## COMMONWEALTH OF KENTUCKY BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF PRATER CREEK	)			
WATER DISTRICT: (1) FOR APPROVAL	)			
OF ITS INITIAL CONSTRUCTION	)			
PROJECT; (2) APPROVAL OF PROJECT	)	CASE	NO.	9369
FINANCING; AND (3) APPROVAL OF	)			
INITIAL WATER SERVICE RATES AND	)			
CHARGES	)			

## ORDER

("Prater Creek") shall file an original and seven copies of the following information with the Commission with a copy to all parties of record by January 3, 1986. 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. Prater Creek 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 original rate schedule appears to be inadequate to produce enough revenue to cover the new cost estimates. Have adjustments to the proposed rate schedule been made? If so, please provide copies of the new schedule and the calculations used in determining it.
- 2. Provide the rate schedule for emergency service to Mud Creek Water District.

- 3. Please state the charge for each of the following and document the cost of each:
  - a. New residential connection to existing system
  - b. Reconnections
  - c. Disconnections
  - d. Meter Changes
  - e. Any and all other special or non-recurring charges
- 4. In response to Item No. 3 of the Commission's October 21, 1985, Information Request, an additional 24-hour pressure recording chart was filed. Provide the approximate sea level elevation of the monitoring location.
- 5. Plan sheet 3 for the proposed construction project depicts a 2-inch non-circulating water line approximately 490 feet in length. Two-inch non-circulating water lines longer than 250 feet and 2-inch circulating water lines longer than 500 feet are in violation of PSC regulation 807 KAR 5:066, Section 11(2)(a). Based on this information it appears that a 3-inch or larger water line should be installed. Provide comments concerning this matter.
- 6. Provide a list of all 2-inch water lines proposed for the project. This list shall include the location, length and possibility for future extension of each line.
- 7. In response to Item No. 4 of the Commission's October 21, 1985, Information Request, design calculations concerning the proposed pump for the hydropneumatic station were filed. However, calculations and design criteria for

the tank, "cut-in" and "cut-out" pressures, etc., were not included.

"Recommended Standards for Water Works" by the Great Lakes-Upper Mississippi River Board of State Sanitary Engineers (Ten States Standards) in Section 7.2.2 states, "The capacity of the wells and pumps in a hydropneumatic system should be at least ten times the average daily consumption rate. The volume of the hydropneumatic tank, in gallons, should be at least ten times the capacity of the largest pump, rated in gallons per minute. For example, a 250 gpm pump should have a 2,500 gallon pressure tank."

Based on this information, provide the design criteria and calculations for the complete hydropneumatic station. Also state why the proposed hydropneumatic station does not appear to meet the above-mentioned design criteria.

Ιn response 8. to No. 2. Item 2(q) the Commission's July 18, 1985, deficiency letter, a hydraulic analysis of the proposed water system was filed on August 2, 1985. This information supposedly indicated the operation of the proposed system with the pump station "on." response to Item No. 7 of the Commission's October 21, 1985, Information Request, a hydraulic analysis of the proposed water system was filed on November 7, 1985. This information supposedly indicated the operation of the proposed system with the pump station "off." However, the previously filed hydraulic analyses do not include several proposed water lines. The analyses also do not address the cumulative

effects of customer demands. The analyses with the proposed pump "off" assume starting pressures for each branch line and do not allow for demands on the main line or demands for previous branch lines. Based on this information provide hydraulic analyses, supported by computations and actual field measurements, of typical operational sequences of the complete proposed water distribution system. These hydraulic should demonstrate the operation of all pump analyses stations and the "empty-fill" cycles of all water storage tanks. Computations are to be documented by a 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 Flows used in the analyses shall be customer demands. 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.

Done at Frankfort, Kentucky, this 9th day of December, 1985.

PUBLIC SERVICE COMMISSION

Charles, Hemany, For the Commission

ATTEST: