

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

**FILED**

DEC 17 2004

**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 A SITE COMPATIBILITY CERTIFICATE, )  
FOR THE EXPANSION OF THE TRIMBLE )  
COUNTY GENERATING STATION )

CASE NO: 2004-02507

**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.* and 807 KAR 5:001, Sections 8 and 9, hereby jointly apply to the Kentucky Public Service Commission (“Commission”) for a Certificate of Public Convenience and Necessity, and a Site Compatibility Certificate, for the Companies’ participation in the expansion of the Trimble County Generating Station (“Trimble Station”) through the construction of a 750 MW nominal net (732 MW summer rating) super-critical pulverized coal-fired base load generating unit (“TC2”). 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 *In the Matter of: Joint Application of E.ON AG, PowerGen plc, LG&E Energy Corp., Louisville Gas and Electric Company and Kentucky Utilities Company for Approval of an Acquisition*, Case No. 2001-104, and are incorporated herein by reference pursuant to 807 KAR 5:001, Section 8(3).

3. Statement of Necessity. LG&E and KU have prepared a 2004 Joint Load Forecast which projects that the Companies will need baseload capacity beginning in 2010. As shown in the table below, the Companies will need between 401 MW and 552 MW of additional capacity by 2012 in order to serve their native loads and maintain the present reserve margin range of 13% to 15%.

Scenario		2004	2005	2006	2007	2008	2009	2010	2011	2012
13 % RM	MW Need Before DSM	-827	-647	-486	-313	-103	100	224	419	535
	MW Need After DSM	-877	-722	-588	-437	-237	-35	90	285	401
15 % RM	MW Need Before DSM	-696	-513	-350	-174	40	245	372	570	688
	MW Need After DSM	-747	-590	-453	-300	-97	109	235	434	552

The 2004 Joint Load Forecast is attached as an exhibit to the direct testimony of David S. Sinclair, which accompanies this Joint Application and is incorporated herein by reference. The Companies have also conducted a Resource Assessment to compare the options available to meet the projected needs of their respective customers. That Assessment determined that the construction of TC2 at the Trimble Station, as proposed herein, was the least-cost option to meet those needs. That construction is essential for LG&E and KU to continue to meet their obligation, as regulated utilities, to provide reliable, low-cost power to their growing native

loads. The Resource Assessment is attached as an exhibit to the direct testimony of John P. Malloy, which accompanies this Joint Application and is incorporated herein by reference.

4. Permits From Public Authorities. The Companies will be required to obtain certain environmental and construction-related permits associated with the construction of TC2. The required permits, and the process for obtaining those permits, is discussed in the direct testimonies of Sharon L. Dodson and John N. Voyles, 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.

5. Location of Proposed Construction. As previously set forth, TC2 will be located at the Trimble Station in Trimble County, Kentucky. Three maps showing the location of the proposed construction are attached hereto at the tab labeled 'Maps'. There are no like facilities owned by others in the area shown on the map, except for the existing unit at the Trimble Station, and it is not anticipated that TC2 will compete with any other public utilities, corporations or persons.

6. Manner of Proposed Construction. As explained in detail in the direct testimony of Mr. Voyles, TC2 will be constructed primarily through an Engineering, Procurement and Construction ("EPC") contract, awarded through a bid process, which will include engineering, procurement and construction of the boiler, air pollution control equipment and turbine generator. The Companies may perform construction of some minor portions of the project independent of the EPC contractor. The Companies will also employ an Owner's Engineer to assist as needed. TC2 will employ state of the art environmental technology and, with respect to NO<sub>x</sub> and SO<sub>2</sub> combined, TC2 will be the cleanest coal-fired unit per MWh produced in Kentucky.

7. Sources of Funds. As explained in detail in the direct testimony of Kent W. Blake, which accompanies this Joint Application and is incorporated herein by reference, the Companies expect to finance their share of the costs of construction of TC2 with a combination of funds generated from cash flow and the issuance of new debt and equity securities. The Companies will continue to evaluate financing alternatives during construction, and will seek the Commission's prior approval of the issuance of any securities as may be required by KRS 278.300.

8. Costs. The expected capital cost for construction of the Companies' collective share of TC2 is approximately \$800 million, excluding costs for any transmission facilities needed to serve native load. The projected annual O&M costs for the Companies' collective share of TC2 is \$11.3 million non-fuel fixed and variable O&M in 2004 dollars.

9. Ownership. Subject to the necessary approvals, the Companies will collectively own 75% of TC2. KU will own 81% and LG&E will own 19% of the Companies' collective share of TC2, based on their energy and capacity needs, pursuant to the Power Supply System Agreement ("PSSA") dated October 9, 1997. The remaining 25% share of TC2 will be owned by the Illinois Municipal Electric Agency ("IMEA") and the Indiana Municipal Power Agency ("IMPA"). The ownership of TC2 is described in more detail in the direct testimonies of Mr. Blake and Mr. Malloy.

10. Site Compatibility Certificate. Consistent with KRS 278.216 and 278.708, a Site Assessment Report is attached as an exhibit to the direct testimony of Ms. Dodson. As set forth in that Report and the testimony of Ms. Dodson, the proposed construction is fully compatible with the selected site and the surrounding area because it will be located at the Trimble Station, which was constructed to support additional units such as TC2.

11. Testimony and Exhibits. A detailed statement of the facts establishing that TC2 is required by the public convenience and necessity, and otherwise supporting this Joint Application, is included in the direct testimony and exhibits of the Company's witnesses:

- Paul W. Thompson -- Senior Vice President, Energy Services
- David S. Sinclair -- Director, Market Analysis and Valuation
- John P. Malloy -- Director, Generation Services
- John N. Voyles -- Vice President, Regulated Generation
- Sharon L. Dodson -- Director, Environmental Affairs
- Kent W. Blake -- Director, State Regulation and Rates

The testimony of those witnesses, together with their exhibits, accompany this Joint Application and are incorporated herein by reference.

**WHEREFORE**, Louisville Gas and Electric Company and Kentucky Utilities Company hereby request the Commission to issue an Order granting the Companies a Certificate of Public Convenience and Necessity and a Site Compatibility Certificate for their 75% participation in the expansion of the Trimble Station through the construction of a 750 MW nominal net (732 MW summer rating) super-critical pulverized coal-fired base load generating unit which participation is to be divided 19% and 81% between Louisville Gas and Electric Company and Kentucky Utilities Company, respectively.

Dated: December 17, 2004

Respectfully submitted,



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**CERTIFICATE OF SERVICE**

The undersigned hereby certifies that a true and correct copy of the foregoing Application was served on the following persons on the 17th day of December, 2004, U.S. mail, postage prepaid:

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