

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF BARKLEY LAKE WATER )  
DISTRICT, (1) FOR A CERTIFICATE THAT )  
PUBLIC CONVENIENCE AND NECESSITY RE- )  
QUIRES THE CONSTRUCTION OF NEW PLANT ) CASE NO.  
FACILITIES; AND (2) SEEKING APPROVAL ) 10046  
OF THE ISSUANCE OF CERTAIN SECURITIES; )  
AND (3) FOR AN ORDER AUTHORIZING AD- )  
JUSTMENT OF WATER SERVICE RATES AND )  
CHARGES )

O R D E R

IT IS ORDERED that Barkley Lake Water District ("Barkley Lake") shall file an original and seven copies of the following information with the Commission with a copy to all parties of record no later than December 4, 1987. If the information cannot be provided by this date, Barkley Lake should submit a motion for an extension of time stating the reason a delay is necessary and include a date by which it will be furnished. Such motion will be considered by the Commission. Barkley Lake shall furnish with each response the name of the witness who will be available at the public hearing for responding to questions concerning each item of information requested.

1. The engineering information submitted with the application indicates that Barkley Lake is proposing to install one fire hydrant as part of this project. KRS 227, the "Recommended Standards For Water Works" by the Great Lakes - Upper Mississippi River Board of State Sanitary Engineers ("Ten States Standards")

and the Insurance Services Office ("ISO") all have requirements for providing fire protection. All of these references require fire hydrant installation on a minimum of 6-inch diameter water lines. The ISO requires the capability to deliver at least 250 gallons per minute at a residual pressure of 20 pounds per square inch for a minimum of 2 hours from any fire hydrant. The Ten States Standards allows a fire hydrant on dead-end mains for flushing only if flow and pressure are sufficient. Otherwise an approved flushing hydrant or blowoff should be used. Based on the above, provide information as to the purpose of the proposed fire hydrant. If the purpose of the proposed fire hydrant is to provide fire protection, provide hydraulic analyses demonstrating the capability of Barkley Lake's system to comply with the requirements of KRS 227, the ISO and the Ten States Standards. If the fire hydrant is proposed for reasons other than fire protection, state why other equipment was not considered (e.g., blow-off valves, drain valves, etc.).

2. The engineering information submitted with the application also indicates that Barkley Lake is proposing to install five flushing hydrants as part of this project. Provide information as to the methods Barkley Lake intends to use to insure that the proposed flushing hydrants are not misconstrued to be fire hydrants by its customers. Also provide information concerning the color, size, type, installation, and markings of the proposed flush hydrants.

3. Provide the pertinent information which was analyzed that led to the conclusion that Barkley Lake's water treatment

plant should be expanded. As a minimum this should include Barkley Lake's actual peak day usage; Barkley Lake's projected annual peak day demands, how they were forecasted, and when 2 million gallons per day will be needed. Also provide information concerning the current level of unaccounted for water and its relation to the need for expansion of the water treatment plant.

4. The proposed expansion of Barkley Lake's water treatment plant to 2 million gallons per day apparently does not include any additional "clearwell" capacity. The Division of Water currently has guidelines that state that "clearwell" capacity must be a minimum of 15 percent of the capacity of the water treatment plant. Based on this guideline, after expansion, Barkley Lake should have clearwell capacity of at least 300,000 gallons. According to information in this case Barkley Lake has less than 20,000 gallons of "clearwell" capacity. Based on the above, provide details of how Barkley Lake intends to comply with the Division of Water's guidelines for "clearwell" capacity. (Note - General engineering references define the "clearwell" as finished water storage hydraulically below and adjacent to the filters). If Barkley Lake considers the water storage tank near the plant as "clearwell" capacity, provide details of the plumbing arrangement which insures that no customer receives water directly from this tank. In addition, state why "clearwell" capacity was not considered at the plant location itself in the original design. Also state why "clearwell" capacity at the plant location was not considered as part of this project in conformance with general

engineering references. Also provide the engineering and economic justification for utilizing an arrangement where water is pumped from the treatment plant up to a tank and then brought back to the treatment plant to be pumped a second time into the distribution system.

Done at Frankfort, Kentucky, this 12th day of November, 1987.

PUBLIC SERVICE COMMISSION

*Richard D. Henson, Jr.*  
For the Commission

ATTEST:

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Executive Director