

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF KENTUCKY UTILITIES)
COMPANY FOR A CERTIFICATE OF)
CONVENIENCE AND NECESSITY TO CONSTRUCT A) CASE NO.
NATURAL GAS PIPELINE TO SERVE ITS E. W.) 92-461
BROWN GENERATING STATION IN MERCER)
COUNTY, KENTUCKY)

O R D E R

On October 30, 1992, Kentucky Utilities Company ("KU") filed its application requesting a Certificate of Public Convenience and Necessity for authority to construct a natural gas pipeline to serve three combustion turbine generators ("CTs") that are under construction at the E. W. Brown Generating Station ("E. W. Brown") near Burgin, Kentucky. The proposed pipeline will be approximately 11 miles long and follow as close as possible KU's existing Lancaster to Dix Dam 69KV electric transmission line on the east side of Herrington Lake. The current construction cost is estimated to be \$8,956,343, and the operating cost is estimated to be \$42,500 per year.

The application was filed in compliance with the Commission's January 31, 1992 Order in Case No. 91-115¹ granting KU

¹ Case No. 91-115, The Application of Kentucky Utilities Company for a Certificate of Convenience and Necessity and a Certificate of Environmental Compatibility to Construct Four 75 Megawatt Combustion Turbine Peaking Units and Associated Facilities Scheduled for Completion in 1994 and 1995, Respectively, to be Located at the Company's E. W. Brown Generating Station in Mercer County, Kentucky.

authorization to construct three CTs at E. W. Brown and directing KU to seek approval to construct a gas pipeline. On June 2, 1993, KU filed with the Commission two pipeline evaluation tables. The tables show that there are savings in using stored natural gas in the pipelines over fuel oil. The tables show an eight-year (1994-2002) savings of \$4,463,537 if a 20-inch pipeline is used with a compressor raising the gas pressure to 1,480 psi, and a savings of \$2,082,121 if a 24-inch pipeline is used under the current suppliers' gas pressures of 550 and 750 psi. The pipeline will connect the three CTs to two existing gas transmission pipelines, one owned by Texas Eastern Transmission Corporation and the other by Tennessee Gas Pipeline Company, at a point approximately four miles northwest of Lancaster, Kentucky.

KU has proposed to construct a 20-inch diameter pipeline with provisions to add a 500 horsepower compressor at a later date. With compression the pipeline will provide a line pack volume of 8,908 Mcf and permit a single CT to operate for approximately 5.3 hours before initiating deliveries from a transmission line supplier. The pipeline will be tested at 2,220 psig and designed to operate at a maximum operating pressure of 1,480 psig. It will be cathodically protected by impressed current and buried at a minimum of three feet in normal terrain and five feet when buried under ditches.

The design, engineering, and construction supervision of the pipeline will be performed by Universal Ensco, Inc. A project schedule has been filed with the Commission which shows the

milestones of the work, including completion of construction by the end of December 1993. This schedule will allow natural gas to be the primary fuel for operating the CTs which are projected to be operational by April 1994.

KU has filed the codes and standards that will be implemented in the design and construction of the project, as well as maps of the route and detailed analyses of alternative pipeline sizes and facilities. The pipeline will be sized to supply eight CTs, the three presently under construction plus five planned for the late 1990s. KU analyzed constructing either a 20-inch diameter or a 24-inch diameter pipeline. Based upon consideration given to the optimal pressures of the transmission line suppliers, the need for compression, and the pipeline's gas storage capacity to meet recurring start-ups of the CTs, the 20-inch pipeline was selected.

After consideration of the evidence of record and being otherwise sufficiently advised, the Commission finds that:

1. KU should be granted a Certificate of Public Convenience and Necessity to construct a 20-inch diameter natural gas pipeline to serve the CTs at E. W. Brown.

2. KU should file with the Commission all necessary documentation and changes as issued including but not limited to:

- a. A copy of the construction bid documents.
- b. A copy of the construction contractor(s) work qualifications and final construction contract.
- c. A copy of the construction schedule as updated.
- d. Three copies of monthly progress reports.

e. Any changes in the design, route, facilities, or specifications.

f. A copy of the project's budget as updated.

g. Process Flow Diagrams of specific design for the compressor station, heater, regulators, pig launcher and receiver, major crossings, cathodic protection, and other related facilities of the project.

h. Copies of the agreements and contracts with the gas suppliers and gas transportation companies when signed and completed.

3. In case of termination of work, KU should inform the Commission within 5 working days of the notice of termination to contractor(s).

4. KU should file with the Commission the final cost of the project and as-built drawings 90 days from project completion date.

5. KU should file with the Commission a copy of the operation and safety manual when the start-up of the project has been completed.


IT IS THEREFORE ORDERED that:

1. KU be and it is hereby granted a Certificate of Public Convenience and Necessity to construct a 20-inch diameter natural gas pipeline to supply the CTs at E. W. Brown.

2. KU shall file all the documents and information set forth in Findings 2 through 5 above.

Done at Frankfort, Kentucky, this 2nd day of August, 1993.

PUBLIC SERVICE COMMISSION


Chairman


Vice Chairman


Commissioner

ATTEST:


Executive Director