COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE PETITION OF BOONE COUNTY WATER) AND SEWER DISTRICT FOR APPROVAL OF A) DEFEASEMENT OF BONDS; ISSUANCE OF) CASE NO BONDS; AND CONSTRUCTION OF WATER) FACILITIES }

CASE NO. 93-326

ORDER

IT IS ORDERED that Boone County Water and Sewer District ("Boone Water") shall file an original and 10 copies (two copies of engineering-related materials) of the following information with the Commission, with a copy to all parties of record within 14 days from the date of this Order. If the information cannot be provided by this date, Boone Water should submit a motion for an extension of time stating the reason for which a delay is necessary and include a date by which the information will be furnished. Such motion will be considered by the Commission. Boone Water shall furnish with each response the name of the witness who will be available at the public hearing, if one is held, for responding to questions concerning each item of information requested.

1. If the hydraulic analyses which are provided in response to this information request are computer-generated, provide a copy of the input data on an IBM compatible 5 1/4-inch or 3 1/2-inch floppy disk.

2. Provide hydraulic analyses, supported by computations and actual field measurements, of typical operational sequences of the

existing water distribution system as presently configured and These hydraulic analyses should demonstrate the operated. operation of all pump stations and the "empty-fill" cycle of all water storage tanks. Computations are to be documented by a labeled schematic map of the system that shows pipeline sizes, lengths, connections, pumps, water storage tanks, wells, and sea level elevations of key points, as well as allocations of actual customer demands. State whether flows used in the analyses are based on average instantaneous flows, peak instantaneous flows, or The flows used in the any combination or variation thereof. analyses shall be documented by actual field measurements and customer use records. Justify fully any assumptions used in the analyses. (Note: If the proposed construction is in an area of the water distribution system which can be hydraulically isolated or separated from the rest of Boone Water's system, only hydraulic analyses for the isolated portion of the system in question need be filed.)

3. Provide a summary of any operational deficiencies of the existing water system that are indicated by the hydraulic analyses or that are known from experience.

4. Provide a narrative description of the proposed daily operational sequences of the water system. Documentation should include the methods and mechanisms proposed to provide positive control of all storage tank water levels. The description should be fully supported by appropriate field measurements and hydraulic calculations.

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5. Provide a water distribution system map at a scale of at least one inch equals two miles marked to show Boone Water's distribution system. The map of the system shall show pipeline sizes, location, and connections as well as pumps, water storage tanks, and sea level elevations of key points.

6. Provide hydraulic analyses, supported by computations and actual field measurements, of typical operational sequences of the water distribution system with the improvements proposed in this case in place. These hydraulic analyses should demonstrate the operation of all pump stations and the "empty-fill" cycle of all water storage tanks. Computations are to be documented by a labeled schematic map of the system that shows pipeline sizes, lengths, connections, pumps, water storage tanks, wells, and sea level elevations of key points, as well as allocations of actual customer demands. Flows used in the analyses shall be identified as to whether they are based on average instantaneous flows, peak instantaneous flows, or any combination or variation thereof. The flows used in the analyses shall be documented by actual field measurements and customer use records. Justify fully any assumptions used in the analyses. (Note: These analyses should use the same schematic as the analyses of the existing water distribution system to facilitate comparison.)

7. The engineering information submitted indicates that Boone Water is proposing to install 60 fire hydrants as part of this project. Commission Regulation 807 KAR 5:066, Section 10(2)(b), states in part that "[f]ire hydrants may be installed by

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a utility only if: a. A professional engineer with a Kentucky registration has certified that the system can provide a minimum fire flow of 250 gallons per minute; and b. The system supporting this flow has the capability of providing this flow for a period of not less than two (2) hours plus consumption at the maximum daily rate."

Provide evidence that the system meets the requirements of 807 KAR 5:066, Section 10(2)(b).

Done at Frankfort, Kentucky, this 5th day of October, 1993.

PUBLIC SERVICE COMMISSION

ATTEST:

Executive Director