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 110 MEGAWATT COMBUSTION TURBINE GENERATING UNIT AND ASSOCIATED FACILITIES SCHEDULED FOR COMPLETION IN 1996 TO BE LOCATED AT THE COMPANY'S E. W. BROWN GENERATING STATION IN MERCER COUNTY, KENTUCKY	)	CASE NO. 93-474

O R D E R

Kentucky Utilities Company ("KU") filed its application with the Commission on December 20, 1993, requesting a Certificate of Public Convenience and Necessity ("CCN") and a Certificate of Environmental Compatibility ("CEC") to construct 110 megawatts of peaking capacity, in the form of a combustion turbine ("CT"), at its E.W. Brown generating station ("Brown") in Mercer County, Kentucky. KU's load forecast indicated that it would need the proposed capacity by the summer of 1996. KU requested that the Commission take final action on its application by May 15, 1994 in order to allow sufficient time for the purchase, construction and installation of the CT to meet the projected summer of 1996 load requirements.[1]

A public hearing on KU's request was held on April 19, 1994. The only intervenor in the case was the Attorney General's Office,

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[1] The Kentucky Natural Resources and Environmental Protection Cabinet recommended the issuance of a CEC by letter filed with the Commission on October 21, 1991.

Utility and Rate Intervention Division ("AG"). The parties filed briefs on April 29, 1994, and the AG filed a supplemental brief on May 3, 1994.

KU's application outlined the components of a projected total cost of $28.1 million for the proposed CT. The projected cost was based on a bid price of $20.85 million provided by Asea Brown Boveri ("ABB"), the manufacturer of the proposed CT. In a letter amendment to an existing contract for the purchase of three identical combustion turbines, KU acquired an option to purchase a fourth CT from ABB at a firm price through May 20, 1994. In exchange for ABB's agreement to hold its price firm for 5 months while KU investigated other alternatives for meeting its capacity needs, KU granted ABB a right of first refusal to meet the price and terms of any such alternative, including purchased power proposals.

KU's purchase of the proposed CT from ABB was subject to 3 conditions: (1) approval by KU's board of directors; (2) regulatory approval by this commission; and (3) a determination by KU that no lower cost alternative exists. In order to determine whether the ABB offer was the lowest cost capacity alternative, KU solicited purchased power offers from 46 utilities and non-utility generators via a request for proposal dated January 31, 1994. KU also sought proposals from other CT manufacturers and two, Westinghouse Electric Corporation ("Westinghouse") and Siemens Power Corporation ("Siemens"), responded.

KU's analysis showed that although Westinghouse and Siemens each offered a CT price lower than ABB, their respective total costs, including amounts for balance of plant, contingencies, and KU start-up and indirect costs, were greater. KU's initial present value revenue requirement ("PVRR") analysis of the purchased power proposals indicated that purchasing power and deferring the CT for one year could have a lower PVRR than installing the CT in 1996. When informed of KU's PVRR analysis ABB exercised its right of first refusal and lowered its price to $20.45 million. This reduced KU's projected installed cost to $27.7 million, resulting in a lower cost PVRR analysis for a CT installed by 1996 rather than by 1997 with purchased power in the interim.

The AG challenged KU's procedures for evaluating the options to meet its future capacity requirements. The AG contends that KU's bid solicitation, issued after its December 1993 letter agreement with ABB, was intended merely to give the appearance that a legitimate bidding process was used. The AG opines that KU's analysis of the Westinghouse and Siemens CT bids, with the larger amounts for balance of plant and contingencies than used with the ABB proposal, reflects a bias in favor of the ABB bid, a bias the AG contends is inherent when such an analysis is performed after a decision is made or course of action is chosen. The AG argues that a legitimate bidding process should be undertaken before issuing a letter of intent to purchase from a particular manufacturer.

The AG also expressed concern about KU's analysis of the CT bids received from Westinghouse and Siemens. Citing the lower heat

rate for the Westinghouse CT, the AG argues that this greater operating efficiency indicates a significant savings in fuel costs over the life of the unit. The AG contends that the 12 percent for project contingencies used by KU for the Westinghouse bid to account for the risks of a new turbine design, is inappropriate and reflects KU's bias. The AG argues that if there is increased risk associated with a new turbine design the risk should rest with Westinghouse as a contractual matter, not with KU. Finally, the AG recommends that KU's request for a CCN be granted but that KU be ordered to investigate the matter further to determine from which manufacturer the CT should be purchased.

ANALYSIS

The AG's argument that the Westinghouse CT should not be assigned 12 percent for contingencies does not comport with the record. The most recent Westinghouse bid was submitted to KU one week after Westinghouse was informed of KU's decision to proceed with the ABB proposal. KU's analysis of this bid includes 12 percent for contingencies and results in a total project cost of $28.4 million. The AG argues that this level of contingencies is inappropriate and that any increased risk caused by Westinghouse's new turbine design should be borne by the manufacturer. KU's consultant, Black & Veatch, advised that the Westinghouse CT had not been tested or operated as a unit and recommended an increase in the project contingencies to account for the additional uncertainties. The Commission finds KU's evidence supporting a 12 percent contingency level to be persuasive. Although the AG

suggests that Westinghouse should bear all the risk of a new turbine design as a contractual matter, there is no evidence that Westinghouse has so agreed under the price offered.

The AG's focus on the lower fuel cost of the Westinghouse CT is misplaced. KU's analysis shows that the ABB turbine has a per unit production cost (cents/kwh), including fuel, lower than the Westinghouse CT when operated 500 hours or less annually, which is expected for this unit. Overall production costs, not just fuel costs, are the appropriate measure for determining the least cost capacity alternative. As the Commission is not persuaded that KU's analysis overstated the total installed cost of the Westinghouse CT as the AG argues, it finds nothing in the record to dispute KU's evidence that the ABB unit will have the lowest production costs.

KU's PVRR analysis shows that installing a CT is the lowest cost alternative for meeting its expected capacity needs. KU performed a reasonably thorough solicitation and evaluation in reaching this result which is consistent with the Commission directive in KU's prior CT certificate case.[2] Based on an assessment of KU's analysis, the Commission is not persuaded that further review of capacity alternatives is necessary. The Commission does, however, share some of the AG's concerns relating

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[2] Case No. 91-115, Application of Kentucky Utilities Company for Certificate of Convenience and Necessity and a Certificate of Environmental Compatibility to Construct Four 75 MW 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. Order dated January 31, 1992, pages 4-5.

to KU's commitment to one manufacturer prior to filing its application with the Commission without first conducting a competitive bidding process.

These concerns relate less to the fact that a commitment was made prior to the application and more to the method by which ABB was selected. ABB has offered a fifth CT at an attractive price as part of its December 1993 letter agreement with KU. However, as noted in KU's letter of April 4, 1994 to ABB, the Siemens and Westinghouse offers for 1996 indicate they could make attractive offers for a 1997 unit.[3] Since the fifth CT at Brown, and any others to follow, will not be directly adjacent to the first four units, many of the site-related arguments favoring ABB in this instance will not apply to future CTs.[4]

Given the apparent competition present in the CT market, and considering that additional CTs are planned by KU over the next several years, KU will need to develop a least-cost capacity expansion plan based upon a comprehensive solicitation of both capacity and power purchases. KU's future resource assessments should reflect a competitive solicitation process that evaluates all resource options on a "level playing field" and gives all

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[3] Per Case No. 93-382, A Review Pursuant to 807 KAR 5:058 of the 1993 Integrated Resource Plan of Kentucky Utilities Company, KU expects to require several additional CTs with the next unit planned for 1997. Per Order of January 27, 1994 the record in Case No. 93-382 was incorporated by reference into the record of this case.

[4] The first three CTs at the Brown site, which are presently under construction, are ABB units.

vendors and potential sellers equal opportunity to meet KU's capacity needs.[5] Both KU and the AG refer to the Commission's concerns expressed in another CT certificate case, Case No. 92-112 in which it criticized East Kentucky Power Cooperative, Inc. ("East Kentucky") for entering into a contract to purchase a CT, which contained financial penalties if the contract was canceled or the project delayed, before filing its certificate application.[6] The Commission did not, however, criticize the competitive bidding process which East Kentucky undertook prior to selecting a CT vendor. That docket is a good example of the type of solicitation process KU should employ in the future.

SUMMARY

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

1. KU will require 110 megawatts of peaking capacity by 1996 and constructing a CT at the Brown site, without purchasing additional power from other sources, is the least-cost alternative available to KU to meet this requirement.

2. KU's proposed construction is compatible with the requirements and regulations of the Kentucky Natural Resources and

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[5] This approach does not preclude KU from conducting a continuing assessment, as it did in this instance.

[6] The Application of East Kentucky Power Cooperative, Inc. for a Certificate of Public Convenience and Necessity and a Certificate of Environmental Compatibility for the Construction of 300 MW (nominal) of Combustion Turbine Peaking Capacity and Related Transmission Facilities in Clark and Madison Counties, Kentucky, Order dated March 11, 1993.

Environmental Protection Cabinet which has recommended that a Certificate of Environmental Compatibility be issued to KU for this project.

IT IS THEREFORE ORDERED that KU be and it hereby is granted a Certificate of Public Convenience and Necessity and a Certificate of Environmental Compatibility to proceed with the construction of 110 megawatts of peaking capacity in the form of a combustion turbine at its Brown generating station as more specifically described in the application and the record.

Done at Frankfort, Kentucky, this 13th day of May, 1994.

PUBLIC SERVICE COMMISSION

Chairman

Vice Chairman

Commissioner

ATTEST:

Executive Director