

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF SOUTH GRAVES	)	
WATER DISTRICT FOR (1) A CERTIFICATE	)	
OF CONVENIENCE AND NECESSITY, (2)	)	CASE NO.
AUTHORIZATION TO BORROW FUNDS AND TO	)	94-004
ISSUE ITS EVIDENCE OF INDEBTEDNESS	)	
THEREFOR; AND (3) FOR AUTHORITY TO	)	
ADJUST RATES	)	

O R D E R

IT IS ORDERED that South Graves Water District ("South Graves") shall file the original and 10 copies (two copies of voluminous engineering-related materials) of the following information with the Commission with a copy to all parties of record within 21 days from the date of this Order. South Graves 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. Engineering information filed with the Commission on March 2, 1994, categorizes improvements to the system as follows: 1) Proposed; 2) Needed; and 3) Long Range. Proposed Improvements are included in this case and Needed and Long Range Improvements are recommended in the near future to eliminate low pressure areas and generally improve system operation. Provide target dates for completion of the Needed and Long Range Improvements. Also provide details of how South Graves plans to finance these improvements and describe any efforts to secure financing.

2. Engineering information indicates that South Graves is proposing to install one fire hydrant as part of this project. 807 KAR 5:066, Section 10(2)(b), states in part "[f]ire hydrants may be installed by 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."

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

3. The hydraulic analyses and additional information filed in this case for the existing water distribution system indicate that low pressure (less than 30 psi) occurs and may continue to occur at Nodes 11, 17, 21, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 40, 41, 46, 47, 48, 53, 62, 67, 72, and 80 after the proposed construction is complete. Pressures at this level violate 807 KAR 5:066, Section 5(1). The proposed improvements will apparently improve pressure at some locations and future improvements will improve system-wide pressures. Provide the exact location of each of these Nodes, the number of customers served, the lowest pressure experienced, the frequency of experiencing low pressure, and whether any low pressure complaints have been received.

4. Provide the criteria used in determining the location, size, overflow elevation, and head range for the proposed water

storage tank. What other sites were considered and why were they not selected?

5. Describe the proposed daily operational sequences of the water system. Document the methods and mechanisms proposed to provide positive control of all storage tank water levels. Include an hourly summary of the expected inflow and outflow of water for existing and proposed tanks, how all pumps will function, and supporting field measurements and hydraulic calculations.

6. The computer hydraulic analyses indicate that the controls will be established so that the pump will function when the tank has dropped five feet below overflow. This would translate to approximately 35,000 gallons out of a 225,000-gallon tank or approximately 16 percent of the total storage volume. Based on this information, will this amount of water turnover be sufficient to maintain adequate residual chlorine to prevent stagnation and bacteria growth during low flow periods or the warm summer months? Explain how this determination was made.

Done at Frankfort, Kentucky, this 5th day of April, 1994.

PUBLIC SERVICE COMMISSION

  
For the Commission

ATTEST:

  
Executive Director