COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF WOOD CREEK WATER DISTRICT, OF LAUREL COUNTY, KENTUCKY, FOR APPROVAL OF CONSTRUCTION, FINANCING, AND INCREASED WATER RATES	))))	CASE NO. 9594

O R D E R

IT IS ORDERED that Wood Creek Water District ("Wood Creek") shall file an original and seven copies of the following information with the Commission with a copy to all parties of record within 3 weeks of the date of this Order. 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. Wood 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. Provide hydraulic analyses, supported by computations and actual field measurements, of typical operational sequences of the existing water distribution system. 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.

2. 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.

3. 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.

4. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available at the locations listed below on Wood Creek's system. Identify the 24-hour period

recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.

a. Water lines at all sale points to the West Laurel Water Association (Junctions 4, 5 and 6).

b. Water line at the sale point to the City of London (Junction 12).

c. Water line at the sale point to the East Laurel Water District (Junction 13).

d. The Mother water storage tank.

e. The Mt. Moriah water storage tank.

f. The Grimes water storage tank.

g. Water line in the vicinity of junction 1.

h. Water line in the vicinity of junction 7.

i. Water line in the vicinity of junction 11.

j. Water line in the vicinity of junction 17.

k. Water line in the vicinity of junction 18.

l. On the discharge side of the high service pumps.

m. On the suction and discharge sides of the existing pump station on Highway 80.

n. On the suction and discharge sides of the existing pump station near the Daniel Boone Parkway.

5. Provide a narrative description of the proposed daily operational sequences of the existing water system. Documentation should include the methods and mechanisms proposed to provide positive control of all water storage tank water levels. The narrative description should include an hourly summary of how all tanks "work" (expected inflow and outflow of water), how all pumps

will function, the amount of water leaving the water treatment plant and the amount of water being purchased by the East Laurel Water District, the West Laurel Water Association and the City of London. Any assumptions are to be fully supported by appropriate measurements and hydraulic calculations.

6. Provide a list of each of Wood Creek's water storage tanks. Give the location, capacity, and overflow elevation of each tank. Explain how water is supplied to each tank.

7. Provide a list of each of Wood Creek's existing pump stations (this list should include all high service pumps). Give the location, number of pumps and their rated capacities, and the purpose of each pump station. Explain how the operation of each pump station is controlled. Provide a copy of the pump manufacturer's characteristics (head/capacity) curve for each of Wood Creek's existing pumps. Identify each curve as to the particular pump and pump station to which it applies. Also state if pump is in use and if pump will remain in use, will be abandoned or will be replaced.

8. Provide a highway map at a scale of at least one inch equals two miles marked to show Wood Creek's water 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.

9. The list of exhibits identifies Exhibit P as a comparative income statement and pro forma adjustments with explanation attached. However, Exhibit P, as filed, consists solely of a three-page explanation of the planned sandblasting and

recoating expenditures scheduled for the next 3 years. Please clarify the intended purpose of Exhibit P and/or file an income statement showing the proposed pro forma adjustments to the test year operations.

10. Per Exhibit M, the proposed increase in rates should produce additional revenue of $87,800 ($780,100 - $692,300). Explain how this amount of increased revenues was determined to be necessary for Wood Creek (i.e. - required rate of return, required debt service coverage, etc.).

11. Exhibit K, as filed, is partially illegible. Also, the breakdown of salaries by employee was not included as stated in the list of exhibits. Please provide legible copies of Exhibit K including the breakdown of salaries.

12. Wood Creek's annual report shows revenue from sales for the 12-months ended December 31, 1985, of $693,741. The monthly billing analyses included in Exhibit M produce total revenue from sales of $711,896. Please explain and reconcile this difference.

13. Provide any usage studies, economic impact studies, regional comparisons, or other documentation used in determining that the proposed rate increase should affect only water usage above 3,500 gallons per month.

Done at Frankfort, Kentucky, this 24th day of June, 1986.

PUBLIC SERVICE COMMISSION

For the Commission

ATTEST:

Secretary