

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF SOUTH WOODFORD )  
COUNTY WATER DISTRICT: (1) FOR A )  
CERTIFICATE THAT PUBLIC CONVEN- )  
IENCE AND NECESSITY REQUIRE THE )  
CONSTRUCTION OF EXTENDED WATER ) CASE NO. 9344  
FACILITIES; (2) SEEKING APPROVAL )  
OF THE ISSUANCE OF CERTAIN SECURI- )  
TIES; AND (3) FOR AN ORDER AUTHOR- )  
IZING ADJUSTMENT OF WATER SERVICE )  
RATES AND CHARGES )

O R D E R

IT IS ORDERED that South Woodford Water District ("South Woodford") shall file an original and seven copies of the following information with the Commission with a copy to all parties of record by December 13, 1985. If the information requested or a motion for an extension of time is not filed by the stated date, the Commission may dismiss the case without prejudice. South Woodford 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. In order to obtain realistic results when utilizing computer hydraulic analyses to predict a water distribution system's performance, engineering references stress the importance of calibrating the results predicted to actual hydraulic conditions. This calibration process should

include matching field measurements to the results predicted by the computer over a wide range of actual operating conditions. As a minimum this should include average and maximum water consumption periods, as well as "fire flow" or very high demand periods.

Based on the above, explain the procedures used to verify the computer hydraulic analyses filed in this case. This explanation should be documented by field measurements, hydraulic calculations, etc.

2. Provide the approximate sea level elevations for all pressure recorder locations previously submitted.

3. Provide information as to why the pressures predicted at Nodes 1, 2, 12 and 17 by the computer hydraulic analyses do not closely match the pressure charts for these locations for the various conditions which were "modeled."

4. The pump operating points as depicted in the computer hydraulic analyses for both the existing and proposed system do not correspond to the pump curve filed in this case. Please explain this discrepancy. Also provide information with supporting documentation as to the expected operation of the pump upon completion of the proposed project. Documentation should include field measurements and hydraulic calculations.

5. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available on the suction side of South Woodford's existing pump. The

previously filed pressure chart supposedly only depicted pressure when the pump was off. The pressure chart should also indicate suction pressure when the pump is operating. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.

6. The computer hydraulic analysis filed in this case for the existing water distribution system indicates low pressures (less than 30 psig) and water outages almost system wide. The computer hydraulic analysis for the proposed water distribution system indicates improvements in pressure but also indicates low pressure (less than 30 psig) at Nodes 1, 3, 7, 13, 18, 21, 23, 24, 25 and 28. Pressures of this magnitude are in violation of PSC regulation 807 KAR 5:066, Section 6(1). Provide details of any preventive measures or additional construction South Woodford intends to perform to protect against this type of occurrence. Details should be documented by hydraulic analyses and field measurements.

7. In reference to the four notes executed by individual customers, are these notes now in South Woodford County Water District's name? If so, how long have they been in South Woodford's name?

8. If South Woodford has paid all interest and principal associated with these notes where was it reported in South Woodford's financial statements?

9. Is payment of these notes included in plans for the money to be borrowed from FmHA?

10. Will the expansion project include the addition of new customers? If so, how many?

Done at Frankfort, Kentucky, this 15th day of November, 1985.

PUBLIC SERVICE COMMISSION

Richard D. Hemminger  
For the Commission

ATTEST:

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Secretary