

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF EAST KENTUCKY POWER	)	
COOPERATIVE, INC. FOR A CERTIFICATE OF	)	
PUBLIC CONVENIENCE AND NECESSITY, AND A	)	
CERTIFICATE OF ENVIRONMENTAL COMPATABILITY,	)	CASE NO.
FOR THE CONSTRUCTION OF A COMBUSTION	)	98-544
TURBINE GENERATING UNIT AND RELATED	)	
TRANSMISSION FACILITIES, IN CLARK AND MADISON	)	
COUNTIES, KENTUCKY	)	

INTERIM ORDER

East Kentucky Power Cooperative, Inc. ( EKPC ) filed an application on October 19, 1998 for a certificate of public convenience and necessity and a certificate of environmental compatibility to construct an 80 MW combustion turbine ( CT ) generating unit at its existing J.K. Smith generating station and related transmission facilities in Clark and Madison counties in Kentucky. EKPC indicated that the need for the proposed construction was supported by the information filed in its application and in its most recent Integrated Resource Plan, filed in Case No. 97-200.<sup>1</sup> EKPC published newspaper notice of its application in the counties that could potentially be affected by the environmental impacts of the CT. No requests for intervention were filed and the Commission held public hearings on March 4, 1999 and March 31, 1999.

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<sup>1</sup> Case No. 97-200, A Review Pursuant to 807 KAR 5:058 of the 1997 Integrated Resource Plan of East Kentucky Power Cooperative, Inc.

EKPC submitted to the Natural Resources and Environmental Protection Cabinet ( Natural Resources Cabinet ) a statement of environmental compatibility for the proposed CT at the J.K. Smith site. By letter dated March 26, 1999, the Natural Resources Cabinet reported that EKPC s proposed CT would not adversely impact the environment.

#### EKPC s Power Supply Needs

EKPC, a winter peaking utility, indicated that additional power would be needed to meet its load requirements in the year 2000 and beyond and to maintain a 15 percent reserve margin. EKPC had issued a request for proposal ( RFP ) to utilities and power marketers on February 24, 1998 for purchase power for up to 200 MW of peaking and intermediate capacity beginning June 1, 2000. Several responses were received and although one was less costly than constructing a CT, it was no longer available after the 1998 summer spike in wholesale power prices.

On November 23, 1998, the Commission ordered EKPC to issue an RFP for firm peaking capacity for a period beginning June 1, 2000. EKPC received several responses to this RFP with only W.V. Hydro s ( Hydro ) proposal being less costly than constructing a CT at the J.K. Smith site. At EKPC s request, the Commission granted confidentiality for certain aspects of all the proposals including the CT construction option. EKPC projected a total installed turbine cost of \$25,750,000, excluding transmission facilities. EKPC modeled 15 years of detailed production and fixed costs to analyze the differential in cost between a new CT and the Hydro proposal. Since the CT provided approximately 40 MW more capacity during EKPC s peak winter months, the analysis of the Hydro proposal included a 40 MW winter purchase to make the two

projects comparable. On a 15-year present value basis, EKPC's analysis shows the Hydro proposal to be slightly less expensive by 0.41 percent

Based on EKPC's most recent Integrated Resource Plan, the Commission finds that EKPC has a need for 80 MW of peaking capacity. Either of the two projects will meet EKPC's power supply needs at comparable costs. However, a significant disadvantage of the Hydro project is that energy might not be available during EKPC's system peak because the output depends on river flow. The CT will provide more reliability to serve peak loads and this increased reliability outweighs the slightly lower cost of the Hydro project. The Commission further finds that the construction of an 80 MW CT is reasonable, cost effective, and will not result in the wasteful duplication of facilities. Therefore, EKPC should be granted a Certificate of Public Convenience and Necessity to construct an 80 MW CT as proposed, subject to the price cap discussed below. The Commission has also considered the needs of the communities served by EKPC, the industrial development, customer requirements, and the economics of the proposed CT. All of these factors, when balanced against the Natural Resources Cabinet's report of no adverse environmental impacts, leads the Commission to find that a Certificate of Environmental Compatibility should be granted.

EKPC has not signed a contract with a specific turbine manufacturer and has stated that it would not make such a financial commitment without first receiving a Certificate of Public Convenience and Necessity from the Commission. Based on its most recent information, EKPC has estimated the cost of the CT to be \$25,750,000. Because only an estimate is currently available on the cost of the CT, the Commission believes that any authorization of a certificate of convenience and necessity for this

project should include an upper limit on the total cost of the CT. The Commission will authorize a certificate of convenience and necessity for the CT, contingent upon the final cost of the CT not exceeding 10 percent of the currently available estimate. In the event that a CT cannot be installed within this price cap, EKPC will be required to submit adequate justification for the price overrun and a detailed explanation of why other capacity alternatives are not more reasonable.

EKPC stated that it has had continued discussions with the developer of the Hydro project and will continue to do so because of the numerous favorable attributes that the project can provide. The Commission concurs with EKPC on this matter and encourages both parties to attempt to reach common ground on the proposal that will best meet EKPC's future power supply needs.

#### Transmission Needs

EKPC indicated that additional transmission facilities will be needed to integrate a new CT at the J.K. Smith site into EKPC's system. A number of transmission alternatives have been considered and each one will require some construction activity by Kentucky Utilities Company (KU), with whom EKPC is highly interconnected. Although EKPC has proposed constructing 11.5 miles of 138 KV transmission lines from J. K. Smith to the Lake Reba Tap Substation, EKPC and KU are currently performing a study to determine the most appropriate transmission alternative. The results of that study, which are anticipated within two months, could lead to a change in EKPC's current proposal. Consequently, the Commission will defer ruling on EKPC's request to construct additional transmission facilities until the joint study has been completed and filed.

IT IS THEREFORE ORDERED that:

1. EKPC is granted a certificate of public convenience and necessity and a certificate of environmental compatibility to construct an 80 MW CT at the J.K. Smith site subject to a price cap of \$25,750,000 plus 10 percent.

2. In the event that the price of the CT exceeds the cap established herein, EKPC shall, prior to signing a contract with the turbine manufacturer, file justification for the additional cost and a detailed explanation for why a purchase option is not a more reasonable alternative.

3. EKPC shall continue to consider the feasibility of the Hydro project as an option to satisfy future needs for capacity.

4. Within 60 days of the date of this Order, and every 60 days thereafter, EKPC shall file a report on the status of its study with KU on alternative transmission facilities. Within 30 days of completion of the study, EKPC shall file with the Commission its prepared testimony, the transmission study, and, if needed, any amendment to its application.

Done at Frankfort, Kentucky, this 9<sup>th</sup> day of June, 1999.

By the Commission

ATTEST:

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Executive Director