

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN ADJUSTMENT OF RATES OF)
THE MILFORD WATER COMPANY OF) CASE NO. 9543
MADISON COUNTY, KENTUCKY)

O R D E R

On March 31, 1986, Milford Water Company ("Milford") filed an application for authority to increase rates, requesting additional operating revenues of approximately \$63,043 annually, an increase of 50.1 percent over normalized test-period operating revenues. Milford is a corporation engaged in the distribution and sale of water to approximately 594 customers in Madison County, Kentucky. Due to the nature of the application and the fact that no party requested a hearing, there was no hearing conducted in this case.

After the adjustments and determinations herein, Milford's operating revenues will increase \$12,640 annually, an increase of 10.1 percent over normalized operating revenues as determined herein.

Staff Audit Report

To simplify the regulatory process for this small utility, the Commission staff performed a limited financial audit for the utility's test period to verify reported expenditures and substantiate the propriety of the test-year financial statements. Although some account classification problems were discovered, they were not considered material in this proceeding. The staff

report was made a part of the record in this case as an appendix to the Commission's Order of June 17, 1986.

VALUATION

Net Investment

Milford proposed, and the Commission finds from the evidence of record, that Milford's net investment rate base at December 31, 1985, is as follows:

Utility Plant in Service		\$233,412
ADD:		
Materials and Supplies	\$ 176	
Working Capital	<u>5,535</u>	
Subtotal		\$ 5,711
DEDUCT:		
Accumulated Depreciation	\$69,286	
Contributions in Aid of Construction	<u>62,307</u>	
Subtotal		<u>\$131,593</u>
 NET INVESTMENT		 <u><u>\$107,530</u></u>

Capital Structure

The Commission finds from the evidence of record that Milford's capital structure at the end of the test period was \$93,356 and consisted of \$70,761 in equity and \$22,595 in long-term debt.

Milford proposed a capital structure of \$103,356 which included \$32,595 in long-term debt. However, \$10,000 of the long-term debt was related to a note incurred during 1985 to help cover losses in 1985 which has been excluded for rate-making purposes. To include this note in the capital structure would create a mismatch between rate base and the capital structure and would allow Milford to receive a return on funds borrowed to meet current operating expenses.

The Commission has given due consideration to these and other elements of value in determining the reasonableness of the rate increase requested herein.

REVENUES AND EXPENSES

Milford proposed, and the Commission accepts, the calendar year ended December 31, 1985, as an appropriate test period for determining the reasonableness of the proposed rates.

The Commission has made, for rate-making purposes, the following modifications to test-period expenses to reflect more normal and current operating conditions.

Operating Revenues

Milford's actual operating revenue from metered water sales for the test year was \$116,654. On July 2, 1985, Milford was permitted to increase the rates it could charge by using a purchased water adjustment, in Case No. 9315.¹ The effect of the purchased water adjustment was not clearly reflected in the proposed adjusted revenue level. Therefore, the Commission has adjusted test-period operating revenues from metered sales by \$8,354, which results in adjusted test-period operating revenues of \$125,716, which includes other water revenues of \$708.

Purchased Water Expense

Milford's actual purchased water expense for the test year was \$86,821. Since the test-year water sales were normalized to reflect the purchased water adjustment, we have normalized the

¹ Case No. 9315, Purchased Water Adjustment Filing of the Milford Water Company, Final Order dated July 2, 1985.

purchased water expense accordingly. The purchased water expense proposed by Milford has been decreased by a total of \$11,955 due to normalization. This net decrease is a result of adjustments to increase purchased water by \$5,669 to reflect normalized sales volumes and to decrease purchased water expense by \$17,624 to exclude the cost of line loss in excess of 15 percent.

Milford's line loss in the test year was 30.7 percent. In its response to the staff audit report, filed on June 30, 1986, Milford discussed the 15 percent limitation. In the discussion, Milford requested specific production and sales data on nine Central Kentucky water districts and associations. That information is included in this Order as Appendix B. While each district or association listed does show losses in excess of 15 percent, the Commission excludes the cost of excessive line loss for rate-making purposes in water utility rate cases. Milford contends that the 15 percent limitation should not be used in the current rate case since its historically high line losses, as well as those line losses for surrounding districts, make the limit unreasonable. Milford's reported line losses since 1980 have been examined. While on average the losses have exceeded 15 percent, the year-to-year figures present a fluctuating pattern of losses. In fact, the reported line loss in 1983 was only 7.2 percent.

While Milford argues that the 15 percent limitation is unreasonable, it has not provided persuasive information that its situation requires extraordinary rate-making treatment. Therefore, the Commission is of the opinion the 15 percent limitation for line losses should be applied in this case.

Depreciation Expense

Milford proposed a depreciation expense of \$5,284, which was the actual expense for the test year. The reported expense includes depreciation on contributed property. The Commission finds it unfair to have customers pay depreciation on assets acquired with contributed funds. In Milford's response to the staff audit report, its attorney stated that failure to allow depreciation on contributed property for rate-making purposes would be denying a lawful expense and constitute a confiscation of Milford's property. While depreciation in and of itself is a lawful expense, disallowing depreciation on contributed property does not constitute a confiscation of Milford property since the assets were secured through contributions. Thus, the Commission has adjusted depreciation expense to exclude \$1,411.²

Interest Expense

Milford reported test-year interest expense of \$2,412 and proposed no specific adjustments to this amount. Upon reviewing the application, it was discovered that this expense was related to two promissory notes held by the State Bank and Trust Company of Richmond, Kentucky. Of the total expense, \$2,021 represented interest paid on a note issued in July 1978; the remaining \$391 represented interest accrued but not paid on a note issued in July

²	Contributed Plant	\$62,307
	Composite Depreciation Rate	
	(Test-Year Depreciation Expense/ Plant-in-Service)	<u>2.2638%</u>
	DEPRECIATION ON CONTRIBUTED PROPERTY	<u>\$ 1,411</u>

1985. The application further revealed that the 1985 note was incurred solely to cover losses sustained in 1985. Further, the rate increase granted herein is sufficient under proper management to prevent the necessity for funding such losses in the future, thus making this expense non-recurring. Therefore, Milford's interest expense has been reduced by \$391.

After consideration of the aforementioned adjustments, the Commission finds Milford's test-period operating statement to be as follows:

	<u>Test Period</u>	<u>Adjustment</u>	<u>Adjusted Test Period</u>
Operating Revenue	\$117,362	\$ 8,354	\$125,716
Operating Expenses	138,231	<11,095>	127,136
Net Operating Income	<u>\$<20,869></u>	<u>\$19,449</u>	<u>\$ <1,420></u>
Other Deductions	2,451	<391>	2,060
NET INCOME	<u>\$<23,320></u>	<u>\$19,840</u>	<u>\$< 3,480></u>

RATE OF RETURN

Milford did not request a rate of return on its net investment rate base but simply requested to raise additional annual operating revenues by \$63,043. Based on test-year data and the net investment rate base determined herein, the requested increase would produce a rate of return on net investment of 39.2 percent.³

³ Test Year Operating Revenue	\$117,362
Increase Requested	63,043
Less: Operating Expenses	<138,231>
Requested Net Operating Income	<u>\$ 42,174</u>
Net Investment Rate Base	107,530
REQUESTED RATE OF RETURN	<u>39.2 percent</u>

The requested increase would also produce a rate of return on the equity proposed by Milford of 56.2 percent.⁴ In Milford's last general rate case, it was allowed a rate of return on equity of 14 percent and a rate of return on net investment of 11.7 percent.⁵

The Commission finds that the return produced by Milford's requested increase is not fair, just or reasonable. The Commission finds that a rate of return on equity of 13 percent is appropriate, which produces a rate of return on net investment rate base of 10.4 percent, which the Commission finds is fair, just and reasonable in that it will allow Milford to service its debts and provide a surplus for equity growth.

REVENUE REQUIREMENTS

The Commission has determined that Milford needs additional annual operating income of \$12,640 to produce the overall return on net investment rate base of 10.4 percent found fair, just and reasonable. To achieve this level of operating income, Milford is entitled to increase its annual revenues by \$12,640 over normalized operating revenues as determined herein.

The rates in Appendix A are designed to produce gross operating revenue, based upon the adjusted test year, of \$137,648.

4	Requested Net Operating Income	\$42,174
	Less: Return on Debt	
	(Test-Year Actual)	<u><2,412></u>
	Return on Equity	\$39,762
	Equity	\$70,761
	RATE OF RETURN	<u>56.2 percent</u>

5 Case No. 8420, An Adjustment of Rates of the Milford Water Company of Madison County, Kentucky, Final Order dated July 6, 1982.

BILLING ANALYSIS

The initial billing analysis filed by Milford with its application included usage for 13 months reported in 1,000 gallon increments. The revenue calculations were based on the average number of customers at each usage level for 7 months at the rates in effect prior to the granting of the purchased water adjustment on July 2, 1985, and the average number of customers for 6 months at the rates currently in effect. After adjusting the billing analysis to a 12-month period, the resulting revenue was \$127,244, a difference of \$10,590 or 9.3 percent above the actual test year revenue.

On September 16, 1986, Milford filed a revised billing analysis based on actual water sales for the test period with resulting test year revenue of \$115,644, which is within .9 percent of actual test year revenue. The Commission has accepted the revised billing analysis as accurately reflecting Milford's test year sales and revenue. Application of the currently effective rates to the billing analysis shows normalized test year revenue of \$125,008, an increase of \$8,354 over test year revenue.

RATE DESIGN

Milford's rate schedule consists of four usage steps.⁶ The proposed rates would increase the first three steps by

⁶ First 2,000 Minimum
Next 2,000
Next 2,000
Over 6,000

approximately 34 percent, 35 percent and 20 percent, respectively, with no increase in the last step. The revised billing analysis shows that approximately 62 of Milford's customers (11 percent) use less than the minimum each month, 108 (19 percent) use 2001-4000 gallons, 151 (27 percent) use 4001-6000 gallons, and 244 (43 percent) use over 6,000 gallons. Based on the average usage within each of these levels, the proposed rates would result in increases to customer bills ranging from approximately 34 percent for the minimum user to 22 percent for those using over 6,000 gallons.

Milford presented no information in support of this disproportionate distribution of the requested increase. The Commission is of the opinion that a change which shifts the revenue burden in this manner is unfair, unjust and unreasonable absent no convincing information in support of the proposed change, and that a more equitable distribution of the increase granted should be made. Therefore, the Commission has made no changes to the rate design and has allocated revenue accordingly.

SUMMARY

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

1. Milford's proposed rates are not fair, just and reasonable and should be denied.
2. The rates in Appendix A are the fair, just and reasonable rates to be charged by Milford.

IT IS THEREFORE ORDERED that:

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

2. The rates proposed by Milford be and they hereby are denied.

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

Done at Frankfort, Kentucky, this 11th day of November, 1986.

PUBLIC SERVICE COMMISSION


Chairman


Vice Chairman


Commissioner

ATTEST:

Executive Director

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE
COMMISSION IN CASE NO. 9543 DATED 11/11/86

The following rates and charges are prescribed for customers receiving water service from Milford Water Company. 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 effective date of this Order.

RATE SCHEDULE

USAGE BLOCKS

First 2,000 Gallons
Next 2,000 Gallons
Next 2,000 Gallons
Over 6,000 Gallons

MONTHLY RATES

\$9.75 Minimum
2.90 Per 1,000 Gallons
2.35 Per 1,000 Gallons
1.95 Per 1,000 Gallons

APPENDIX B

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE
COMMISSION IN CASE NO. 9543 DATED 11/11/86

Selected data on nine water districts and associations, requested by Milford in response to the Commission's Staff Audit Report, Request filed June 30, 1986, for the calendar years ended December 31, 1984, and December 31, 1985.

1. Boonesboro Water Association, Inc.
Water Division
Began Service: 1964

	CYE 12/31/84	CYE 12/31/85
Water Produced and Purchased	122,382,000 Gals	125,913,000 Gals
Water Sold	95,034,570 Gals	100,441,790 Gals
Line Loss and Unaccounted for Water	27,347,430 Gals	25,471,210 Gals
Line Loss Percentage	22.35	20.20

Transmission Line Material: PVC

2. Garrard County Water Association, Inc.
Began Service: 1971

	CYE 12/31/84	CYE 12/31/85
Water Produced and Purchased	124,353,480 Gals	125,050,000 Gals
Water Sold	90,525,053 Gals	102,368,000 Gals
Line Loss and Unaccounted for Water	33,828,427 Gals	22,682,000 Gals
Line Loss Percentage	24.39	16.71

Transmission Line Material: PVC

3. **Kirksville Water Association, Inc.**
Began Service: 1976

	CYE 12/31/84	CYE 12/31/85
Water Produced and Purchased	41,405,540 Gals	53,202,996 Gals
Water Sold	33,821,722 Gals	40,168,210 Gals
Line Loss and Unaccounted for Water	7,583,818 Gals	13,034,786 Gals
Line Loss Percentage	18.00	22.00

Transmission Line Material: PVC

4. **Lake Village Water Association, Inc.**
Began Service: 1971

	CYE 12/31/84	CYE 12/31/85
Water Produced and Purchased	151,353,013 Gals	141,848,559 Gals
Water Sold	68,798,419 Gals	66,949,418 Gals
Line Loss and Unaccounted for Water	82,554,594 Gals	74,899,141 Gals
Line Loss Percentage	54.41	52.70

Transmission Line Material: PVC

5. **McKinney Water Association, Inc.**
Began Service: 1974

	CYE 12/31/84	CYE 12/31/85
Water Produced and Purchased	31,962,500 Gals	35,071,000 Gals
Water Sold	26,177,662 Gals	27,544,600 Gals
Line Loss and Unaccounted for Water	5,784,838 Gals	7,526,400 Gals
Line Loss Percentage	18.00	21.00

Transmission Line Material: PVC

6. North Woodford County Water District
Began Service: 1963

	CYE 12/31/84	CYE 12/31/85
Water Produced and Purchased	99,506,700 Gals	92,059,300 Gals
Water Sold	70,393,200 Gals	79,004,700 Gals
Line Loss and Unaccounted for Water	29,113,500 Gals	13,054,600 Gals
Line Loss Percentage	25.26	14.10

Transmission Line Material: PVC

7. Parksville Water District
Began Service: 1966

	CYE 12/31/84	CYE 12/31/85
Water Produced and Purchased	68,381,321 Gals	82,335,128 Gals
Water Sold	44,778,200 Gals	46,834,400 Gals
Line Loss and Unaccounted for Water	23,603,121 Gals	35,500,728 Gals
Line Loss Percentage	32.00	32.00

Transmission Line Material: AC
PVC

8. Peaks Mill Water District
Began Service: 1970

	CYE 12/31/84	CYE 12/31/85
Water Produced and Purchased	66,112,400 Gals	53,516,000 Gals
Water Sold	42,072,000 Gals	38,886,000 Gals
Line Loss and Unaccounted for Water	24,040,400 Gals	14,630,000 Gals
Line Loss Percentage	31.00	21.00

Transmission Line Material: Transit
PVC
Plastic

9. South Woodford County Water District
Began Service: 1969

	CYE 12/31/84	CYE 12/31/85
Water Produced and		
Purchased	79,034,000 Gals	71,814,000 Gals
Water Sold	55,490,000 Gals	54,772,000 Gals
Line Loss and		
Unaccounted for Water	23,544,000 Gals	17,042,000 Gals
Line Loss Percentage	30.00	24.00
Transmission Line Material:	Asbestos	
	PVC	