

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

* * * * *

In the Matter of

THE APPLICATION OF McCREARY COUNTY)
WATER DISTRICT FOR (1) A CERTIFICATE)
OF PUBLIC CONVENIENCE AND NECESSITY,)
AUTHORIZING AND PERMITTING SAID WATER)
DISTRICT TO CONSTRUCT A WATERWORKS)
CONSTRUCTION PROJECT, CONSISTING OF)
EXTENSIONS, ADDITIONS, AND IMPROVE-)
MENTS TO THE EXISTING WATERWORKS)
SYSTEM OF THE DISTRICT; (2) APPROVAL)
OF THE PROPOSED PLAN OF FINACNING OF)
SAID PROJECT; AND (3) APPROVAL OF THE)
INCREASED WATER RATES PROPOSED TO BE)
CHARGED BY THE DISTRICT TO CUSTOMERS)
OF THE DISTRICT)

CASE NO. 8720

O R D E R

IT IS ORDERED That this case be and it hereby is set for hearing on May 4, 1983, at 2:00 p.m., Eastern Daylight Time, in the Commission's offices at Frankfort, Kentucky, for the purpose of receiving testimony with respect to the attached Report of Robert Arnett of the Commission Staff dated March 17, 1983, (Appendix A) and those sections of the attached draft Order (Appendix B) relating to the proposed construction of the McCreary County Water District.

Done at Frankfort, Kentucky, this 29th day of April, 1983.

PUBLIC SERVICE COMMISSION


Chairman


Vice Chairman


Commissioner

ATTEST:

Secretary

R E P O R T

TO: Claude G. Rhorer, Jr., Director *CR*
Division of Utility Engineering
and Services

THRU: Byrnes C. Fairchild, Chief *BCF*
Water and Sewage Section

FROM: Robert N. Arnett, ^{RNA} Public Service Engineer
Water and Sewage Section

RE: Case No. 8720

DATE: March 17, 1983

Brief

The purpose of this report is to review the need for a proposed waterworks improvement project to the McCreary County Water District's ("McCreary County") present system. On November 1, 1982, McCreary County filed an application with the Public Service Commission requesting approval of the construction of a new garage and maintenance building, water treatment plant improvements, and the construction of a 500,000 gallon elevated steel water storage tank and related appurtenances. The application also requested approval of a proposed plan of financing the proposed improvements, and a proposed rate increase. Cost estimates, engineering reports, plans, specifications and hydraulic analyses were filed with the original application. Additional hydraulic information was requested from McCreary County by Order dated January 19, 1983. A formal hearing was held on February 15, 1983.

It appears from the application and record in this case that the construction of a new garage and maintenance building and water

treatment plant improvements will enable McCreary County to offer more efficient water service to its customers, however after reviewing the engineering data and hydraulic analyses furnished in this case by McCreary County's consultant, Kenroy Engineers, Inc. of Lexington, Kentucky ("Kenroy"), I feel the need for a 500,000 gallon water storage tank in the location proposed has not been sufficiently documented by Kenroy. (All data for this report came from Case File 8720).

Background Information

McCreary County was formed in 1962 and began operation of facilities in 1965. There have been two major improvement and expansion projects constructed (1972 and 1978). McCreary County presently serves approximately 2,730 customers in McCreary County (See Figure 1). The existing water system is comprised of a water intake structure and impoundment, a water treatment plant, approximately 36 miles of pipeline, 4 storage tanks (See Table I) and two booster pump stations. (See Figure 2 for partial layout of system)

Existing Storage Tanks
TABLE I

| <u>TANK</u> | <u>CAPACITY</u> <u>(GALLONS)</u> |
|--------------------|-------------------------------------|
| PARKERS LAKE | 150,000 |
| WHITLEY CITY | 30,000 |
| PINE KNOT | 50,000 |
| KING CEMETERY ROAD | 150,000 |
| | <u>400,000</u> |

The average daily demand for water in 1979 on McCreary County's system was 466,340 gallons. The PSC's current regulations

require a minimum of 1 days storage and the Farmers Administration ("FmHA") recommends 2 days storage. As can be seen from Table I, McCreary County's storage did not meet the PSC's one day storage requirement in 1979.

To further complicate matters the Parkers Lake and King Cemetery Road Tanks are on the North and South ends of McCreary County's system respectively and are filled by booster pump stations which incorporate check valves such that the tanks cannot backfeed to the "core" area. This in turn further demonstrates the need for additional storage capacity as can be seen from Table II which is based on 1979 data taken from the Preliminary Engineering Report filed by Kennoy.

TABLE II

| TANK | CAPACITY (GALLONS) | AVERAGE DAILY DEMAND (GALLONS) | STORAGE (DAYS) |
|--------------------|-----------------------|--------------------------------------|-------------------|
| PARKERS LAKE | 150,000 | 43,000 | 3.5 |
| WHITLEY CITY | 50,000 | 217,670 | .23 |
| PINE KNOT | 50,000 | 169,000 | .30 |
| KING CEMETERY ROAD | 150,000 | 36,670 | 4.10 |

As can be seen from the above table there appears to be inadequate water storage in the "core" area of McCreary County's system. At the present time there is only 100,000 gallons available for storage for a 1979 daily demand of 386,670 in the "core" area. Based on the above information, additional water storage of approximately 300,000 gallons is needed in the "core" area based on PSC requirements and approximately 700,000 gallons if FmHA's recommendation is used. However, 700,000 gallons of additional storage would probably not be feasible. An additional 500,000 gallons storage as

proposed would give approximately 1.6 days storage. E - There is an estimated 250,000 gallons of water in storage in the clearwell at the water treatment plant, which could be used to supplement the storage in the "core" area. However, this would have to be pumped into the system instead of being gravity fed as from the storage tanks. The gallonage in the clearwell was estimated from the plans, etc. submitted in this Case.)

Review of Data and Expected
System Operation

In order to verify how McCreary County's system will operate after the installation of the proposed 500,000 gallon tank it is necessary to perform a detailed hydraulic analysis. Since McCreary County's system has several tanks, loop lines, etc. it would be very tedious and time consuming to do an adequate hydraulic analysis of the system without the aid of computer facilities. Kennoy simulated McCreary County's system on the computer using input data such as the type and size of lines, friction factors or resistance to flow, location of usages (demands) at appropriate points on the system etc. Kennoy filed computer results of several possible operating scenarios with the original application and filed additional computer results at the request of PSC staff as stated earlier. My review and subsequent concern is based on the data filed by Kennoy.

Kennoy filed an expected operational sequence of the proposed system in response to the PSC's Order dated January 19, 1983. This response stated, "The system improvements for the above referenced project will result in the high service pumps at the water treatment plant being activated by a Telemetering System to be installed at the proposed tank site. This Telemetering System will be set up such

that it will be adjustable and we have based our hydraulic calculations on a tank level at two thirds full capacity. We feel this will be the normal operating range and once this level is obtained in the tank the Telemetering System will activate the high service pumps to fill the new five hundred thousand (500,000) gallon tank, located on Lookout Tower Road. Once this tank has been filled the pumps at the water treatment plant will shut off and the levels in the other tanks will increase until such point in time as they are at their over-flow elevation which is the same elevation as the proposed tank (1529). The two pump stations within the distribution system are activated either by Telemetering Systems or set up to operate predetermined number of hours each day."

The following table was constructed based on data from Kennoy's computer simulation of the system with the following input data in addition to the data mentioned above.

1. New tank is one third less than full, all other tanks approximately 1/2 full, high service pumps off and average usage on the system.

TABLE III

| TANK | CAPACITY (GALLONS) | AVERAGE DEMAND (GALLONS PER MINUTE) | TIME TO EMPTY IF FULL (HOURS) | NORMAL USE IN 12 HOURS (GALLONS) |
|-------------------|-----------------------|---|-------------------------------------|--|
| PARKERS LAKE | 150,000 | 78 | 32.0 | 56,160 |
| WHITLEY CITY | 50,000 | 335 | 2.5 | 241,200* |
| NEW TANK | 500,000 | 120 | 69.0 | 86,400 |
| PINE KNOT | 50,000 | 176 | 4.8 | 126,720* |
| KING CEMETERY RD. | 150,000 | 26 | 96.0 | 18,720 |

*IMPOSSIBLE SITUATION - 2 TANKS IF HALF FULL ONLY HAVE 25,000 GALLONS EACH. USAGE MUST BE SATISFIED FROM ANOTHER SOURCE.

The following table was constructed based on from Kennoy's computer simulation of the system with the following input data in addition to the data mentioned on page 4:

2. All tanks full, high service pumps on, zero usage (demand). This scenario would demonstrate whether the tanks can be filled. The flow data taken from the computer simulation would be the minimum flow going into each of the tanks with zero customer usage. At lower water levels in the tanks greater flow would enter each tank due to less head or pressure that the high service pumps have to work against. In order to be conservative assume that the flows never exceed the flow at that point in time when all tanks are full.

TABLE IV

| <u>TANK</u> | <u>CAPACITY (GALLONS)</u> | <u>OUTFLOW TANKS (GALLONS)</u> | <u>INFLOW TANKS (GALLONS PER MINUTE)</u> | <u>TIME TO FILL TO CAPACITY (HOURS)</u> |
|--------------------|-------------------------------|------------------------------------|--|---|
| PARKERS LAKE | 150,000 | 56,160 | 8 | 117 |
| WHITLEY CITY | 50,000 | 241,200* | 205 | 4.1 |
| NEW TANK | 500,000 | 86,400 | 257 | 5.6 |
| PINE KNOT | 50,000 | 126,720* | 157 | 5.3 |
| KINGS CEMETERY RD. | 150,000 | 18,720 | 52 | 6 |

*SEE NOTE ON TABLE III

From the above it can be seen that all tanks except Parkers Lake could be filled during off-peak times which is approximately 8 hours a day. The Parkers Lake Tank could not be filled unless the pump station which feeds this tank is operated. This would take more water from the "core" area and could in turn cause the tanks in the "core" area not to be full at the start of the normal demand period. Based on this information it would take even less time to empty the Whitley City and Pine Knot tanks.

Based on the information on page 6, the expected operation of the system assuming it has been subjected to the average demand and the new tank level has dropped enough to activate the high service pumps would be as follows:

1. All tanks begin filling.
2. The Whitley City Tank would fill first and would be cut off by its altitude valve.
3. The Pine Knot Tank would fill and would be cut off by its altitude valve.
4. The new tank would fill and would de-activate the high service pumps.
5. The Parkers Lake Tank and King Cemetery Road Tank would continue to fill from the other tanks.

At this point in time approximately 8 hours after starting to fill, the system would start to experience usage (demand). In all probability this demand could be higher than average demand, and would make conditions worse than outlined in Table III. For the sake of discussion assume the system only experiences average demand.

Based on the information on page 5, the expected operation of the system would be as follows:

1. The Whitley City Tank would be out of water in approximately 2 1/2 hours.
2. The Pine Knot Tank would be out of water in approximately 5 hours.
3. Any demand in these areas would have to come from the new tank which after two hours has fed approximately 18,000 gallons into the system. As stated earlier a 1/3 drop in

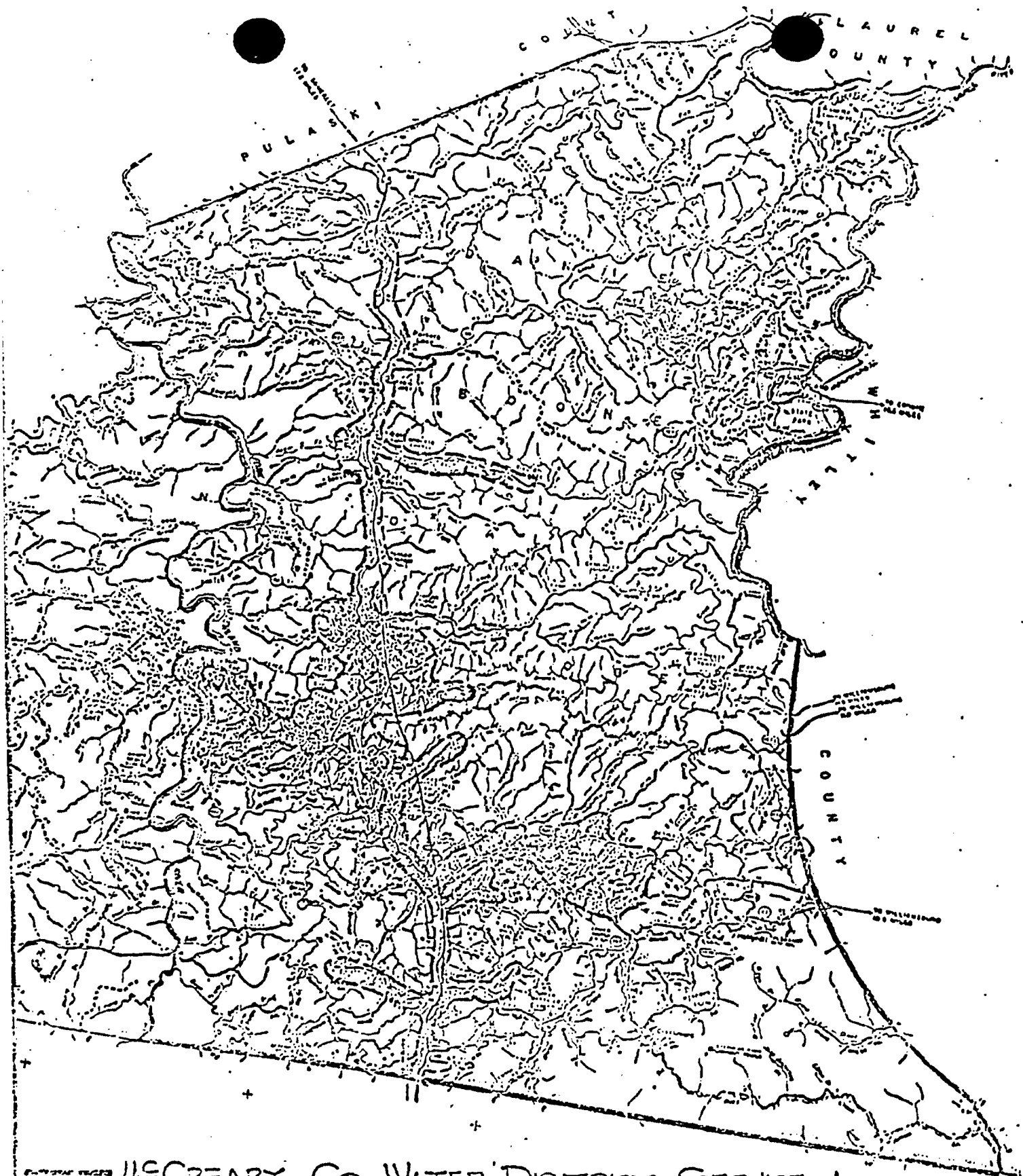
Conclusions and Recommendations

Based on the review of the information submitted in this case, the following conclusions are presented:

1. There is a demonstrable need for the construction of a new garage and maintenance building.
2. There is a demonstrable need for making water treatment plant improvements.
3. There is a demonstrable need for additional water storage facilities on the McCreary County system.
4. McCreary County's distribution system will not hydraulically support a 500,000 gallon storage tank in its proposed location.

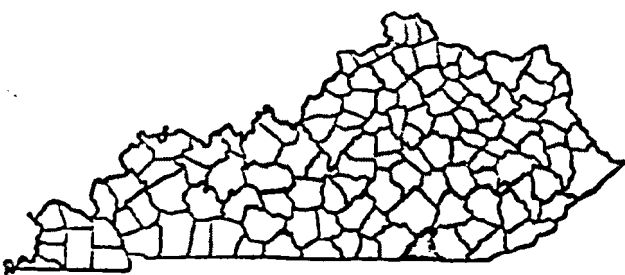
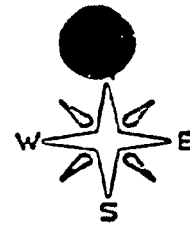
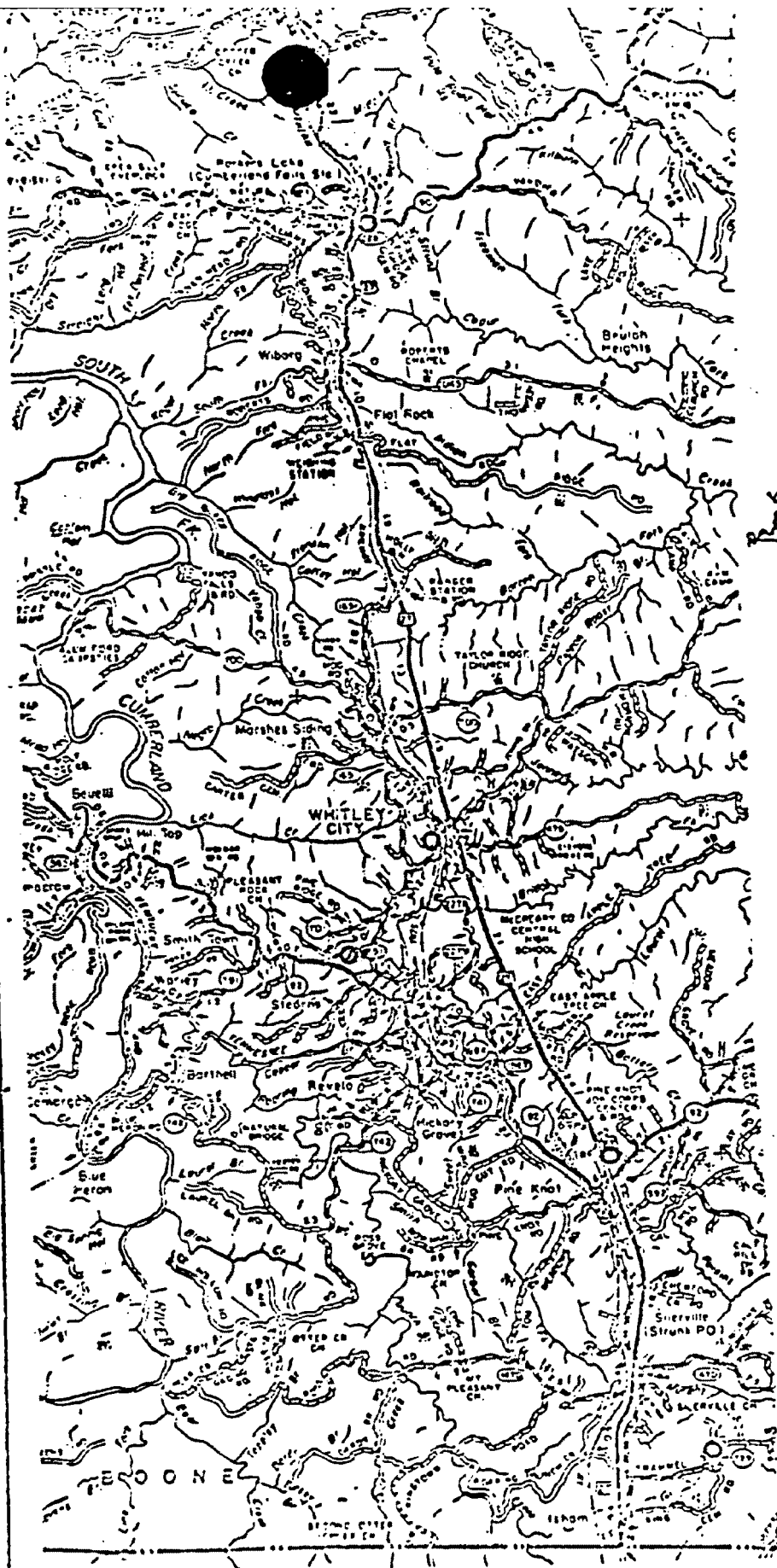
This report makes the following recommendations:

1. McCreary County's application for a certificate of public convenience and necessity for the construction of a new garage and maintenance Building and making water treatment plant improvements should be granted.
2. McCreary County's application for a certificate of convenience and necessity for the construction of a 500,000 gallon water storage tank in its proposed location should be denied.
3. McCreary County should be instructed to make further studies of its distribution system to determine the most appropriate location for a new-storage tank (or tanks). The location(s) selected should in addition to being suitable for the quantity to be stored, also be suitable for hydraulically efficient delivery of this quantity to meet the system's demand for water. Studies based on actual operating conditions are essential to this purpose.

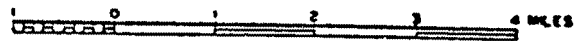


||| McCreezy Co. Water District Service Area
 --- EXISTING SERVICE

FIGURE 1



SCALE



LEGEND

| <i>EXISTING WATERLINE</i> | <i>PROPOSED WATERLINE</i> |
|---------------------------|---------------------------|
| | |
| | |
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| | |
| | |
| | |
| | |
| | |
| | |

○ WATER TANK ●

DISTRIBUTION SYSTEM

Figure 2

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

* * * * *

In the Matter of:

THE APPLICATION OF MCCREARY)
COUNTY WATER DISTRICT FOR (1) A)
CERTIFICATE OF PUBLIC CONVENIENCE)
AND NECESSITY, AUTHORIZING AND)
PERMITTING SAID WATER DISTRICT TO)
CONSTRUCT A WATERWORKS)
CONSTRUCTION PROJECT, CONSISTING)
OF EXTENSIONS, ADDITIONS, AND)
IMPROVEMENTS TO THE EXISTING)
WATERWORKS SYSEM OF THE DISTRICT;)
(2) APPROVAL OF THE PROPOSED PLAN)
OF FINANCING OF SAID PROJECT AND)
(3) APPROVAL OF THE INCREASED)
WATER RATES PROPOSED TO BE)
CHARGED BY THE DISTRICT TO)
CUSTOMERS OF THE DISTRICT)

CASE NO. 8720

O R D E R

The McCreary County Water District ("McCreary County") filed its application on November 1, 1982, for approval of adjustments to its water service rates, authorization to construct a \$785,000 waterworks improvement project and approval of its plan of financing for this project. The planned financing included a \$400,000 grant from the Appalachian Regional Commission ("ARC") and Farmers Home Administration ("FmHA") loans totaling \$385,000 as follows: \$285,000 at 5 percent interest and \$100,000 at 11 3/8 percent interest. Waterworks revenue bonds are to be issued as security for these loans. The repayment period will be 40 years.

A hearing was held February 15, 1983, in the offices of the Public Service Commission, Frankfort, Kentucky. Mrs. Pat Terry

and Mr. Grayson Deel, customers of McCreary County, intervened and expressed concern about the effect of the proposed rates on high volume customers of McCreary County. Mrs. Terry owns the People's Laundry in Whitley City. Mr. Deel represented the Pine Knott Conservation Center, a Job Corps Training Center.

McCreary County requested approval of increased rates for water service which would provide an increase in operating revenues of \$97,749. In this Order, the Commission has allowed an increase in operating revenues of \$66,303.

TEST PERIOD

McCreary County proposed and the Commission has accepted the 12-month period ending June 30, 1982, as the test period in this matter.

REVENUES AND EXPENSES

McCreary County's net operating income for the test period was \$11,188. In order to reflect expected operating conditions subsequent to completion of the proposed construction project, McCreary County proposed numerous adjustments to revenues and expenses resulting in an adjusted net operating loss of \$2,844. The Commission finds McCreary County's proposed adjustments to be generally proper and has accepted them for rate-making purposes with the following exception:

Depreciation Expense

McCreary County adjusted depreciation expense by \$7,700 to reflect additional depreciation from the construction project. The Commission has further adjusted depreciation expense in accordance with its policy that depreciation should be computed on

the basis of original cost of the plant in service less contributions in aid of construction. The Commission is of the opinion that it is unfair to require ratepayers to provide recovery on that portion of plant which has been provided free of cost. Therefore, the Commission finds that reasonable depreciation expense for rate-making purposes is \$40,219,^{1/} a reduction in adjusted depreciation expense of \$37,429.

Therefore, the Commission finds that McCreary County's adjusted test period operations are as follows:

| | <u>McCreary County Adjusted</u> | <u>Commission Adjustments[*]</u> | <u>Adjusted</u> |
|--------------------------------------|-------------------------------------|---|------------------|
| Operating Revenues | \$ 399,017 | \$ -0- | \$399,017 |
| Operating Expenses | <u>401,861</u> | <u>(37,429)</u> | <u>364,432</u> |
| Net Operating Income | <u>\$ (2,844)</u> | <u>\$ 37,429</u> | <u>\$ 34,585</u> |
| Other Income | <u>\$ 5,044</u> | <u>-0-</u> | <u>\$ 5,044</u> |
| Income Available for Debt Service | <u>\$ 2,200</u> | <u>\$ 37,429</u> | <u>\$ 39,629</u> |

REVENUE REQUIREMENTS

The Commission has used the debt service coverage ("DSC") method to determine appropriate revenue requirements for McCreary County. McCreary County's pro forma average debt service for the next 5 years, including financing of the proposed construction project, is \$88,277. McCreary County's DSC on adjusted net operating income of \$34,585 plus other income of \$5,044 is .45X. The Commission is of the opinion that this DSC is unfair, unjust and unreasonable. Furthermore, the Commission is of the opinion that a DSC of 1.2X is the fair, just, and reasonable coverage necessary for McCreary County to pay its operating expenses and to meet the requirements of its lenders. Accordingly, the Commission has determined that additional revenue of \$66,303^{2/} is necessary to

provide the 1.2X DSC which will ensure the future financial stability of McCreary County.

OTHER MATTERS

Delinquent Principal Payments

McCreary County issued Waterworks Refunding and Improvement Bonds in 1973 to finance improvements on the system and to refund previous issues. McCreary County currently has outstanding \$631,415 of Series "A" bonds and \$172,000 of Series "B" bonds payable to the Department of Housing and Urban Development ("HUD"). Further, McCreary County is currently in default on \$47,415 of principal on the Series "A" bonds and \$9,000 on the Series "B" bonds. McCreary County asked to include a 3-year amortization of this delinquent principal in its basic rates at an annual charge of \$18,805. In theory and according to past Commission policy, principal repayment should be made from the annual depreciation charges and the profits of a utility. However, due to its limited cash-flow and its failure to make timely rate case filings, McCreary County has been unable to pay its operating expenses and meet its debt service requirements.

The Commission has reviewed McCreary County's operations and rate case history to determine the appropriateness of requiring the present ratepayers to supplement any cash flow deficiency caused by past due delinquencies. The Commission is of the opinion that in this instance it is necessary for the ratepayers to pay a surcharge since there are no stockholders to penalize for the lack of timely rate filings. Therefore, the Commission finds it appropriate for McCreary County's ratepayers to pay a surcharge of \$0.53 per month for a period not to exceed 36 months or until total revenues of

\$56,415 are collected, whichever comes first. Amounts collected under this surcharge will be applied by McCreary County solely to the settlement of the debt owed to HUD. McCreary County will be required to file with the Commission quarterly statements of payments on its indebtedness to HUD.

The Commission further advises McCreary County that future rate requests should be filed on a more timely basis to avoid recurring delinquencies, and cautions that failure to adhere to this advice could result in future financial instability.

RATE DESIGN

At the hearing of the case, Mrs. Pat Terry and Mr. Grayson Deel expressed concern about McCreary County's rate design, particularly its impact on large volume users. The Commission also questioned McCreary County's rate design and requested additional information to assist rate design evaluation.

The Commission has considered modifying McCreary County's rate design. However, such a task involves considerable effort that would delay issuance of this Order, and McCreary County is in need of immediate rate relief. Therefore, the Commission has determined to defer rate design restructuring considerations and advises McCreary County to include a rate design evaluation proposal in any future case.

SUMMARY

The Commission, after consideration of the application and evidence of record and being advised, is of the opinion and finds that:

1. The engineer's hydraulic analyses indicate that McCreary County's water mains are too small to hydraulically support the proposed 500,000-gallon tank at its proposed location and that the 9,000 feet of existing 6-inch main between the tank site and Whitley City could restrict the flow of water to quantities that will not permit full utilization of the 500,000-gallon tank.

The Commission, therefore, finds that public convenience and necessity do not require construction of the 500,000-gallon storage tank proposed by McCreary County.

2. McCreary County should make further studies of its distribution system for the purpose of selecting tank sites and tank capacities that are compatible with the flowage capacities of its existing water mains. Its subsequent proposals for storage tank construction will be reviewed and considered for approval upon receipt by this Commission.

3. With the deletion of the proposed 500,000-gallon storage tank and the substitution therefor of storage tanks that are compatible with the flowage capacities of existing water mains, public convenience and necessity require that the construction proposed in the application and record be performed and that a certificate of public convenience and necessity be granted.

4. The construction approved herein includes improvements to certain components of the water treatment process for better equalization of the capacities of these components so as to effect increased productivity and efficiency of water treatment plant operations, and the construction of a utility service building to

include a meter testing laboratory and facilities for the maintenance of utility vehicles and equipment.

5. The construction recommended herein includes storage tanks with a combined capacity of 500,000 gallons or less for which plans, specifications and estimates are to be prepared and submitted to this Commission at a future date.

6. Any deviations from the construction approved herein which could adversely affect service to any customer should be subject to the prior approval of this Commission.

7. The total project costs for the construction approved and recommended herein will, on the basis of the bids received February 8, 1983, approximate \$785,000 including fees, contingencies and other indirect costs. McCreary County's financing in the amount of \$785,000 should, therefore, be approved.

8. The proposed borrowing of \$385,000 is for lawful objects within the corporate purposes of McCreary County, is necessary and appropriate for and consistent with the proper performance of services to the public by McCreary County, will not impair its ability to perform these services and is reasonably necessary and appropriate for such purposes.

9. McCreary County should furnish duly verified documentation of the total cost of this project including the cost of construction and all other capitalized costs (engineering, legal, administrative, etc.) within 60 days of the date that construction is substantially completed.

10. McCreary County's contract with its engineer should require the provision of full-time resident inspection under the

general supervision of a professional engineer with a Kentucky registration in civil or mechanical engineering. This supervision and inspection should insure that the construction work is done in accordance with the contract plans and specifications and in conformance with the best practices of the construction trades involved in the project.

11. McCreary County should require the engineer to furnish this Commission with a copy of the record plans and a signed statement that the construction has been satisfactorily completed in accordance with the contract plans and specifications within 60 days of the date of substantial completion of this construction.

12. McCreary County has been advised by the Department for Natural Resources^{3/} that its water impoundment dam does not meet the minimum criteria adopted by the Commonwealth of Kentucky for moderate hazard dams. The Phase II investigation, which has been estimated to cost \$20,000, should be completed during calendar year 1983. McCreary County should seek the approval of the FmHA and the ARC for setting aside contingency funds from this project to pay for the Phase II study.

13. The rates proposed by McCreary County will produce revenues in excess of the revenues found reasonable herein and should be denied upon application of KRS 278.030.

14. The rates and charges in Appendix A are the fair, just and reasonable rates to be charged by McCreary County in that they should produce gross annual revenue of \$470,364.

15. In addition to the rates in Appendix A, McCreary County should charge its customers a surcharge.

16. McCreary County should be required to submit a quarterly statement showing amounts received from the surcharge and each payment made to HUD with copies of cancelled checks.

IT IS THEREFORE ORDERED that McCreary County be and it hereby is denied a certificate of public convenience and necessity for construction of its proposed 500,000-gallon water storage tank.

IT IS FURTHER ORDERED that McCreary County be and it hereby is granted a certificate of public convenience and necessity to proceed with the construction of the proposed water treatment plant improvements and to proceed with the construction of a building that will house a meter testing laboratory and provide facilities for the maintenance of utility vehicles and equipment as set forth in the plans and specifications of record herein.

IT IS FURTHER ORDERED that McCreary County shall make further studies of its distribution system to select tank sites and tank capacities that are hydraulically compatible with the capacities of its distribution mains. The revised proposals for construction of water storage facilities shall be submitted to this Commission for approval before any construction thereof is begun.

IT IS FURTHER ORDERED that McCreary County shall complete the Phase II investigation of its water impoundment dam as soon as feasibly possible, but no later than December 31, 1983.

IT IS FURTHER ORDERED that any deviations from the construction approved herein which could adversely affect service to any customer shall be subject to the prior approval of this Commission.

IT IS FURTHER ORDERED that McCreary County's plan of financing in the amount of \$785,000, including 40-year loans of \$285,000 at 5 percent interest and \$100,000 at 11 3/8 percent interest from the FmHA be and it hereby is approved.

IT IS FURTHER ORDERED that McCreary County shall file with the Commission duly verified documentation which shows the total costs of the construction herein certificated including all capitalized costs (engineering, legal, administrative, etc.) within 60 days of the date that construction is substantially completed.

IT IS FURTHER ORDERED that the contract between McCreary County and its engineer shall require the provision of full-time resident inspection under the general supervision of a professional engineer with a Kentucky registration in civil or mechanical engineering. This supervision and inspection shall insure that the construction work is done in accordance with the contract plans and specifications and in conformance with the best practices of the construction trades involved in the project.

IT IS FURTHER ORDERED that McCreary County shall require the engineer to furnish this Commission with a copy of the record drawings and a signed statement that the construction has been satisfactorily completed and done in accordance with the contract plans and specifications within 60 days of the date of substantial completion of the proposed construction.

IT IS FURTHER ORDERED that the rates proposed by McCreary County be and they hereby are denied.

IT IS FURTHER ORDERED that the rates and charges in Appendix A be and they hereby are approved as the fair, just and reasonable

rates and charges to be charged by McCreary County for service rendered on and after the date of this Order.

IT IS FURTHER ORDERED that McCreary County shall place into effect the surcharges in Appendix A, effective with the next billing after the date of this Order, for a period not to exceed 36 months on and after the date of the next billing or until \$56,415 has been collected, whichever first occurs.

IT IS FURTHER ORDERED that McCreary County shall file a quarterly statement with the Commission outlining the amounts collected from the surcharge and payments made to HUD. These monthly statements shall include a copy of the cancelled checks and the suppliers' invoices.

IT IS FURTHER ORDERED that within 30 days of the date of this Order, McCreary County shall file its tariffs setting out the rates approved in Appendix A.

Nothing contained herein shall be deemed a warranty of the Commonwealth of Kentucky, or any agency thereof, of the financing herein authorized.

Done at Frankfort, Kentucky, this

By the Commission

ATTEST:

Secretary

FOOTNOTES

| | |
|---|------------------|
| 1. Calculation: | |
| Utility Plant in Service | \$ 2,628,719 |
| Less: Contributions in Aid of Construction | <u>1,406,198</u> |
| Net Utility Plant in Service | \$ 1,222,521 |
| Composite Depreciation Rate | X 2.66% |
| Depreciation Expense on Plant in Service | <u>\$ 32,519</u> |
| Plus: Depreciation Expense on Proposed Construction | <u>7,700</u> |
| Adjusted Depreciation Expense | <u>\$ 40,219</u> |
| 2. Adjusted Operating Expenses | \$ 364,432 |
| 1.2X Debt Service (\$88,277) | <u>105,932</u> |
| Revenue Requirement | \$ 470,364 |
| Less: Adjusted Operating Revenue + Other Income | <u>404,061</u> |
| Increase Allowed | \$ 66,303 |

3. This Commission was advised of this matter by a letter dated February 9, 1983, from Natural Resources. The content of this letter was brought out during the hearing by the engineer's testimony; pages 40 and 41 of the hearing transcript.

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE
COMMISSION IN CASE NO. 8720 DATED

The following rates and charges are prescribed for the customers in the area served by McCreary County Water District. All other rates and charges not specifically mentioned herein shall remain the same as those in effect under authority of this Commission prior to the date of this Order.

Water Service

| <u>Consumption</u> | <u>Rate</u> |
|---------------------|------------------------|
| First 2,000 gallons | \$6.42 (Minimum Bill) |
| Next 8,000 gallons | 2.45 per 1,000 gallons |
| Next 10,000 gallons | 1.87 per 1,000 gallons |
| Over 20,000 gallons | 1.17 per 1,000 gallons |

Surcharge

An itemized surcharge in the amount of \$0.53 shall be added to the monthly bill of each customer served by McCreary County Water District, subject to conditions outlined in this Order.