<sup>9</sup> Big Rivers Electric Corporation and East Kentucky Power Cooperative, Inc., elected not to join in this application because they do not have funding for the payments in their 2008 budgets. Big Rivers Electric Corporation and East Kentucky Power Cooperative, Inc., have authorized the Applicants to state that their lack of participation in this application should not be interpreted as a lack of support for the Carbon Management Research Group and the Kentucky Consortium for Carbon Storage.

Kentucky Power on an annual basis (based upon the progress made, additional funding sources secured and work product reviews in subsequent years), and an annual determination made to match equal funding (up to \$200,000 a year) provided by the Commonwealth. Duke, subject to the Commission's approval of this application, agrees to provide a funding match of up to \$200,000 in the first year. Duke further agreed to consider future participation in funding on a year-to-year basis (based upon the progress made, work product reviews in subsequent years) and CMRG's ability to secure additional funding sources. KU and LG&E jointly agreed to provide up to \$200,000 a year for ten years.

15. The KCCS sought a one-time funding commitment from each of the Applicants to match other funding available to it. KU and LG&E jointly agreed to provide up to \$1.8 million in funding over two years. KU and LG&E, Peabody Energy and ConocoPhillips have formed the Western Kentucky Carbon Storage Foundation, Inc., a 501(c)(3) entity to collect and manage all industry contributions to the KCCS. Duke decided not to participate in this funding commitment at the present time because Duke already has committed substantial funding to study carbon sequestration at its East Bend Generating Station. Kentucky Power at this time elected not to participate because it is studying carbon sequestration (through AEP) at its Mountaineer Generating Plant in West Virginia.

16. The funding to be provided by some of the Applicants is contingent upon the Applicants receiving the authority requested in this Joint Application.

17. The Applicants own and operate existing coal-fired generating plants that produce carbon dioxide emissions. The projects to be funded by the Applicants' funding are designed to

assist the Applicants in addressing carbon dioxide emissions from their generating facilities in a cost-effective fashion.

### Accounting Treatment

18. The Applicants propose that their commitments for these payments be treated as regulatory assets to be deferred until recovery is provided within the next base rate case of each applicant, at which time the regulatory assets will be amortized over the life of each project: four years in the case of KCCS and ten years with respect to payments to CMRG.

19. As part of its rate-making authority, the Commission is authorized to “establish a system of accounts to be kept by utilities subject to its jurisdiction . . . and may prescribe the manner in which accounts shall be kept.”<sup>10</sup>

20. The Commission has interpreted KRS 278.220 to require utilities to obtain Commission approval for accounting adjustments before establishing any expense as a new regulatory asset.<sup>11</sup>

21. The proposed commitments and resulting payments are reasonable expenses of providing utility service and will materially benefit the Applicants’ ratepayers.

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<sup>10</sup> KRS 278.220.

<sup>11</sup> Order, *In the Matter of the Adjustment of Rates of The Union, Light, Heat and Power Company*, Case No. 2001-00092 at 14 (January 31, 2002).

**Communications**

22. The Applicants request that all communications be distributed as follows:

Duke Energy Kentucky, Inc.:

Amy B. Spiller  
Duke Energy Business Services, Inc.,  
Room 2500, Atrium II  
P.O. Box 960  
Cincinnati, Ohio 45201-0960

Kentucky Power Company:

Mark R. Overstreet  
Stites & Harbison PLLC  
421 West Main Street  
P.O. Box 634  
Frankfort, Kentucky 40602-0634

Errol K. Wagner  
Kentucky Power Company  
101A Enterprise Drive  
P.O. Box 5190  
Frankfort, Kentucky 40602-5190

Kentucky Utilities Company:

Allyson K. Sturgeon  
Senior Corporate Counsel  
E.ON U.S. LLC  
220 West Main Street  
Louisville, Kentucky 40202

Louisville Gas and Electric Company:

Allyson K. Sturgeon  
Senior Corporate Counsel  
E.ON U.S. LLC  
220 West Main Street  
Louisville, Kentucky 40202

Wherefore, the Applicants respectfully request the Commission enter an Order:

- (1) Granting each Applicant the authority to treat their commitments to the KCCS (in the case of KU and LG&E only) and CMRG as regulatory assets until recovery is

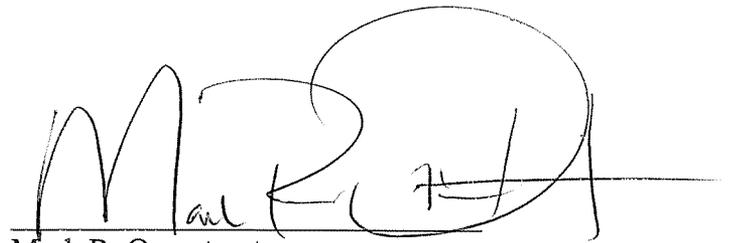
provided within the next base rate case of each applicant, at which time the regulatory assets will be amortized over a period equal to the life of the respective projects; and

- (2) Such further relief to which they may be entitled.

Respectfully submitted,

Amy B Spiller by MROper  
Amy B. Spiller e-ms  
Duke Energy Shared Services, Inc., Authorization  
Room 2500, Atrium II  
P.O. Box 960  
Cincinnati, Ohio 45201-0960

*Counsel for Duke Energy Kentucky, Inc.*

A handwritten signature in black ink, appearing to read 'Mark R. Overstreet', written over a horizontal line. The signature is stylized and somewhat cursive.

Mark R. Overstreet  
Stites & Harbison PLLC  
421 West Main Street  
P.O. Box 634  
Frankfort, Kentucky 40602-0634

*Counsel for Kentucky Power Company*



Allyson K. Sturgeon  
Senior Corporate Counsel  
E.ON U.S. LLC  
220 West Main Street  
Louisville, Kentucky 40202

*Counsel for Kentucky Utilities Company and  
Louisville Gas and Electric Company*

**CERTIFICATE OF SERVICE**

I hereby certify that a copy of the foregoing was served by first class mail, postage prepaid, upon the following, this 25<sup>th</sup> day of July, 2008:

Michael L. Kurtz  
Kurt Boehm  
Boehm, Kurtz & Lowry  
2110 CBLD Center  
36 East Seventh Street  
Cincinnati, OH 45202

Dennis G. Howard II  
Lawrence W. Cook  
Assistant Attorney General  
Office for Rate Intervention  
P. O. Box 2000  
Frankfort, KY 40602-2000

David A. Spainhoward  
Vice President, External Relations  
Big Rivers Electric Corporation  
201 Third Street  
Henderson, KY 42420  
(270) 827-2561  
[dspainhoward@bigrivers.com](mailto:dspainhoward@bigrivers.com)

James M. Miller  
Sullivan, Mountjoy, Stainback & Miller, P.S.C.  
P. O. Box 727  
100 St. Ann Street  
Owensboro, KY 42302  
(270) 926-4000  
[jmiller@smsmlaw.com](mailto:jmiller@smsmlaw.com)

Charles A. Lile, Senior Corporate Counsel  
East Kentucky Power Cooperative Corporation  
4775 Lexington Road  
Post Office Box 707  
Winchester, Kentucky 40392-0707



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Mark R. Overstreet