

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ADJUSTMENT OF RATES OF THE BEREA	)	CASE NO.
COLLEGE WATER UTILITY	)	90-052

O R D E R

On March 30, 1990, Berea College Water Utility ("Berea Water") filed notice with the Commission of its intention to adjust its rates for water service rendered on and after August 30, 1990. The proposed rates would increase annual revenues by \$673,679, an increase of 59.4 percent.

The Commission suspended the proposed rate adjustment until September 30, 1990 to investigate the reasonableness of the proposed rates. The city of Berea, Kentucky ("Berea") and Southern Madison Water District ("Southern Madison") were permitted to intervene in this matter. After discovery, including prefiled testimony, a hearing for the purposes of cross-examination of the witnesses of Berea Water and the intervenors was held on August 21, 1990 with all parties represented.

On October 3, 1990, Berea Water filed notice, pursuant to KRS 278.190(2), that it was placing rates which would generate the agreed revenue requirement of \$1,742,921 into effect for service rendered on and after October 3, 1990. On October 15, 1990, the Commission ordered Berea Water to maintain its records in such a

manner as will allow the determination of any amount to be refunded.

Berea Water is a department of Berea College, a Kentucky not-for-profit educational institution. It owns and operates a water production and distribution system which serves approximately 3,066 residential, commercial, and industrial customers in and around Berea, Kentucky. Additionally, it provides water to the Southern Madison Water District which serves approximately 2,000 customers in urban and rural areas of southern Madison County, Kentucky.

At the hearing in this matter, the parties and Commission Staff stipulated that Berea Water required total annual revenues of \$1,742,921 and a net operating income of \$907,587.<sup>1</sup> This revenue requirement is based on a 10 percent overall rate of return and an adjusted net investment rate base of \$9,075,867.<sup>2</sup> Adjusted net investment rate base was calculated by removing certain retired plant and capitalized interest ("AFUDC") from Berea Water's proposed rate base and increasing accumulated

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<sup>1</sup> Transcript of Evidence at 6-7.

<sup>2</sup> Pro Forma Rate Base (Application) \$10,066,338

Adjustments:

Unrecovered Cost of Plant	(474,942)
Capitalized Interest (AFUDC)	(287,780)
Increase to Accumulated Depreciation	(227,749)
Adjusted Rate Base	\$ 9,075,867
Agreed Rate of Return	x .10
Required Net Operating Income Level	<u>\$ 907,587</u>

depreciation. After agreeing to certain adjustments to Berea Water's pro forma net operating income for depreciation, rate case and maintenance expenses, the parties and Commission Staff stipulated that a revenue increase of \$608,330 was required.<sup>3</sup>

The stipulated level of rate base includes post test-period plant additions in rate base. These additions, approved by this Commission in Case No. 89-035,<sup>4</sup> include a 3 million gallon per day water treatment plant, a 3 million gallon water storage reservoir, and a 14-inch transmission main connecting at a cost of approximately \$5.4 million. The record indicates that these additions were to be completed and in operation as of August 1, 1990.

In Case No. 10481,<sup>5</sup> the Commission advised all jurisdictional utilities that "adjustments for post test-period additions to

3	Pro Forma Net Operating Income (Application)	\$ 262,421
	Adjustments:	
	Depreciation Expense	6,836
	Rate Case Amortization	5,000
	Maintenance Expense	25,000
	Net Operating Income (Stipulation)	<u>\$ 299,257</u>
	Required Net Operating Income	\$ 907,587
	Net Operating Income (Stipulation)	299,257
	Revenue Increase Required	<u>\$ 608,330</u>

4 Case No. 89-035, The Application of Berea College Water Utility, a Department of Berea College, for a Certificate of Convenience and Necessity Authorizing the Construction of Water System Improvements, Order dated May 18, 1989.

5 Case No. 10481, Notice of Adjustment of the Rates of Kentucky-American Water Company Effective on February 2, 1989, Order dated August 22, 1989.

plant in service should not be requested unless all revenues, expenses, rate base and capital items have been updated to the same period as plant additions."<sup>6</sup> Based upon its review of the record, the Commission finds that the parties and Commission Staff in reaching the stipulated revenue requirement have complied with this directive.

The Commission further finds that the stipulation provides for a reasonable rate of return and provides sufficient revenues for Berea Water to cover its operating expenses. Accordingly, the Commission accepts the parties' stipulation as to revenue requirement and adopts it as its own finding.

The Commission now turns to the issue of rate design. Berea Water, using as a guide the publication Water Rates: AWWA Manual M1 (3rd edition), proposes a new rate design based on a commodity demand/commodity cost allocation cost-of-service study. We find this study to be flawed. To accurately determine a customer's demand characteristics, both the volume of use and maximum rate of flow must be considered. Berea Water based its study strictly on customer usage and, as a result, the cost-of-service study does not properly allocate plant capacity. This type of allocation is necessary to reflect the appropriate costs of plant to different customers. If additional capacity is added to serve the expected increase in the demand of industrial customers which Berea Water

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<sup>6</sup> Id. at 5.

expects, the importance of this type of allocation shall become even greater.

Because of these flaws, the Commission finds that Berea Water's rate design should not be changed at the present time and that the additional revenue granted herein should be spread through the existing rate structure so that the percentage of revenue generated by each customer class remains unchanged - with one exception. Under Berea Water's current rate structure, all customers are billed under declining block rate schedules except wholesale customers which are billed a flat rate. In a declining block rate schedule, the lowest rate step is designed to recover the cost of water at that level of usage. The current wholesale rate is less than the lowest rate charged other customers. The Commission finds that to reflect the actual cost of water and avoid subsidization of wholesale customers by other customer classes, the wholesale rate should be increased to a level equal to the lowest rate step charged other customers. The Commission further finds that Berea Water should develop a plan and methodology for determining the demand patterns for customers served under either its industrial or wholesale rate schedules and should submit with its next application for rate adjustment a cost-of-service study which fully considers demand characteristics and assigns plant accordingly.

In summary, the Commission finds that rates proposed by Berea Water in its application are unfair, unjust, and unreasonable, and would produce revenues in excess of that found reasonable herein.

We further find that the rates contained in Appendix A of this Order are fair, just, and reasonable and will produce annual revenues of \$1,742,921.

IT IS THEREFORE ORDERED that:


1. Berea Water's proposed rates are denied.
2. The rates set forth in Appendix A, attached hereto and incorporated herein, are approved for service rendered by Berea Water on and after the date of this Order.
3. Berea Water shall refund all amounts collected in excess of the rates approved herein for service rendered from October 3, 1990 until the date of this Order.
4. Berea Water shall refund the amounts collected in excess of the rates established herein plus interest at a rate equal to the average of the "3-month Commercial Paper Rate" for November 1990. These monthly rates are reported in the Federal Reserve Bulletin and the Federal Reserve Statistical Release.
5. The refund shall be made by either direct payment or bill credit and within 60 days of the date of this Order as required by KRS 278.190(4).
6. Within 30 days of the date the refund is completed, Berea Water shall file with the Commission a summary statement showing a reconciliation of customer billings and the amount refunded.
7. No provisions in this Order shall be construed as authorizing Berea Water to collect any difference between the rates collected for service rendered from October 3, 1990 until the date of this Order and the rates approved herein.

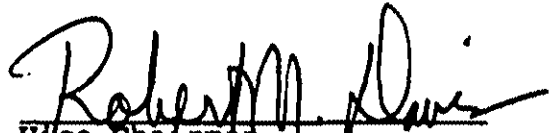
8. Berea Water shall file with its next application for rate adjustment a cost-of-service study which fully considers the demand characteristics of its customers.

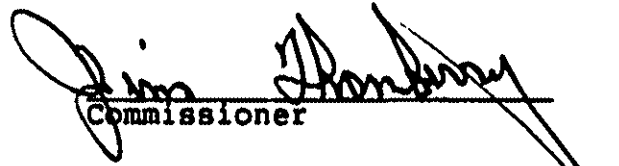
9. Berea Water shall file within 30 days of the date of this Order new tariffs setting forth the rates contained in Appendix A.

Done at Frankfort, Kentucky, this 19th day of November, 1990.

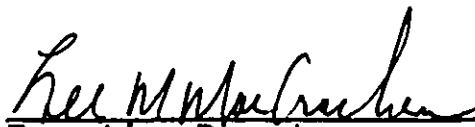
PUBLIC SERVICE COMMISSION

  
Chairman

  
Vice Chairman

  
Commissioner

ATTEST:

  
Executive Director

APPENDIX A

APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE  
COMMISSION IN CASE NO. 90-052 DATED November 19, 1990

The following rates and charges are prescribed for the customers in the area served by Berea College Water Utility. 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.

Residential - Classes 1, 4 and 5

Monthly Rate

First	200 cubic feet	\$7.45 Minimum Bill
Next	1,800 cubic feet	3.55 per 100 cubic feet
Next	3,000 cubic feet	3.20 per 100 cubic feet
Next	5,000 cubic feet	2.80 per 100 cubic feet
Next	5,000 cubic feet	2.25 per 100 cubic feet
Over	15,000 cubic feet	1.95 per 100 cubic feet

Commercial - Class 2

Monthly Rate

First	200 cubic feet	\$7.45 Minimum Bill
Next	1,800 cubic feet	3.55 per 100 cubic feet
Next	3,000 cubic feet	3.20 per 100 cubic feet
Next	5,000 cubic feet	2.80 per 100 cubic feet
Next	5,000 cubic feet	2.25 per 100 cubic feet
Over	15,000 cubic feet	1.95 per 100 cubic feet

Industrial - Class 3

Monthly Rate

First	200 cubic feet	\$7.45 Minimum Bill
Next	1,800 cubic feet	3.55 per 100 cubic feet
Next	3,000 cubic feet	3.20 per 100 cubic feet
Next	5,000 cubic feet	2.80 per 100 cubic feet
Next	5,000 cubic feet	2.25 per 100 cubic feet
Over	15,000 cubic feet	1.95 per 100 cubic feet

Wholesale (Sale for Resell)

All water sales	\$1.95 per 100 cubic feet
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Fire Protection - Class 7

Monthly Rates

6 inch sprinkle line	\$41.00
8 inch sprinkle line	57.00
10 inch sprinkle line	74.00
12 inch sprinkle line	90.00

Public and Private Fire Protection - Class 8

Monthly Rates

Hydrants	\$12.00
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