

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF JACKSON COUNTY WATER)
ASSOCIATION FOR A CERTIFICATE OF)
PUBLIC CONVENIENCE AND NECESSITY, AND) CASE NO. 93-120
FOR ORDERS APPROVING AN ADJUSTMENT IN)
WATER RATES AND CONSTRUCTION FINANCING)

O R D E R

On April 21, 1993, Jackson County Water Association ("Jackson") filed its application for Commission approval of proposed construction, financing and increased water rates. Commission Staff, having performed a limited financial review of Jackson's operations, has prepared the attached Staff Report containing Staff's findings and recommendations regarding the 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 no more than 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 17th day of September, 1993.

PUBLIC SERVICE COMMISSION


For the Commission

ATTEST:


Executive Director

COMMONWEALTH OF KENTUCKY
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STAFF REPORT

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STAFF REPORT
ON
JACKSON COUNTY WATER ASSOCIATION
CASE NO. 93-120

A. Preface

On March 31, 1993, Jackson County Water Association ("Jackson") submitted an application to the Kentucky Public Service Commission ("Commission") seeking approval of its proposed construction, financing and water rate increase. The application was considered filed on April 21, 1993, when all deficiencies were cured. The proposed rates would generate approximately \$213,227 annually in additional revenues. This represents an increase of 38 percent over normalized revenues from water as calculated by Jackson of \$559,452.

In order to evaluate the requested increase, the Commission Staff ("Staff") chose to perform a limited financial review of Jackson's operations for the test period, the twelve-month period ending December 31, 1992. Jack Scott Lawless of the Commission's Division of Financial Analysis began the review on May 13, 1993 at the office of Jackson. John Geoghegan of the Commission's Division of Rates and Research performed a review of Jackson's reported revenues at the offices of the Commission.

The findings of Staff's review have been reduced to writing in this report. Mr. Geoghegan is responsible for the sections related to operating revenues and rate design. The remaining sections of this report were prepared by Mr. Lawless. Based upon the findings

of this report, Staff recommends that Jackson be allowed to increase its annual operating revenues by its requested amount of \$213,227 or 38 percent.

Scope

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

During the course of the review, Jackson was advised that all proposed adjustments to test-year expenses must be supported by some form of documentation and that all such adjustments must be known and measurable.

B. Analysis of Operating Revenues and Expenses

Operating Revenues

Jackson provided a billing analysis in its application for the test year. In its annual report, Jackson reported test-period revenue from rates of \$495,896. Normalizing new customers added during the test year and from the line extension proposed in this proceeding yields an additional \$11,258 and \$54,068 respectively. Revenue from Truck Sales in the amount of \$1,873 was subtracted because it was not included in the billing analysis revenue. Reported Other Operating Revenue was \$12,309, normalized to

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\$14,182. After making a billing analysis adjustment of \$4,169, Normalized Operating Revenue is \$577,700.¹

Operating Expenses

For the test period, Jackson reported operating expenses of \$487,867 which it proposed to increase by \$71,188. Staff's pro forma adjustments to test-period expenses are shown in Appendix B attached to this report and are discussed in the following sections of this report.

Salaries and Wages

For the test period, Jackson reported salaries and wages expense of \$132,940. Adjustments were proposed to increase this amount by \$18,025 to reflect increased salaries and to annualize the salaries of two individuals that were hired during the test year. During Staff's review of Jackson's payroll records it was determined that one employee included in Jackson's pro forma payroll calculations had quit during the test year. Staff also discovered that a three percent pay raise was approved by the Board of Directors on May 13, 1993 for all employees who had reached the pay ceiling for their respective job classifications. Staff, after

¹	Reported Test-Year Revenue from rates	\$495,896
	New customers added during test year	11,258
	New customers from line extension	54,068
	Truck Sales	(1,873)
	Billing analysis adjustment	4,169
	Normalized Revenue from Rates	<u>\$563,518</u>
	Reported Other Operating Revenue	\$12,309
	Adjustment to Other Operating Rev.	<u>1,873</u>
	Normalized Other Operating Revenue	14,182
	Normalized Operating Revenue	<u>\$577,700</u>

considering all of these factors, calculated pro forma payroll expense to be \$140,785 and has made the appropriate adjustment of \$7,845.

Taxes Other than Income Taxes

Jackson made an adjustment to taxes other than income taxes of \$1,379 which correlates with its payroll adjustment. Staff agrees that an adjustment should be made and has calculated an adjustment of \$600 to correspond with Staff's \$7,845 payroll adjustment.

Employee Pensions and Benefits

During the test year, Jackson reported employee pensions and benefits expenses of \$15,698 which it proposed to increase by \$3,168. Jackson's adjustment was made to reflect health and life insurance premiums to be paid on behalf of the two new employees. To calculate pro forma employee pensions and benefits expenses, Staff annualized the most recent premium paid for health and life insurance of \$2,322. This calculation results in a pro forma expense of \$27,860 requiring an adjustment to test-year expenses of \$12,162. Staff's adjustment is necessary for Jackson to recover increasing health insurance premiums and additional premiums of new employees. Therefore, Staff has reflected this adjustment in its calculation of pro forma revenue requirements.

Source of Supply, Water Treatment and Customer Accounts

Jackson adjusted source of supply and water treatment expense by \$12,014 and customer accounts by \$8,602 to reflect the increased expenses from additional customers to be served by the proposed

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construction. Included in these accounts are allocated test-year expenses related to salaries and wages, purchased power for pumping, chemicals, office supplies, bad debts and taxes other than income taxes. The pro forma salaries and wages and taxes other than income taxes have already been reflected in pro forma revenue requirements by making the adjustments as previously discussed. Therefore, these additional adjustments should be disallowed for rate-making purposes.

Staff agrees with Jackson's adjustments to purchased power for pumping, chemicals, office supplies and bad debts and has included them in its calculation of pro forma revenue requirements along with the normalization adjustments for customers added during the test year. Staff's adjustments were calculated as follows:

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Purchased Power: Staff has adjusted test-year purchased power for pumping expense by \$6,919 for new customers, the new pump and line flushing.

New Customer Adjustment:	
Additional gallons needed (000) omitted	20,514 ²
Times: Cost per thousand gallons	\$.217402 ³
Adjustment	<u>\$ 4,460</u>

New pump:	
Estimated gallons pumped per day (000) omitted	64
Times: Estimated cost per thousand	\$.10
Annualize	365
Adjustment	<u>\$ 2,336</u>

Line Flushing:	
Gallons needed (000) omitted	566 ⁴
Times: Cost per thousand gallons	\$.21740
Adjustment	<u>\$ 123</u>

Total Purchased Power Adjustment	<u>\$ 6,919</u>
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² Test-year normalization adjustment	46
New customers from proposed construction	<u>253</u>

New Customers	299
Times: Average annual usage (4,700 x 12)	56,400
1 + backwash percentage	103.4%
Divide by: 1 - unaccounted for water	<u>85%</u>

Gallons needed	<u>20,514,073</u>
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³ Cost per annual report	\$ 43,009
Divide by: Water produced (000) omitted	<u>197,838</u>

Cost per thousand gallons	<u>\$0.21740</u>
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⁴ See Jackson's Exhibit 1, page 1-16, footnote 6.

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Jackson County Water Association
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Chemicals: Staff has adjusted test-year chemicals expense by \$4,219 for new customers and line flushing.

New Customer Adjustment:

Additional gallons needed (000) omitted	20,514
Times: Cost per thousand gallons	\$.20014 ⁵
Adjustment	<u>\$ 4,106</u>

Line Flushing:

Gallons needed (000) omitted	566
Times: Cost per thousand gallons	\$.20014
Adjustment	<u>\$ 113</u>

Total Chemical Adjustment	<u>\$ 4,219</u>
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Office Supplies and Bad Debts: Staff has adjusted test-year office supplies and bad debts by \$2,304 and \$567, respectively. These adjustments will reflect the additional expenses associated with the new customers.

	<u>Supplies</u>	<u>Bad Debts</u>
Annual expense	\$19,076	\$4,694
Divide by: average number of customers	<u>2,476</u>	<u>2,476</u>
Annual expense per customer	7.70	1.90
Times: New customers	299	299
Adjustment	<u>\$ 2,304</u>	<u>\$ 567</u>

Depreciation

Jackson reported test-year depreciation expense of \$117,961 which it proposed to increase by \$28,000. Jackson calculated this adjustment by depreciating the construction costs of \$1,400,000 over a 50-year life using a straight-line method. In comparison, Staff has adjusted test-year depreciation by \$46,216. Staff's

⁵ Cost per annual report \$ 39,595
Divide by: Water produced (000) omitted 197,838
Cost per thousand gallons \$ 0.20014

adjustment was calculated by depreciating the total depreciable project cost of \$1,848,645 (total project cost \$1,858,645 - cost of land \$10,000) over a 40-year life using a straight line method.

Staff is of the opinion that the total depreciable project cost should be used in the calculation of pro forma depreciation to ensure that Jackson recovers adequate funds to replace the proposed system when it deteriorates. Furthermore, after discussion with the Commission's Engineering Division, Staff determined that a 40-year recovery would be more reasonable than 50 years given the size of Jackson. Also, the 40-year recovery is consistent with the depreciable lives of Jackson's existing distribution system.

In addition, Staff has adjusted test-year depreciation expense by \$2,977⁶ which is necessary to normalize test-year depreciation expense for depreciable plant that was placed into service during 1992.

C. Revenue Requirements Determination

Based on the findings contained in this report Staff believes that Jackson could justify additional operating revenue of \$260,576. These calculations are as follows:

⁶ Annual depreciation expense for items that were placed into service in 1992	\$ 6,789
Less: Depreciation expensed in 1992 on items that were placed into service in 1992	<u>(3,812)</u>
Adjustment	<u>\$ 2,977</u>

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Adjusted Operating Expenses	\$ 571,675
Debt Service	257,268
Debt Service Coverage	<u>25,726⁷</u>
 Total Revenue Requirement	 854,669
Less: Interest Income	(16,393)
Other Operating Income	<u>(14,182)</u>
 Revenue Requirement to be generated through water sales	 824,094
Less: Normalized Water Sales	<u>(563,518)</u>
 Required Revenue Increase	 <u>\$ 260,576</u>

However, since Jackson's proposed rates will produce a positive cash flow of \$145,531⁸, which is sufficient to meet its actual debt service requirement, Staff recommends that the proposed rates be accepted.

If Jackson chooses to amend its application to reflect rates that will generate the additional revenue of \$260,576, it should do so when filing comments to the Staff Report. In the event that Jackson does request rates that differ from those previously noticed to its customers, it will be required to renote the proposed increase.

⁷ Based on 10% Debt Service Coverage as required by loan commitment.

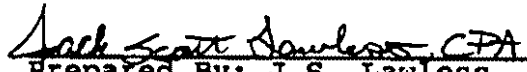
⁸


Adjusted Operations	\$ 22,418
Add: Proposed Increase	213,227
Depreciation Expense	167,154
Less: Average Annual Debt Service	257,268
Net Cash Flow	<u>\$145,531</u>

D. Rate Design

Jackson County's present rate design for general customers consists of five steps. Its rate for Truck Sales is a one-step rate design with a single rate per 1,000-gallon increment. Jackson County did not propose to change its existing rate design. Staff is of the opinion that the present rate design is reasonable, therefore any increase in revenue will be added to the existing rates. Staff's recommended rates set out in Appendix A will produce \$772,680 annually in revenue. The rates set out in Appendix C will produce \$824,094.

E. Signatures


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APPENDIX A
JACKSON COUNTY WATER ASSOCIATION

The following rates are recommended for customers of the Jackson County Water Association.

5/8 x 3/4 Inch Connection

First 1,000 gallons	\$10.00 (minimum bill)
Next 4,000 gallons	3.90 per 1,000 gallons
Next 5,000 gallons	3.15 per 1,000 gallons
Next 10,000 gallons	2.55 per 1,000 gallons
Over 20,000 gallons	1.90 per 1,000 gallons

1 Inch Connection

First 5,000 gallons	\$25.60 (minimum bill)
Next 5,000 gallons	3.15 per 1,000 gallons
Next 10,000 gallons	2.55 per 1,000 gallons
Over 20,000 gallons	1.90 per 1,000 gallons

1 1/2 Inch Connection

First 10,000 gallons	\$41.35 (minimum bill)
Next 10,000 gallons	2.55 per 1,000 gallons
Over 20,000 gallons	1.90 per 1,000 gallons

2 Inch Connection

First 20,000 gallons	\$66.85 (minimum bill)
Over 20,000 gallons	1.90 per 1,000 gallons

Truck Sales

\$2.00 per 1,000 gallons

APPENDIX B
TO STAFF REPORT FOR CASE NO. 93-120

Jackson County Water Association
Statement of Adjusted Operations

	Test Year	Adj.	Pro forma Present Rates
Operating Revenues			
Water sales	495,896	(1,873)	
		11,258	
		54,068	
		4,169	563,518
Other operating revenues	12,309	1,873	14,182
Total Operating Revenues	508,205	69,495	577,700
Operating Expenses			
Operation and Maintenance			
Salaries and wages	132,940	7,845	140,785
Employee pensions and benefits	15,698	12,162	27,860
Purchased power	43,009	6,919	49,928
Chemicals	39,595	4,219	43,814
Materials and supplies	61,738	2,304	64,042
Contractual services - acct.	5,680		5,680
Contractual services - legal	2,325		2,325
Transportation	9,686		9,686
Insurance - vehicle	2,896		2,896
Insurance - general liability	5,282		5,282
Insurance - workers comp.	4,868		4,868
Insurance - other	3,489		3,489
Bad debt expense	4,694	567	5,261
Miscellaneous	22,158		22,158
Total Operation and Maintenance	354,058	34,015	388,073
Depreciation	117,961	2,977	
		46,216	167,154
Taxes Other Than Income Taxes	15,848	600	16,448
Total Operating Expenses	487,867	83,802	571,675
Net Operating Income	20,338	(14,313)	6,025
Interest income	16,393		16,393
Income Available for Debt Service	36,731	(14,313)	22,418

APPENDIX C
JACKSON COUNTY WATER ASSOCIATION

The following rates are recommended for customers of the Jackson County Water Association.

5/8 x 3/4 Inch Connection

First 1,000 gallons	\$11.90 (minimum bill)
Next 4,000 gallons	3.80 per 1,000 gallons
Next 5,000 gallons	3.00 per 1,000 gallons
Next 10,000 gallons	2.50 per 1,000 gallons
Over 20,000 gallons	1.85 per 1,000 gallons

1 Inch Connection

First 5,000 gallons	\$27.10 (minimum bill)
Next 5,000 gallons	3.00 per 1,000 gallons
Next 10,000 gallons	2.50 per 1,000 gallons
Over 20,000 gallons	1.85 per 1,000 gallons

1 1/2 Inch Connection

First 10,000 gallons	\$42.10 (minimum bill)
Next 10,000 gallons	2.50 per 1,000 gallons
Over 20,000 gallons	1.85 per 1,000 gallons

2 Inch Connection

First 20,000 gallons	\$67.10 (minimum bill)
Over 20,000 gallons	1.85 per 1,000 gallons

Truck Sales

\$2.90 per 1,000 gallons