



Mr. Jeff DeRouen
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Kentucky Public Service Commission
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September 15, 2011

RE: *Joint Application of Louisville Gas and Electric Company and Kentucky Utilities Company for a Certificate of Public Convenience and Necessity and Site Compatibility Certificate for the Construction of a Combined Cycle Combustion Turbine at the Cane Run Generating Station and the Purchase of Existing Simple Cycle Combustion Turbine Facilities from Bluegrass Generation Company, LLC in LaGrange, Kentucky*
Case No. 2011-00__

Dear Mr. DeRouen:

Please find enclosed and accept for filing an original and ten (10) copies of Louisville Gas and Electric Company and Kentucky Utilities Company's Joint Application and Testimonies of Paul W. Thompson, David S. Sinclair, John N. Voyles, Jr., Lonnie E. Bellar, and Gary H. Revlett, in the above-referenced docket.

Also enclosed is an original and ten (10) copies of a Petition for Confidential Protection of Exhibits to Testimony and for Deviation from 807 KAR 5:001 Section 7(2)).

Finally, also enclosed is an original and ten (10) copies of a Motion for Informal Conference in connection with this docket.

Mr. Jeff DeRouen
September 15, 2011

Should you have any questions regarding the enclosed, please do not hesitate to contact me. If you receive any requests for copies of the attached documents, please refer the same to me directly; I will provide such copies upon request.

Sincerely,

A handwritten signature in black ink that reads "Rick E. Lovekamp". The signature is written in a cursive style with a large, prominent initial "R".

Rick E. Lovekamp

cc: Hon. Dennis G. Howard
Hon. Michael L. Kurtz

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

**JOINT APPLICATION OF LOUISVILLE GAS)
AND ELECTRIC COMPANY AND KENTUCKY)
UTILITIES COMPANY FOR A CERTIFICATE)
OF PUBLIC CONVENIENCE AND NECESSITY)
AND SITE COMPATIBILITY CERTIFICATE)
FOR THE CONSTRUCTION OF A COMBINED) CASE NO. 2011-_____
CYCLE COMBUSTION TURBINE AT THE)
CANE RUN GENERATING STATION AND THE)
PURCHASE OF EXISTING SIMPLE CYCLE)
COMBUSTION TURBINE FACILITIES FROM)
BLUEGRASS GENERATION COMPANY, LLC)
IN LAGRANGE, KENTUCKY)**

JOINT APPLICATION

Louisville Gas and Electric Company (“LG&E”) and Kentucky Utilities Company (“KU”) (collectively the “Companies” or “Applicants”) pursuant to KRS 278.020, et seq., 807 KAR 5:001, Sections 8 and 9, and KRS 278.216 hereby jointly apply to the Public Service Commission (“Commission”) for a Certificate of Public Convenience and Necessity (“CPCN”), and a Site Compatibility Certificate, for the construction of a 640 MW net summer rating natural gas combined cycle combustion turbine (“NGCC”) at the Companies’ Cane Run Generating Station, including a 20-inch natural gas pipeline, and for the purchase of Bluegrass Generation Company, LLC’s facilities in LaGrange, Kentucky, which include natural gas simple cycle combustion turbines (“SCCT”). In support of this Joint Application, the Companies state as follows:

1. Address. LG&E’s full name and business address is Louisville Gas and Electric Company, 220 West Main Street, Louisville, Kentucky 40202. KU’s full name

and business address is Kentucky Utilities Company, One Quality Street, Lexington, Kentucky 40507. The mailing address for both applicants is P.O. Box 32010, Louisville, Kentucky 40232.

2. Articles of Incorporation. Certified copies of LG&E's and KU's Articles of Incorporation are already on file with the Commission in Case No. 2010-00204, *In the Matter of: Joint Application of PPL Corporation, E.ON AG, E.ON U.S. Investments Corp., E.ON U.S. LLC, Louisville and Gas Electric Company and Kentucky Utilities company for Approval of an Acquisition of Ownership and Control of Utilities*, filed on May 28, 2010, and are incorporated by reference herein pursuant to 807 KAR 5:001, Section 8(3).

3. In March 2011, the Environmental Protection Agency ("EPA") issued a proposed rule aimed at reducing hazardous air pollutants from new and existing coal-and oil-fired electric utility steam generating units ("HAPs Rule"). In August 2011, the EPA issued its final Cross-State Air Pollution rule ("CSAPR") that provides limited allowances for NO_x and SO₂ emissions starting in 2012. In addition, the EPA's National Ambient Air Quality Standards ("NAAQS") will further restrict NO_x and SO₂ emissions beginning in 2016 and 2017.

4. Statement of Need (807 KAR 5:001 § 9(2)(a)). In order to comply with the foregoing regulations at all but one of their coal-fired steam generating units, the Companies must either install additional emission controls or retire and replace the capacity. The Companies evaluated these decisions at each of their coal-fired steam generating units and submitted their least-cost compliance plan ("2011 Compliance Plan") to the Commission in June 2011 in their Applications for Certificates of Public

Convenience and Necessity and Approval of Their 2011 Compliance Plan for Recovery of Environmental Surcharge.¹ Given the operating characteristics, age, and size of the units, the Companies determined that the cost of additional emission controls at their Green River and Tyrone plants cannot be justified. The Companies determined that the coal-fired steam generating units at Green River and Tyrone should be retired at the end of 2015. In addition, the Companies determined that the cost of additional emission controls at their Cane Run plant cannot be justified and that the coal-fired steam generating units designated as Cane Run 4, Cane Run 5 and Cane Run 6 should be retired at the end of 2015. With the retirements of the Cane Run, Green River and Tyrone coal-fired steam generating units, the Companies will have a capacity shortfall in 2016 of 877 MWs.

In April 2011, the Companies filed their 2011 Integrated Resource Plan (“2011 IRP”) with the Commission.² The 2011 IRP provides a detailed summary of the Companies’ plan to meet their future energy requirements within their service territories at the lowest possible cost consistent with reliable supply. Like the 2011 Compliance Plan, the 2011 IRP found that the Green River, Tyrone and Cane Run coal-fired steam generating units would be retired at the end of 2015. The Companies’ capacity needs through 2016, as identified in the 2011 IRP, are summarized in the table below.

¹ Case Nos. 2011-00161 and 2011-00162.

² Case No. 2011-00140.

LG&E/KU Resource Summary

	2012	2013	2014	2015	2016	2017	2018
Forecasted Peak Load	7,210	7,356	7,477	7,603	7,654	7,760	7,897
Peak Reductions ³	390	442	501	544	585	626	664
Total Demand	6,821	6,915	6,976	7,059	7,070	7,135	7,234
Existing Resources	8,002	8,006	8,001	7,996	7,969	7,970	7,970
Retirements					(797)	(797)	(797)
Firm Purchases (OVEC)	154	152	152	152	152	152	152
Total Supply	8,156	8,158	8,153	8,148	7,324	7,325	7,325
16% Reserve Requirements	1,091	1,106	1,116	1,129	1,131	1,142	1,157
Difference from Target	243	137	61	(40)	(877)	(952)	(1,066)
Reserve Margin	19.6%	18.0%	16.9%	15.4%	3.6%	2.7%	1.3%

The Companies submitted a request for proposals (“RFP”) in December 2010 for electric energy and capacity. Responses to the RFP included power purchase agreements and asset sale offers for gas, coal, nuclear, wind, biomass and solar technologies. The Companies’ analysis of the RFP responses was completed in two phases. Phase I consisted of an initial screening of the responses through the use of a scoring system (“Phase I Screening”) which evaluated attributes including cost, term and site viability. The goal of the Phase I screening process was to select the top candidates for each technology for further evaluation. Phase II of the analysis evaluated the top candidates (and various combinations of the top candidates) from the Phase I Screening in more detail. Phase II was completed in several iterations and ultimately considered the Companies’ self-build alternatives.

At the conclusion of these processes, the Companies determined that the least-cost alternative for complying with the aforementioned EPA regulations and meeting the capacity and energy needs beginning in 2016 is to build a 640 MW net summer rating NGCC at the Companies’ Cane Run facility (“CR7”) and to purchase Bluegrass

³ Peak reductions include the impacts of interruptible demands and demand-side management programs.

Generation Company, LLC's existing SCCT facilities in LaGrange, Kentucky. A detailed description of the foregoing process is set forth in the 2011 Resource Assessment attached as an exhibit to the testimony of David S. Sinclair.

5. Permits from Public Authorities (807 KAR 5:001, § 9(2)(b)). The Companies will be required to obtain certain environmental and construction-related permits associated with the construction of CR7. The required permits and the process for obtaining those permits is discussed in the direct testimonies of John N. Voyles and Gary H. Revlett, which accompany this Joint Application and are incorporated herein by reference. Copies of those permits will be filed with the Commission, as obtained, to the extent required by law or requested by the Commission. No permits from public authorities will be required for the purchase of Bluegrass Generation Company's SCCT facilities.

6. Location of Proposed Construction (807 KAR 5:001, § 9(2)(c)). As previously stated, CR7 will be located at the Companies' Cane Run Generating Station in Jefferson County, Kentucky. There are no like facilities in the vicinity of CR7, except for the existing units at Cane Run, and it is not anticipated that CR7 will compete with any other public utilities, corporations or persons.

7. Manner of Proposed Construction (807 KAR 5:001, § 9(2)(c)). As explained in detail in the direct testimony of Mr. Voyles, CR7 will be constructed primarily through a self-build process. An engineering firm has been selected to perform engineering services, optimize design for the Companies' needs, support environmental permitting and to assist the Companies in their procurement efforts. Construction is scheduled to begin upon receipt of the CPCN and other required regulatory and

environmental approvals. Completion of CR7 is expected to occur no later than January 1, 2016. In addition, a 20-inch natural gas pipeline approximately 8 miles in length will be constructed to supply natural gas to CR7.

8. Area Maps (807 KAR 5:001, § 9(2)(d)). The required area map showing the location where the Companies propose to build CR7 is attached as Joint Application Exhibit 1. A map showing the accompanying gas pipeline is attached as Joint Application Exhibit 2. A map showing the Bluegrass Development facilities in LaGrange, Kentucky, is attached as Joint Application Exhibit 3.

9. Financing Plans (807 KAR 5:001, § 9(2)(e)). The total projected capital cost for CR7, including the gas pipeline, is \$583 million. The proposed purchase price for the Bluegrass Generation facility is \$110 million. The Companies' proposed financing of such costs is discussed in the direct testimony of Lonnie E. Bellar, which accompanies this Joint Application and is incorporated herein by reference.

10. Estimated Cost of Operation (807 KAR 5:001, § 9(2)(f)). The estimated annual cost of operation of the proposed construction and the proposed purchased facilities is set forth in the direct testimony of Mr. Voyles.

11. Ownership. Subject to the necessary approvals, KU will own 78% and LG&E will own 22% of CR7; KU will own 31% and LG&E will own 69% of Bluegrass Generation, all pursuant to the Power Supply System Agreement ("PSSA") dated October 9, 1997. The ownership of CR7 and Bluegrass Generation is described in more detail in the direct testimony of Messrs. Thompson, Sinclair and Bellar.

12. Site Compatibility Certificate. Consistent with KRS 278.216, a Site Assessment Report is attached as an exhibit to the direct testimony of Mr. Revlett. As set

forth in that Report and the testimony of Mr. Revlett, the proposed construction of CR7 is fully compatible with the selected site and the surrounding area because it will be located at the Cane Run Generating Station, which is suitable to support additional combustion turbines such as CR7.

13. Testimony and Exhibits. A detailed statement of the facts establishing that the construction of CR7 and the purchase of the Bluegrass Generation facilities are required by the public convenience and necessity, and otherwise supporting this Joint Application, is included in the direct testimony and exhibits of the Companies' witnesses:

- Paul W. Thompson, Senior Vice President, Energy Services;
- David S. Sinclair, Vice President, Energy Marketing;
- John N. Voyles, Vice President Transmission and Generation Services;
- Lonnie E. Bellar, Vice President, State Regulation and Rates; and
- Gary H. Revlett, Director, Environmental Affairs.

14. The HAPs Rule's tight compliance deadline, the need to arrange construction reasonably, the high industry-wide demand to build similar facilities resulting from the HAPs Rule and contractual obligations all necessitate the Companies' taking quick but carefully analyzed action. The Companies therefore respectfully ask the Commission to issue the requested CPCN on or before April 30, 2012, to permit the Companies to obtain the best pricing possible under the current market conditions and to attempt to obtain construction contracts that will ensure the maximum timely compliance that is prudently and reasonably feasible.

WHEREFORE, LG&E and KU respectfully request the Commission to issue an order granting the Companies a Certificate of Public Convenience and Necessity, and a

Site Compatibility Certificate, for the construction of a 640 MW net summer rating natural gas combined cycle combustion turbine at the Companies' Cane Run Generating Station, including a 20-inch natural gas pipeline, and for the purchase of the existing Bluegrass Generation Company, LLC facilities, including the natural gas simple-cycle combustion turbines, located in LaGrange, Kentucky, and for any and all other relief to which the Companies may appear entitled.

Dated: September 15, 2011

Respectfully submitted,



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*Counsel for Louisville Gas and
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CERTIFICATE OF SERVICE

This is to certify that the foregoing pleading has been served by mailing a copy of same, postage prepaid, to the following persons on the 15th day of September 2011:

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