

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF BEAVER-ELKHORN)	
WATER DISTRICT FOR (1) CERTIFICATE OF)	
PUBLIC CONVENIENCE AND NECESSITY -)	
CONSTRUCTION - TO UPGRADE WATER TREAT-)	
MENT PLANT/WATER LINE EXTENSIONS)	
PURSUANT TO KRS 278.020(1); (2))	CASE NO.
AUTHORIZATION OF BORROWING FROM THE)	92-129
COMMONWEALTH OF KENTUCKY, KENTUCKY)	
INFRASTRUCTURE AUTHORITY WATER RESOURCES)	
LOAN FUND PURSUANT TO KRS 278.300; (3))	
AUTHORITY TO INCREASE RATES PURSUANT)	
TO 807 KAR 5:001, SECTION 10)	

O R D E R

On March 30, 1992, Beaver-Elkhorn Water District ("Beaver-Elkhorn") filed its application for Commission approval of a proposed increase in its rates for water service. Commission Staff, having performed a limited financial review of Beaver-Elkhorn's operations, has prepared the attached Staff Report containing Staff's findings and recommendations regarding Beaver-Elkhorn's proposed rates. All parties should review the report carefully and provide any written comments or requests for a hearing or informal conference no later than 15 days from the date of this Order.

IT IS THEREFORE ORDERED that all parties shall have 15 days from the date of this Order to provide written comments regarding the attached Staff Report or requests for a hearing or informal conference. If no request for a hearing or informal conference is

received, then this case will be submitted to the Commission for a decision.

Done at Frankfort, Kentucky this 1st day of October, 1992.

PUBLIC SERVICE COMMISSION


For the Commission

ATTEST:


Executive Director

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STAFF REPORT

Prepared By: Carl Combs
Public Utility Financial
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Communications, Water and
Sewer Rate Design Branch
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STAFF REPORT
ON
BEAVER-ELKHORN WATER DISTRICT
CASE NO. 92-129

A. Preface

On March 30, 1992, Beaver-Elkhorn Water District ("Beaver-Elkhorn") filed an application with the Commission for a Certificate of Public Convenience and Necessity to construct a waterworks improvement and extension project, for approval of its plan of financing of the project and for approval to increase its rates. The proposed rates would generate approximately \$205,239 annually in additional revenues, an increase of 28.1 percent over normalized test-year revenues from water sales of \$730,126.

In order to evaluate the requested increase in rates, the Commission Staff ("Staff") chose to perform a limited financial review of Beaver-Elkhorn's operations for the test period, the 12-months ending December 31, 1991. Carl Salyer Combs of the Commission's Division of Rates and Tariffs conducted the review at the offices of Stephen Allen, CPA, on April 8-9, 1992 and is responsible for this Staff Report except for the sections on operating revenues and rate design, which were prepared by John Geoghegan of the Commission's Research Division.

Normally, the Commission requires that all utility-proposed adjustments to test-year expenses be supported by some form of documentation, such as an invoice, or that all such adjustments be known and measurable. In this instance, that requirement cannot be stringently applied to all expenses because the proposed

adjustments are based upon increased plant capacity and significant customer growth. The utility did, however, adjust test period revenue to provide a matching between its pro forma revenues and expenses; this method appears reasonable and is acceptable to Staff.

Based upon the findings of this report, Staff recommends that Beaver-Elkhorn be authorized to increase its annual operating revenues by \$196,499.

Scope

The scope of the review was limited to obtaining information to determine whether reported test-period operating revenues and expenses were representative of normal operations. Insignificant or immaterial discrepancies were not pursued and are not addressed herein.

B. Analysis of Operating Revenues and Expenses

Normalized Revenue

In its application Beaver-Elkhorn provided a billing analysis for the test year of 1991 which indicated total normalized revenue from water sales to be \$730,126, a difference of \$256,717 over test year water sales from the billing analysis of \$473,409. The increase in normalized revenue over actual test year revenue is due to the expected addition of 1,115 new customers from the Floyd County System.

Operating Expenses

Beaver-Elkhorn reported test-period operating expenses of \$477,061 which it proposed to increase by \$178,888. The proposed adjustments to various test-year expenses are based entirely upon estimates due to a 50 percent increase in plant capacity and significant growth (57.9 percent) in its customer base. Beaver-Elkhorn expects to add 1,115 new customers to its 1,926 existing customers. The pro forma adjustments and other Staff adjustments to test-period operations are discussed in the following sections:

Fuel for Power Production Expense

Beaver-Elkhorn proposed to increase reported test-year fuel for power production expense of \$24,387 by \$5,400 based upon an estimated increase in the power cost for pumping due to increased plant capacity. This adjustment represents an increase of 22 percent. According to the Commission's Engineering Division, the proposed increase is reasonable. Staff therefore recommends that annual fuel for power production expense of \$29,787 be included for rate-making purposes.

Materials and Supplies Expense

Beaver-Elkhorn proposed to increase reported test-year materials and supplies expense of \$60,724 by \$9,019 based upon estimated increases due to plant expansion and significant growth in its customer base. The proposed adjustment represents an increase of 14.9 percent. There are five components of materials and supplies expense. Following is a breakdown of those components

listed by category name and including the test-year expense, the amount of increase proposed and the percent increase of the proposed adjustments.

<u>Category</u>	<u>Test-Year Actual Expense</u>	<u>Proposed Adjustment</u>	<u>Percent of Increase</u>
Source of supply operation expenses	\$ 7,202	\$ 583	8.1
Water treatment operation expenses	2,483	960	38.7
Transmission and distribution operation expense	26,552	4,681	17.6
Customer accounts expenses	16,835	2,405	14.3
Administrative and general expenses	7,652	390	5.1

Staff's Engineering Division considers the proposed increases to the first three of the aforementioned categories to be reasonable based upon Beaver-Elkhorn's proposed increase in both plant capacity and customer base. Staff also considers the proposed increases to categories four and five listed above to be reasonable and, therefore, recommends that annual materials and supplies expense of \$69,743 be included for rate-making purposes.

Chemicals Expense

Beaver-Elkhorn proposed to increase reported test-year chemicals expense of \$27,930 by \$18,154 based upon an estimated increase due to plant expansion and customer growth. Beaver-Elkhorn's proposed adjustment represents an increase of 65 percent. According to the Commission's Engineering Division, an increase of 50 percent is reasonable as it matches the increased plant

capacity. Staff therefore recommends that annual chemicals expense of \$41,895 be included for rate-making purposes.

Insurance (General Liability) Expense

Beaver-Elkhorn proposed to increase reported test-year insurance (general liability) expense of \$9,512 by \$1,590 based upon an estimated cost increase to cover new components of its plant. Staff is of the opinion that Beaver-Elkhorn should have provided a quote or an estimate from an insurance agent in support of its proposed increase. In the absence of such support, Staff recommends that the adjustment be denied and annual insurance (general liability) expense of \$9,512 has been included for rate-making purposes.

Depreciation Expense

Beaver-Elkhorn proposed to increase reported test-year depreciation expense of \$100,653 by \$144,725 based upon plant additions of approximately \$7,236,247 depreciated over 50 years. According to information contained in Beaver-Elkhorn's application, the total project cost will be \$7,168,091. Staff agrees that 50 years is an appropriate period over which to depreciate the additional plant. Staff recommends that an increase of \$143,362¹ in depreciation expense related to the plant addition be allowed for rate-making purposes. Therefore, total annual depreciation expense of \$244,015 has been included for rate-making purposes.

¹ $\$7,168,091 / 50 \text{ years} = \$143,362$

Operations Summary

Based on the recommendations of Staff contained in this report, Beaver-Elkhorn's operating statement would appear as follows:

	<u>Test Period Application</u>	<u>Recommended Adjustments</u>	<u>Test Year Adjusted</u>
OPERATING REVENUES:			
Water Sales	\$ 471,535	\$ 258,591	\$ 730,126
Other Operating Revenue	15,260	-0-	15,260
Total Operating Revenue	<u>\$ 486,795</u>	<u>\$ 258,591</u>	<u>\$ 745,386</u>
OPERATING EXPENSES:			
Salaries-Employees	\$ 155,946	\$ -0-	\$ 155,946
Salaries-Officers, etc.	5,220	-0-	5,220
Employee Benefits	42,940	-0-	42,940
Fuel for Power Prod.	24,387	5,400	29,787
Chemicals	27,930	13,965	41,895
Materials and Supplies:			
Source of Supply	7,202	583	7,785
Water Treatment	2,483	960	3,443
Transmission & Distrib.	26,552	4,681	31,233
Customer Accounts	16,835	2,405	19,240
Administrative & General	7,652	390	8,042
Contractual Services	20,514	-0-	20,514
Transportation	752	-0-	752
Insurance-Gen. Liability	9,512	-0-	9,512
Insurance-Workers' Comp.	9,344	-0-	9,344
Reg. Commission	2,700	-0-	2,700
Bad Debt	2,956	-0-	2,956
Depreciation	100,653	143,362	244,015
Taxes Other than Income	13,483	-0-	13,483
Total Operating Expense	<u>\$ 477,061</u>	<u>\$ 171,746</u>	<u>\$ 648,807</u>
Operating Income	9,734	86,845	96,579
Other Income	17,435	-0-	17,435
Inc. Avail. for Debt Svc.	<u>\$ 27,169</u>	<u>\$ 86,845</u>	<u>\$ 114,014</u>

C. Revenue Requirements Determination

Staff has calculated Beaver-Elkhorn's annual debt service to be \$258,761.² This includes existing debt and the proposed annual debt payment related to all phases of the proposed construction. In the event that approval for any phase of the construction is not obtained, the recommendations contained herein related to financing and expenses for the construction would change accordingly. Assuming that all phases of the proposed construction are approved, Staff recommends that the additional debt, as well as Staff's recommended adjustments to operating expenses, be included in revenue requirements in order to fund the proposed construction. Beaver-Elkhorn's adjusted operations reflect \$114,014 in income available for debt service which results in a debt service coverage ("DSC") ratio of .44X. Staff is of the opinion that Beaver-Elkhorn's current rates are inadequate and will not cover payment of operating expenses and debt service requirements. In cases involving water districts, the Commission's normal practice is to allow a 1.2X DSC which provides a 20 percent margin above annual principal and interest requirements. In this instance, Staff is of the opinion that Beaver-Elkhorn should be granted an increase in revenues sufficient to produce a DSC ratio of 1.2X. Therefore,

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5-year average of interest payments due (current bonds)	\$ 28,365
5-year average of principal payments due (current bonds)	18,200
5-year average of interest payments due (KIA loan)	119,138
5-year average of principal payments due (KIA loan)	93,058
Total of 5-year average of P&I payments due	<u>\$258,761</u>

Staff recommends an increase in annual revenues of \$196,499 calculated as follows:

1.2X DSC	\$310,513
Adjusted Operating Expense	<u>648,807</u>
Total Revenue Requirement	\$959,320
LESS:	
Adjusted Test-Year Revenues	745,386
Other Income	<u>17,435</u>
Increased Required	<u>\$196,499</u>

D. Rate Design

Beaver-Elkhorn's application included a schedule of its present and proposed rates. It did not propose to change its present rate design. Staff is of the opinion that the current rate structure is reasonable, therefore, any change in revenue in this case will be added or subtracted to the existing rate structure. Appendix A outlines the rates based on the increase recommended herein. These rates will produce approximately \$926,625 in water sales annually.

E. Signatures

Carl Salyer Combs
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Public Utility Financial
Analyst
Water and Sewer Revenue
Requirements Branch
Rates and Tariffs Division

John Geoghagan
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Public Utility Financial
Analyst, Principal
Communications, Water and
Sewer Rate Design Branch
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APPENDIX A
TO STAFF REPORT CASE NO. 92-129

The Staff recommends the following rate be prescribed for customers of Beaver-Elkhorn Water District.

Monthly Rates

First 1,000 gallons	\$12.38 Minimum Bill
Next 19,000 gallons	2.22 per 1,000 gallons
Next 30,000 gallons	2.03 per 1,000 gallons
Next 50,000 gallons	1.71 per 1,000 gallons
Next 100,000 gallons	1.52 per 1,000 gallons

Wholesale Rate

\$1.52 per 1,000 gallons