

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF THE SOUTHERN MADISON )  
WATER DISTRICT, A WATER DISTRICT )  
ORGANIZED PURSUANT TO CHAPTER 74 OF THE )  
KENTUCKY REVISED STATUTES, OF MADISON )  
COUNTY, KENTUCKY FOR (1) APPROVAL OF )  
THE ADJUSTMENT OF WATER RATES PROPOSED )  
TO BE CHARGED BY THE DISTRICT TO )  
CUSTOMERS OF THE DISTRICT; (2) A ) CASE NO.  
CERTIFICATE OF PUBLIC CONVENIENCE AND ) 9596  
NECESSITY, AUTHORIZING AND PERMITTING )  
SAID WATER DISTRICT TO CONSTRUCT AN )  
EXTENSION TO ITS WATERWORKS DISTRI- )  
BUTION SYSTEM; AND (3) APPROVAL OF THE )  
PROPOSED PLAN OF FINANCING OF SAID )  
IMPROVEMENTS AND EXTENSION OF SAID )  
WATERWORKS DISTRIBUTION SYSTEM )

O R D E R

Southern Madison Water District ("Southern Madison") filed its Application and Motion to Reopen Case No. 9377 on May 28, 1986, wherein it sought approval of adjustments to its water service rates, authorization to construct a \$827,500 waterworks improvement project and approval of its plan of financing for this project. By Order entered June 6, 1986, the instant case was established with the record of Case No. 9377 incorporated herein by reference. The project funding includes a \$805,000 loan from the Farmers Home Administration ("FmHA"), and contributions of \$22,500 from applicants for service in the proposed project area. The FmHA loan will be secured by waterworks revenue bonds maturing over a 40-year period at an interest rate of 9 1/8 percent per annum.

Southern Madison is a non-profit water utility engaged in the distribution and sale of water to approximately 1,578 customers in Madison County, Kentucky.

The 100 customers to be added by the proposed construction would generate approximately \$20,832 in revenues under the present rates. Southern Madison proposed an overall increase in rates to produce additional operating revenue of \$64,765. After the adjustments and determination herein, Southern Madison is granted authority to increase rates to produce additional revenue of \$64,765, or 18.1 percent, in addition to issuance of a Certificate of Public Convenience and Necessity to Construct, and approval of the financing arrangement.

Drawings and specifications for the proposed improvements by Charles E. Black, Consulting Engineers of Richmond, Kentucky, ("Engineers") have been approved by the Division of Water of the Natural Resources and Environmental Protection Cabinet ("Division of Water").

The Commission's June 6, 1986, Order made a Staff Report of April 28, 1986, part of the record in this case. The Staff Report questioned the adequacy of the proposed system to provide water service within the pressure range as outlined in 807 KAR 5:066, Section 6 (1). Southern Madison was allowed to make any comments on the Staff Report by July 2, 1986. No comments were received.

A hearing was held in the offices of the Public Service Commission, in Frankfort, Kentucky, on July 18, 1986. No intervenors were present and no protests were entered.

COMMENTARY ON THE HEARING

The Engineer testified that Southern Madison intended to address the engineering staff's concerns outlined in the Staff Report. The low pressure areas are to be corrected by the installation of two hydropneumatic stations. The high pressure areas are to be corrected by main line and individual customer pressure reducing facilities already included as part of the proposed construction.

TEST PERIOD

Southern Madison proposed, and the Commission has accepted, the 12-month period ending March 31, 1985, as an appropriate test period for determining the reasonableness of the proposed rates. In utilizing the historical test period, the Commission has made adjustments, where appropriate, to reflect more current and anticipated operating conditions.

REVENUES AND EXPENSES

Southern Madison proposed adjustments to revenues and expenses as reflected in the Comparative Income Statement filed in the application as Exhibit B, page 17. The Commission is of the opinion that the proposed adjustments are generally proper and acceptable for rate-making purposes, with the following modifications to reflect actual and anticipated operating conditions:

Annual Customer Usage

Southern Madison proposes to connect 120 new customers by constructing an extension to its distribution system. At the hearing held July 18, 1986, Southern Madison notified the Commission that only 100 new customers would be connecting to the

system. The Commission has adjusted Southern Madison's expenses and income to reflect this decrease in new customers.

Southern Madison's billing analysis uses an estimated usage for its new customers of 3,233 gallons per month. The record shows 83,041,200 gallons sold to the current 1,499 residential customers, for an average monthly usage of 4,616 gallons each. Therefore, the Commission has based Southern Madison's income and expenses for the 100 new customers to be served on an average monthly usage of 4,616 gallons per customer.

#### Operating Revenue

Southern Madison's actual operating revenue from metered water sales for the test year was \$337,313. An adjustment has been made to reflect the revenues from the 100 customers to be added by the proposed construction based on the average monthly usage of 4,616 gallons per customer and the present rates. Therefore, the Commission has increased the test-period operating revenue from metered sales by \$20,832 to a level of \$358,145.

#### Purchased Water Expense

Southern Madison's actual purchased water expense for the test year was \$126,131. Southern Madison proposed a pro forma adjustment of \$10,865 to reflect the additional water purchases required to serve the new customers. Southern Madison based its computation on 120 customers and a 15 percent line loss. Since Southern Madison's actual line loss for the test period was only 12 percent, the Commission has recalculated this adjustment to be \$7,239, using the 12 percent line loss, the revised number of 100 customers, and the revised average monthly usage of 4,616 gallons

per customer. Thus, the purchased water expense has been increased to \$133,370.

#### Operating and Office Salaries Expense

Southern Madison's actual salary expense for the test year was \$30,300. Southern Madison amended their proposed adjustment to \$13,629, based upon the projections of the expense for the year following the test period.<sup>1</sup> It is the Commission's opinion that this adjustment should include normalization of the latest salary and wage increase, which was effective May 16, 1985. Therefore, this adjustment has been increased to \$14,090, resulting in an allowed salary expense of \$44,390.

#### Transportation Expense

Southern Madison reported actual test-year transportation expense of \$5,251. Included in this amount is \$1,053 paid to the Berea Body Shop for repairs. It is the Commission's opinion that this expense will benefit more than one period and should, therefore, be capitalized and depreciated over 3 years. Thus, this cost has been removed from the transportation expense, reducing the expense to a level of \$4,198.

Southern Madison proposed a \$416 adjustment to the transportation expense based upon a test-year expense per customer times the proposed 120 additional customers. Although the Commission does not necessarily agree with this method of computing the adjustment to this expense, the record in this proceeding does not

---

<sup>1</sup> Information filed July 24, 1986, in response to items requested at the July 18, 1986, hearing.

contain sufficient information to calculate the adjustment using a more accurate method and the dollar affect of the more accurate method would be miniscule. Therefore, this adjustment has been recalculated, using the methodology proposed, the revised expense amount of \$4,198, and the revised number of 100 additional customers, resulting in an increase to Southern Madison's proposal of \$277. The net effect of these adjustments is \$<776>, reducing the transportation expense to a level of \$4,475.

#### Operating Supplies Expense and Outside Labor Expense

Southern Madison utilizes outside labor for repairs, maintenance and replacement work. Mr. Floyd Harding performs these services and completes a work order sheet for each job. Mr. Harding's labor expense is charged to the Outside Labor account or the appropriate capital account, while the supplies and parts used for the various jobs are taken out of Southern Madison's inventory and charged to either operating supplies expense or a capital account.

After reviewing the test-year work orders, the Commission is of the opinion that several items which were expensed should have been capitalized and depreciated over 40 years. These items are listed in Appendix B and total \$3,048. Therefore, the outside labor expense has been decreased by \$1,453 to a level of \$7,935 and the operating supplies expense has been decreased by \$1,595 to a level of \$9,781.

#### Rate Case Expense

Southern Madison expensed \$5,348 of legal and accounting services during the test year for the preparation of this rate

case.<sup>2</sup> It is the Commission's opinion that this proceeding will benefit more than 1 period and thus, the rate case expense should be amortized over a 3-year period. Therefore, the legal and accounting expenses have been reduced to \$1,783, resulting in a net decrease of \$3,565 to total operating expenses.

Computer Billing Expense

Southern Madison proposed an adjustment of \$619 to the computer billing expense based upon a per customer expense times the proposed 120 additional customers. The Commission has recalculated this adjustment using the revised number of 100 additional customers resulting in an adjustment of \$516.

Depreciation Expense

Southern Madison proposed a pro forma depreciation expense adjustment of \$20,738 based upon the \$827,500 construction project. The Commission is of the opinion that Southern Madison's customers should pay depreciation expense only on noncontributed property and has, therefore, disallowed \$613 of the pro forma depreciation expense adjustment based upon the percentage of contributed funds to total funds needed for the construction project.

Southern Madison also proposed to increase the test-year depreciation expense by \$3,333 based upon the purchase of a \$10,000 truck, depreciated over 3 years. The Commission is of the opinion that the truck's useful life is longer than 3 years and, therefore, has depreciated it over 5 years reducing this adjustment to \$2,000.

---

<sup>2</sup> Ibid.

Since the Commission is of the opinion that the customers shall pay depreciation expense only on noncontributed property, the Commission has disallowed \$7,889 of the test-year depreciation expense.<sup>3</sup> However, the test-year depreciation expense has been increased by \$427 due to the capitalization of the items in Appendix B and to the capitalization of a transportation expense which was reclassified. Therefore, the net effect of the aforesaid adjustments results in an increase to depreciation expense of \$14,663 to a level of \$46,993.

After consideration of the aforementioned adjustments, the Commission finds Southern Madison's test period operations to be as follows:

	<u>Test Period Reported</u>	<u>Pro Forma Adjustments</u>	<u>Test Period Adjusted</u>
Operating Revenues	\$337,313	\$ 20,832	\$358,145
Operating Expenses	<u>261,145</u>	<u>32,272</u>	<u>293,417</u>
<b>OPERATING INCOME</b>	<b><u>\$ 76,168</u></b>	<b><u>\$&lt;11,440&gt;</u></b>	<b><u>\$ 64,728</u></b>

---

3 Test-year Depreciation Expense	\$32,330
Times: Percentage of Contributed Property to Total Plant	<u>24.48</u>
Disallowance Portion of Existing Depreciation Expense	<u>\$ 7,889</u>

#### REVENUE REQUIREMENTS

Southern Madison's annual debt service on debt outstanding at the end of the test year and debt proposed in this proceeding is \$128,925. The adjusted operating income of \$64,788 plus net non-operating income of \$5,992 results in total income for rate-making purposes of \$70,780 and will allow Southern Madison a debt service coverage ("DSC") of .55X.

The additional revenues granted herein are based on Southern Madison's requested rates and will provide Southern Madison with a DSC of 1.05X assuming the adjusted test period operations accurately reflect Southern Madison's actual operations. In a case such as this where a large number of customers not previously served are added, accurate projections of increased operation and maintenance expenses are difficult. Generally, the Commission has accepted Southern Madison's proposed adjustments as reasonable. However, the Commission is concerned that the additional revenues of \$64,765 granted herein may not be sufficient for Southern Madison to meet its operating expenses and service its debt.

The Commission advises Southern Madison to review its financial position after 1 year of operation of its expanded system and take appropriate action as it deems necessary. The Commission will monitor Southern Madison's financial condition through review of Southern Madison's annual reports for the purpose of determining what, if any, future rate adjustments might be necessary.

#### NONRECURRING CHARGES

Southern Madison proposed to increase its connection fees for all size connections served, but did not file any cost

justification supporting the proposed increases; therefore, the Commission must deny the proposed increases in connection fees.

FINDINGS AND ORDERS

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

1. With the installation of two hydropneumatic stations, to address the low pressure areas, public convenience and necessity require that the construction proposed in the application be performed and that a certificate of public convenience and necessity be granted.
2. The proposed construction consists of an elevated water storage tank, a booster pumping station, approximately 22 miles of 6-inch and 4-inch diameter pipelines, and related appurtenances to serve 100 additional customers. The low bids totaled \$615,871, which will require about \$827,500 after allowances are made for fees, contingencies, other indirect costs and the additional construction proposed in Finding No. 1.
3. Prior to the installation of the hydropneumatic stations, Southern Madison should obtain the Commission's approval of the pertinent design and cost information for this equipment. Southern Madison should also file a copy of the approval letter from the Division of Water.
4. Any deviations from the construction herein approved which could adversely affect service to any customer should be done only with the prior approval of this Commission.

5. Southern Madison 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. Said construction costs should be classified into appropriate plant accounts in accordance with the Uniform System of Accounts for Water Utilities prescribed by this Commission.

6. Southern Madison'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, to insure that the construction work is done in accordance with the contract drawings and specifications and in conformance with the best practices of the construction trades involved in the project.

7. Southern Madison should require the Engineer to furnish a copy of the "as-built" drawings 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.

8. The financing plan proposed by Southern Madison is for the lawful objects within the corporate purpose of its utility operations, is necessary and appropriate for and consistent with the proper performance of its service to the public and will not impair its ability to perform that service and should, therefore, be approved.

9. The financing secured by Southern Madison for this project will be needed to pay for the work herein approved. Southern Madison's financing plan should, therefore, be approved.

10. The rates and charges in Appendix A are fair, just and reasonable and should produce gross operating revenues of \$422,910 for Southern Madison.

11. Southern Madison did not file cost justification to support its proposed increase in connection fees; therefore, the proposed increase should be denied.

IT IS THEREFORE ORDERED that:

1. Southern Madison be and it hereby is granted a certificate of public convenience and necessity to proceed with the proposed construction project as set forth in the drawings and specifications of record herein on the condition that two hydropneumatic stations be installed in accordance with Finding Number 1 and Finding Number 3 of this Order.

2. Southern Madison's financing plan consisting of an FmHA loan of \$805,000 and customer connection fees of \$22,500 be and it hereby is approved.

3. If under new FmHA loan conditions Southern Madison is notified and granted the option of accepting a lower interest rate at the date of closing, Southern Madison shall file with the Commission the FmHA notification of the lower interest rate and shall provide all correspondence from and to FmHA concerning this notification within 30 days of the closing date.

4. Southern Madison shall file a statement of the interest rate accepted from FmHA within 30 days of the date of closing.

5. If Southern Madison accepts an interest rate different from the rate approved herein, it shall file amended pages to its bond resolution and an amended amortization schedule.

6. If Southern Madison is eligible but does not take advantage of a lower interest rate at the time of closing, it shall fully document why the lower rate was not accepted showing an analysis of the higher costs associated with the loan over its life.

7. Southern Madison shall comply with all matters set out in Findings 3 through 7 as if the same were individually so ordered.

8. Southern Madison did not file cost justification to support its proposed increase in connection fees; therefore, they are denied.

9. The rates in Appendix A be and they hereby are approved for service rendered by Southern Madison on and after the date of this Order.

10. Within 30 days from the date of this Order, Southern Madison shall file with the Commission its revised tariff sheets setting out the rates approved herein.

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 14th day of August, 1986.

PUBLIC SERVICE COMMISSION

Richard D. Lemon Jr.  
Chairman

R. D. Lemon Jr.  
Vice Chairman

Spencer M. Wilhoring Jr.  
Commissioner

ATTEST:

Executive Director

## APPENDIX A

### APPENDIX TO AN ORDER OF THE PUBLIC SERVICE COMMISSION IN CASE NO. 9596 DATED 8/14/86

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

#### Rates: Monthly

First 2,000 gallons	\$9.26 Minimum Bill
Next 1,000 gallons	4.54 per 1,000 gallons
Next 3,000 gallons	4.13 per 1,000 gallons
Next 4,000 gallons	3.67 per 1,000 gallons
Next 15,000 gallons	2.79 per 1,000 gallons
Next 25,000 gallons	2.49 per 1,000 gallons
Over 50,000 gallons	1.94 per 1,000 gallons

## APPENDIX B

**APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE  
COMMISSION IN CASE NO. 9596 DATED 8/14/86**

The following items have been capitalized:

<b>Work Order No.</b>	<b>Description</b>	<b>Date</b>	<b>Outside Labor Expense</b>	<b>Operating Supplies Expense</b>	<b>Total</b>
55	Remove & Replace Meter	4/3/84	\$ 45.00	\$ 61.68	\$ 106.68
69	Replace Meter & Yoke	5/10/84	75.00	96.05	171.05
77	Locate Water Main	6/25/84	187.50	-0-	187.50
87	Move & Replace Yoke, Meter, & Box	6/28/84	75.00	150.78	225.78
88	Replace Yoke	4/23/84	75.00	128.89	203.89
89	Replace Yoke	6/28/84	75.00	105.66	180.66
104	Replace Yoke	7/13/84	75.00	30.83	105.83
106	Change Yoke & Meter	4/25/84	75.00	127.54	202.54
116	Replace Yoke, Install Pressure Reducing Valve	8/7/84	75.00	172.75	247.75
138	Dig Up & Raise Meter Put in New Meter	8/23/84	105.00	110.19	215.19
142	Remove & Replace Meter Box	9/17/84	50.00	16.69	66.69
149	Replace Meter & Yoke	7/30/84	75.00	121.09	196.09
152	Replace Meter & Yoke	8/2/84	75.00	106.32	181.32
153	Raise Meter	9/25/84	45.00	50.93	95.93
154	Raise Meter	9/25/84	45.00	16.69	61.69
166	Move Meter	9/25/84	75.00	104.85	179.85
168	Remove & Replace Meter	7/24/84	25.00	34.00	59.00
192	Move Meter - Repair Blockage in Service Line	11/21/84	200.00	160.43	360.43
			<b>\$1,452.50</b>	<b>\$1,595.37</b>	<b>\$3,047.87</b>