

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF WEBSTER COUNTY)	
WATER DISTRICT (1) FOR A CERTIFICATE OF)	
PUBLIC CONVENIENCE AND NECESSITY)	
AUTHORIZING CONSTRUCTION OF MAJOR)	CASE NO.
ADDITIONS AND IMPROVEMENTS TO ITS WATER)	98-182
SYSTEM; (2) SEEKING APPROVAL OF REVISED)	
WATER SERVICE RATES AND CHARGES; AND (3))	
SEEKING APPROVAL OF THE ISSUANCE OF)	
CERTAIN SECURITIES PURSUANT TO THE)	
PROVISIONS OF KRS 278.020, KRS 278.300, AND)	
807 KAR 5:001)	

ORDER

Webster County Water District (Webster) having applied for a rate adjustment, and Commission Staff having performed a limited review of Webster s operations and having prepared a report of its findings and recommendations,

IT IS THEREFORE ORDERED that:

1. The report of Commission Staff, appended hereto, is made a part of the record of this proceeding.
2. Within 10 days of the date of this Order, Webster shall submit to the Commission its written comments on the report. In its comments, Webster shall specifically state its position on each recommendation contained in the report. If Webster wishes to amend its application to request rates that Commission Staff has recommended and that differ from those in its application, it shall submit such amendment when filing its comments.

3. Within 10 days of the date of this Order, if no other parties except Webster submit written comments or objections to the findings and recommendations of the Commission Staff Report, the Commission shall assume that all other parties have carefully reviewed the report and accepted the recommendations in the report.

4. A public hearing on the proposed rate adjustment shall be held in Hearing Room 1 of the Commission's offices at 730 Schenkel Lane, Frankfort, Kentucky on March 25, 1999, at 1:00 p.m., Eastern Standard Time.

5. Webster shall cause to be published in a newspaper of general circulation in the area affected by its proposed rate adjustment, no later than March 15, 1999, notice of the purpose, time, place and date of hearing.

6. All parties shall advise the Commission within 15 days of the date of this order as to whether they wish to waive their right to a hearing in this matter and have the matter stand submitted to the Commission for decision based upon the existing record, including all comments to the Commission Staff Report. The scheduled hearing will be cancelled if all parties waive their right to hearing.

Done at Frankfort, Kentucky, this 5th day of March, 1999.

By the Commission

ATTEST:

Executive Director

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CASE NO.
98-182

STAFF REPORT

Prepared By: John D. Williams
Public Utility Financial
Analyst, Senior
Water and Sewer Revenue
Requirements Branch
Division of Financial Analysis

Prepared By: Renee Curry
Public Utility Rate
Analyst, Senior
Communications, Water and
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Division of Financial Analysis

STAFF REPORT
ON
WEBSTER COUNTY WATER DISTRICT
CASE NO. 98-182

On April 20, 1998, Webster County Water District (Webster) applied to adjust its water service rates. Due to deficiencies, its application was not accepted for filing until June 4, 1998. In its application, Webster requests a 26 percent increase in its water service rates which will generate additional annual revenues of \$282,713.

Commission Staff has performed a limited financial review of Webster s operations for the 12-month period ending December 31, 1997, Webster s proposed test period. The scope of this review is limited to determining whether the test period operating revenues and expenses are representative of normal operations. Insignificant or immaterial discrepancies are neither pursued nor addressed.

John Williams of the Commission s Water and Sewer Revenue Requirements Branch is responsible for the preparation of this Staff Report, except for those sections addressing normalized operating revenues and Webster s cost of service study and rate design. Renee Curry of the Commission s Communications, Water and Sewer Rate Design Branch addresses those sections.

Revenue Requirements.

Commission Staff s findings and recommendations regarding Webster s adjusted test year operations are set forth in Attachment A. A comparison of Webster s proposed revenue requirement calculation and Staff s recommended revenue requirement

calculation is set forth at Attachment B. Based upon its review of Webster's test period operations, Commission Staff finds that Webster's revenue requirement should range between \$1,293,578¹ and \$1,734,237² and requires an increase in annual revenues that ranges from \$224,307 and \$664,966.

Current Rate Design

Webster's current retail rate design is a 4-step declining block schedule, with usage allowances of 2,000 gallons, 4,000 gallons, 94,000 gallons and an over 100,000 gallon increment. Webster originally submitted a proposal to increase each rate step by approximately 25 to 27 percent. On February 16, 1999, Webster submitted another proposal wherein each rate step would be increased by \$1.08 per 1,000 gallons. Webster has a flat per 1,000-gallon wholesale rate that it proposed to increase by the same amounts. Both proposals generate the revenue requested by Webster.

¹ This figure represents the amount of revenue necessary to meet Webster's reasonable operating expenses and the minimum debt service coverage requirements in its existing and proposed long-term debt.

² This figure represents the amount of revenue necessary to meet Webster's reasonable operating expenses and the minimum debt service coverage requirements in its existing and proposed long-term debt instruments and to recover depreciation expense. The Kentucky Supreme Court has noted that [d]epreciation is a concern to most enterprises, but it is of particular importance to water and sewer utilities because of the relatively large investment in utility plants required to produce each dollar of annual revenue. Water districts are capital intensive, asset-wasting enterprises. The structure of a water plant, comprised of innumerable components, demands allocation of proper depreciation to ensure financial stability. Adequate depreciation allowance is critical in order to allot to the district sufficient revenue to provide for a replacement fund for all its plant property, contributed or noncontributed. Public Service Commission v. Dewitt Water District, Ky., 720 S.W.2d 725, 729 (1986).

No cost of service study has ever been prepared for this utility. A cost of service study establishes charges to customers in proportion with the cost of providing service. Accordingly, Commission Staff prepared a cost of service study of Webster and has attached this study as Attachment C.

Wholesale Rate

The first step in preparing the cost of service study was to determine the wholesale rate. Webster sells water to the cities of Dixon, Slaughters, and Clay. Commission Staff first determined the total amount of water produced and sold shown at Sheet 1. Webster sold 89,751,000 gallons to its wholesale customers, reported a line loss of 2.33 percent and reported plant use of 1.24 percent. The line loss and plant use is well within acceptable ranges.

Commission Staff then allocated the inch miles of lines that were jointly used by Webster and its wholesale customers shown at Sheet 2. Since the wholesale customers do not use any transmission lines less than 6 inches in diameter and jointly use a portion of the other lines an allocation factor must be determined in order to allocate water transmission costs.

Staff reviewed Webster's depreciation schedule shown at Sheet 3, and determined the items that should be allocated to the wholesale customers. All items were allocated with the exception of meter and meter installations, hydrants, and \$27,854 in items such as office furniture and transportation equipment, which are used mainly to serve retail customers.

The wholesale allocation factors, shown at Sheet 4, were determined based on the ratio of sales to wholesale to total sales and the ratio of total system miles of line to

the jointly used miles of line. A water production allocation factor of .3379 and a pipeline transmission factor of .1741 was determined to be the factors to be used in allocating production and transmission costs to the wholesale customers.

Staff's allocation of wholesale costs shows the total costs of Webster, the allocation factor used to allocate each cost, and the dollar amount allocated to the wholesale customers. The wholesale costs are then subtracted from the total costs to determine the costs to be paid by the retail customers. The total wholesale costs are then divided by the total gallons sold to the wholesale customers to determine the wholesale rate.

There are two wholesale rates shown on Sheet 5, allocation of wholesale rate. The rate of \$5.15 per 1,000 gallons is based on the amount of revenue that Commission Staff determined was actually needed by Webster. The rate of \$3.70 per 1,000 gallons is based on the increased amount of revenue requested by Webster and the increase recommended to be accepted in this report.

Retail Rates

Staff has used the commodity demand methodology in preparing the cost of service study as set out in the American Water Works Association's (AWWA) Manual M-1. This study recognizes that a utility must be prepared for meeting average water use needs as well as peak demand requirements. In other words, a system must be sized to meet the demands of the residential customers who place a larger demand on the system than very large consumers. The large consumers use water throughout the day and night and generally place a smaller demand on the system than residential customers who use water for a few hours each day.

The commodity demand method allocates costs into either commodity, demand or customer functions. Commodity costs are those costs that vary directly with the quantity of water produced such as chemicals and purchased power. Demand costs are associated with providing facilities to meet the peak demands placed on the system. These costs include transmission and distribution costs. Customer costs are those costs associated with serving the customers regardless of the amount of water used. These costs include meter reading and billing and collecting.

Allocation of plant value shown at Sheet 6 allocates plant value into demand or customer. No plant value is allocated to commodity since the value does not change with amounts of water produced. Sheet 7 shows the allocation of expenses to the functional cost components. Administrative and general expenses are allocated to the cost components based on the subtotal of all other expenses, excluding commodity costs. Depreciation expense is based on the percentages contained in Sheet 3. Debt service is based on the allocation of plant value as shown on Sheet 6. Expenses have been allocated based on both the revenue proposed by Webster and the revenue that Staff has found that Webster actually needs.

Once operating and maintenance expense has been allocated, all other expenses and income must be allocated to the functional categories. Sheet 8 is the allocation of expenses and other revenue based on the amount of revenue Webster requested, less wholesale revenue. The sheet shows that \$98,521 should be collected from the commodity category, \$801,793 from the demand category and \$120,824 from the customer charge.

After costs have been allocated by function, a billing analysis must be reviewed to study the usage patterns of the customers of a utility. The chart on Sheet 9 shows that Webster is unique in that a large portion of its water is sold at 2,000,000 gallons and over. The AWWA Manual M-1 states that the initial usage block should be selected to include about 80 to 90 percent of usage, or at least all residential usage. Based on the usage patterns of Webster's customers, the usage allowances have been changed to a first 2,000,000 gallons and an over 2,000,000 gallons. The first 2,000,000-gallon rate increment includes 83 percent of Webster's total water sales.

Sheet 10 shows the allocation of expenses to each usage increment. These expenses are based on the total revenue requested by Webster. The actual water sales percentages are used to allocate commodity costs. Demand costs are allocated using a weighted sales percentage in order to more fairly reflect the demand placed on the system. The allocations produce a customer charge with no usage allowance of \$8.47, a rate of \$5.49 per 1,000 gallons up to 2,000,000 gallons and a rate of \$3.85 per 1,000 gallons for all water used in excess of 2,000,000 gallons. Sheet 11 is a verification schedule showing that the rates produced by the cost of service study will in fact produce the correct amount of revenue.

The next 3 pages of the cost of service study, Sheets 12 through 14, show the rates based on the actual revenue amount that Staff has determined that Webster needs. All numbers with the exception of depreciation and debt service amounts are the same as the other study. In order for Webster to receive only the amount requested, depreciation has been decreased from \$341,531 to \$305,745. Debt service has been adjusted from \$417,403 to \$341,531.

Sheet 15 shows a comparison of rates based on the revenue found reasonable by Staff and the revenue requested by Webster.

Recommendations

Commission Staff recommends the following actions:

1. As Webster's proposed rates will generate revenues of \$1,353,079 and as such revenues are sufficient to meet Webster's reasonable operating expenses (excluding depreciation expense) and the minimum debt service requirements of its existing and proposed long-term debt, the proposed rates, which are set forth in Attachment D, should be approved.

2. As an alternative to approving Webster's proposed rates, the Commission should:

a. Approve the rates set forth in Attachment E, which will generate total revenues of \$1,737,237 and will permit Webster to recover its reasonable operating expenses, including depreciation expense, and to meet the minimum debt service coverage requirements in its existing and proposed long-term debt instruments; or,

b. Allow Webster to phase-in the rates set forth in Attachment E over a 3-year period; or,

c. If the rates set forth in Attachment E are not authorized for immediate use or on a phased-in basis, establish a rider to Webster's approved rates in accordance with Attachment F which will require an annual adjustment in those rates to reflect the inflation as measured by the Gross Domestic Product Implicit Price Deflator.

3. Commission Staff be required to perform a limited review of the Webster s operations within 3 years of the establishment of new rates to ensure that the establish rates are still adequate.

4. Webster should be required to notify the Commission in writing if, during the three years following the establishment of new rates and prior to the performance of any limited Commission Staff review, the revenues generated by the new rates become inadequate to meet its cash operating expenses and annual debt service requirements.

Signatures

Prepared By: John D. Williams
Public Utility Financial
Analyst, Senior
Water and Sewer Revenue
Requirements Branch
Division of Financial Analysis

Prepared By: Renee Curry
Public Utility Rate
Analyst, Senior
Communications, Water and
Sewer Rate Design Branch
Division of Financial Analysis

ATTACHMENT A
STAFF REPORT CASE NO. 98-182
STAFF'S RECOMMENDED OPERATIONS

	Actual Test Year Operations	Adjustments	Ref.	Staff Adjusted Test Year Operations
Operating Revenues:				
Retail Water Sales	\$ 823,551	\$ (1,095)	A	\$ 822,456
Sales for Resale	246,815	-		246,815
Other Operating Revenue	17,624	845	B	18,469
Total Operating Revenues	<u>\$ 1,087,990</u>	<u>\$ (250)</u>		<u>\$ 1,087,740</u>
Operating Expenses:				
Salaries & Wages - Employees	253,995	27,766	C	281,761
Salaries & Wages - Officers	12,000	-		12,000
Employee Pensions & Benefits	66,773	5,636	D	72,409
Purchased Power	78,414	-		78,414
Chemicals	70,386	-		70,386
Materials & Supplies	58,214	-		58,214
Contr. Svcs. - Accounting	8,300	-		8,300
Contr. Svcs. - Legal	6,129	(3,129)	J	3,000
Rental of Equipment	2,086	(2,086)	J	-
Transportation Expenses	10,711	-		10,711
Insurance - Gen'l Liability	13,561	7,717	G	21,278
Insurance - Worker's Comp.	8,000	(36)	F	7,964
Insurance - Other	432	-		432
Advertising Expense	766	(766)	I	-
Amort. - Rate Case Expense	-	3,333	H	3,333
Amort. - Non-Recurring Expenses	-	1,738	J	1,738
Regulatory Comm. Expense	-	1,989	E	1,989
Bad Debt Expense	580	-		580
Miscellaneous Expense	24,200	-		24,200
Total Oper. And Maint. Expenses	<u>\$ 614,547</u>	<u>\$ 42,162</u>		<u>\$ 656,709</u>
Depreciation Expense	257,637	183,022	L	440,659
Taxes Other Than Income	23,110	(2,027)	E	21,083
Total Operating Expenses	<u>\$ 895,294</u>	<u>\$ 223,157</u>		<u>\$ 1,118,451</u>
Net Operating Income	<u>\$ 192,696</u>	<u>\$ (223,407)</u>		<u>\$ (30,711)</u>
Other Income (Expense):				
Interest Income - Unrestricted	43,556	(43,556)	K	-
Income Available to Service Debt	<u>\$ 236,252</u>	<u>\$ (266,963)</u>		<u>\$ (30,711)</u>

ATTACHMENT A
STAFF REPORT CASE NO. 98-182
STAFF RECOMMENDED OPERATIONS

- A. Retail Water Sales. Webster reported retail sales of \$823,551 in its 1997 annual report to the Commission. Staff prepared a billing analysis using billing and usage information by customer class for the 1,280 customers served by the utility on December 31, 1997. Staff proposes a pro forma adjustment decreasing retail sales revenue by (\$1,095) based on the results of the billing analysis.
- B. Other Operating Revenue. Webster prepared a summary of forfeited discounts and miscellaneous service revenues by month for 1997. Miscellaneous service revenues are returned check fees, service connection charges, service investigation charges, etc., as provided for in the utility's tariff. Staff traced the information to the monthly accounts receivable transaction summaries and accepted the analysis as prepared by the utility. The difference between Webster's total in its annual report to the Commission and the summary resulted in a pro forma increase to other operating revenue of \$845.
- C. Salaries & Wages - Employees. Test year salaries and wages employees were reported in the annual report to the Commission at \$253,995. By reviewing Webster's payroll information, Staff determined that applying pay rates effective January 1, 1998 to 1997 employee hours (including open positions at the time of the field review) was the best way to normalize the expense for known and measurable changes. Staff prepared this calculation that resulted in a pro forma increase to test year salaries and wages employees of \$27,766.

- D. Employee Pensions & Benefits. Webster contributes 8.22 percent of employees wages to the County Employees Retirement System. The utility pays for employee health, life, and dental insurance coverage. A portion of the dental insurance cost is withheld from employees wages according to the coverage selected. Based on the adjustment to salaries and wages employees previously set forth, a pro forma adjustment has been determined by Staff increasing test year employee pensions and benefits by \$5,636.
- E. Taxes Other Than Income. Test year taxes other than income taxes were reported to the Commission at \$23,110. Staff recalculated employer payroll taxes for FICA-OASDI and FICA-HI based on the pro forma adjustments to salaries & wages employees. Staff excluded Webster's commissioners fees from being subject to payroll taxes since their services represent non-employee compensation. Staff made a pro forma increase to regulatory commission expense of \$1,989 as a result of a reclassification of the annual PSC assessment fee from taxes other than income. Staff's calculations to normalize taxes other than income result in a pro forma decrease of (\$2,027).
- F. Insurance Workers Compensation. Test year insurance workers compensation was reported to the Commission at \$8,000. Staff applied the most recent annual billing for insurance - workers compensation rates to the normalized salaries and wages employees as described in Note C. This pro forma adjustment results from the difference between the estimated wages used by the insurer and Staff's normalized salaries and wages employees. The pro forma decrease of (\$36) to test year insurance workers compensation is the outcome of this comparative calculation.

- G. Insurance General Liability. Test year insurance general liability was reported to the Commission at \$13,561. Staff compared this total with the most recent annual billing to Webster. Management explained to Staff that the annual premium had increased due to claims for lightning damage to the treatment plant and clearwells in recent years. Staff accepted the recent billings as representative of normal costs. Based on this information a pro forma adjustment has been determined by Staff increasing insurance general liability by \$7,717.
- H. Amortization Rate Case Expense. Based on an invoice provided by Webster's attorney, the utility will incur \$10,000 for legal expenses associated with preparing this rate case. Webster Water did not include this expense in the revenue requirement requested in its application. Staff made a pro forma adjustment to this account to amortize this cost over three years. Generally, the Commission recognizes a three-year period as the average between rate case filings. Staff's calculation to amortize this expense results in a pro forma increase of \$3,333.
- I. Advertising Expense. The advertising expense represents the cost of public notifications of system problems and corrections. Considering the magnitude of the system improvements involved in this case, Staff is eliminating this expense from future operating expenses. When the improvements to the water treatment plant is in place, system problems should be minimal. Accordingly, Staff is making a pro forma adjustment decreasing advertising expense by (\$766).
- J. Non-Recurring Expenses. Staff's review of Webster's records indicate that rental of equipment and contract services legal, except the utility's \$300 monthly

retainer to its attorney, represent non-recurring expenses. Accordingly, the non-recurring expenses to reclassify from operating expenses are as follows:

Contract Services Legal	\$3,129
Rental of Equipment	<u>\$2,086</u>
Total Non- Recurring Expenses to Amortize	\$5,215
Amortization Over Three Years	\$1,738

Therefore, Staff is making pro forma adjustments to decrease contract services legal and rental of equipment by (\$3,129) and (\$2,086), respectively, while increasing operating expenses with a pro forma adjustment to amortization non-recurring expenses of \$1,738.

- K. Interest Income - Unrestricted. In its application, Webster did not address the issue of the unrestricted portion versus restricted portion of interest income relative to determining the revenue requirement. Only unrestricted interest income is allowed as a reduction in the determination of a utility's revenue requirement based on the manner in which this item has been treated previously by the Commission. Based on the requests for interim Orders by Webster in this case (for Certificates of Public Convenience and Necessity),¹ the utility will be utilizing internal funds in the interim financing of this project.

¹ Case No. 98-182, The Application of Webster County Water District (1) for a Certificate of Public Convenience and Necessity Authorizing Construction of Major Additions and Improvements to Its Water System; (2) Seeking Approval of Revised Water Service Rates and Charges; and (3) Seeking Approval of the Issuance of Certain Securities, Pursuant to the Provisions of KRS 278.020, KRS 278.300, and 807 KAR 5:001, Interim Orders Dated August 7, 1998 and October 13, 1998.

Staff finds that the only interest income the utility should receive in the short-term will be for reserved funds. In the long-term, unrestricted cash and cash equivalents available for investment cannot be accurately estimated. For these reasons, Staff made a pro forma adjustment to decrease interest income unrestricted by (\$43,556).

- L. Depreciation expense. Webster's test period annual report to the Commission lists a total utility plant of \$9,353,631, including \$71,832 of construction work-in-progress. The water utility plant accounts total \$9,281,799, with \$9,206,392 in depreciable assets, as \$75,407 represents land and land acquisition rights. The 1997 depreciation expense for the test period totaled \$257,637, including \$7,282 depreciation of 1997 acquisitions, for which the depreciation normalized equals \$11,160. The plant renovation and expansion project includes a total depreciable cost of \$6,140,911. Estimated depreciable lives used to compute depreciation on the plant renovation and expansion range from 25 to 50 years. Staff has made a pro forma adjustment normalizing and providing depreciation on a new plant that increases operating expenses by \$183,022, calculated as follows:

<u>Item</u>	<u>Cost</u>	<u>Life</u>	<u>Expense</u>
Depreciable Utility Plant 12/31/97, at cost	\$9,281,799	Various	<u>\$257,637</u>
Adjustment Eliminating Truck Bought in 1994 from a Commissioner	\$ (7,500)		\$ (1,500)
Normalization Adjustment to 1997 Acquisitions			\$ 3,878
Plant Expansion & Renovation	\$5,024,091	25 to 50	\$158,307
Raw Water Intake Structure	\$ 877,877	50	\$ 17,558
Raw Water Intake Mains	\$ 238,943	50	<u>\$ 4,779</u>
Pro Forma Adjustments Total			<u>\$183,022</u>
Pro Forma Depreciation Total			\$440,659

ATTACHMENT B
 STAFF REPORT CASE NO. 98-182
 COMPARISON OF REQUESTED AND RECOMMENDED
 REVENUE REQUIREMENT CALCULATIONS

	Utility Requested <u>Operations</u>	Staff Recommended <u>Operations</u>
Five Year Average Annual Debt Service Requirement	\$ 432,471	\$ 569,282
Plus: Required Debt Service Coverage *	86,494	64,973
Operating Expenses	895,294	1,118,451
Less: Other Operating Revenue	(17,624)	(18,469)
Unrestricted Interest Income	(43,556)	-
Total Revenue Required from Rates	<u>1,353,079</u>	<u>1,734,237</u>
Less: Normalized Test Year Revenue from Rates	(1,070,366)	(1,069,271)
Requested/Optimum Increase	<u>\$ 282,713</u>	664,966
Less: Depreciation Expense		(440,659)
Minimum Increase Per Staff		<u>\$ 224,307</u>

* Staff calculation of debt service coverage is based on 110 percent for 1995J KIA loan and "proposed" KIA loan and 120 percent for Webster Water Revenue Bonds and 1993E KIA loan.

ATTACHMENT C
STAFF REPORT CASE NO. 98-182

Cost of Service Study

Wholesale Rate Allocations

Total Water Produced and Sold	Sheet 1
Allocation of Lines	Sheet 2
Allocation of Depreciation	Sheet 3
Wholesale Allocation Factors	Sheet 4
Allocation of Wholesale Rates	Sheet 5

Retail Rate Allocations

Allocation of Plant Value	Sheet 6
Allocation of O/M Expenses	Sheet 7

Utility Requested Revenue

Allocation of Retail Cost of Service	Sheet 8
Retail Water Usage Pattern	Sheet 9
Calculation of Retail Water Rates	Sheet 10
Verification of Rates	Sheet 11

Staff Revenue Requirement

Allocation of Retail Cost of Service	Sheet 12
Calculation of Retail Water Rates	Sheet 13
Verification of Rates	Sheet 14

Comparison of Rates

Sheet 15

Total Water Produced and Sold

	Gallons	Percent
Line Loss	6,353,563	2.33%
Sales to Retail	172,729,178	
Sales to Wholesale Customers	89,751,000	
Plant Use	3,382,500	1.24%
Total Water Produced and Purchased	272,412,300	
Total Sold	262,480,178	

Allocation of Lines

Size	Feet	Miles	Inch Miles	Jointly Used	
				Miles	Inch Miles
2	4300	0.81	1.62	0.00	0.00
3	77450	14.67	44.01	0.00	0.00
4	242800	45.98	183.92	0.00	0.00
6	241900	45.81	274.86	11.55	69.30
8	311906	59.07	472.56	38.65	309.20
10	62880	11.91	119.10	11.91	119.10
12	54285	10.28	123.36	10.28	123.36
Total	995521	188.53	1219.43	72.39	620.96

Percentage of jointly used line - inch miles

50.92%

ALLOCATION OF DEPRECIATION

	Total	Commodity	Demand	Customer	Wholesale
Structures and Improvements					
Source of Supply & Pumping Plant	\$14,709		14,709		14,709
New Raw Water Intake Structure	17,558		17,558		17,558
Water Treatment Plant	12,724		12,724		12,724
New WTP Structures	24,000		24,000		24,000
Other Costs-Eng, Legal etc	18,658		18,658		18,658
Transmission & Dist. Plant	117		117		117
General Plant	2,631		2,631		2,631
Wells and Springs	2,955		2,955		2,955
Supply Mains	2,175		2,175		2,175
Raw Water Intake Mains	4,779		4,779		4,779
Pumping Equipment	1,762		1,762		1,762
Water Treatment Equipment	11,754		11,754		11,754
New Water Treatment Equip	115,648		115,648		115,648
Dist. Reservoirs & Standpipes	35,129		35,129		35,129
Transmission & Dist. Mains	130,002		130,002		130,002
Meter & Meter Installations	16,888			16,888	
Hydrants	1,316			1,316	
Subtotal	\$412,805		\$394,601	\$18,204	
Percentage Subtotal	100.00%		95.59%	4.41%	
Office Furniture & Equipment	\$10,246		\$9,794	\$452	
Transportation Equipment	10,709		10,237	472	
Tools, Shop & Garage Equipment	445		425	20	
Power Operated Equipment	1,832		1,751	81	
Communication Equipment	3,089		2,953	136	
Other Plant & Misc. Equipment	1,533		1,465	68	
Subtotal	\$27,854		\$26,625	\$1,229	\$394,601
Total	\$440,659		\$421,226	\$19,433	
Percent	100.00%		95.59%	4.41%	

Wholesale Allocation Factors

Line Loss Percentage		0.0233
Plant Use Percentage		0.0124
Allowable Line Loss & Plant Use		0.0357
Webster Co. Production Multiplier	1/1-.0357	1.0370
Inch Mile Ratio	621.01/1,219.51	0.5092
Wholesale Share of Line Loss	.5092*.0233	0.0119
Joint Share Line Loss/Plant Use	.0119+.0124	0.0243
Wholesale Production Multiplier	1/1-.0243	1.0249
Production Allocation Factor	$89,751,000/262,480,178 * (1.0249/1.0370)$	0.3379
Pipeline Transmission Factor	$89,751,000/262,480,178 * .5092$	0.1741

Allocation of Wholesale Rates				
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	Total	Allocation Factor	Wholesale	Retail
Salaries				
Meter Reading/Collecting	\$59,135			\$59,135
Trans/Dist.	176,683	0.1741	30,761	145,922
Employee Pension/Benefits				
Meter Reading/Collecting	15,206			15,206
Trans/Dist.	45,618	0.1741	7,942	37,676
Worker's Comp				
Meter Reading/Collecting	1,672			1,672
Trans/Dist.	5,017	0.1741	873	4,144
Taxes Other Than Income				
Meter Reading/Collecting	4,427			4,427
Trans/Dist.	13,282	0.1741	2,312	10,970
Purchased Power	78,414	0.3379	26,496	51,918
Chemicals	70,386	0.3379	23,783	46,603
Materials & Supplies	54,231	0.3379	18,325	35,906
Bad Debt Expense	580			580
Miscellaneous Expense	12,074			12,074
Salaries				
Admin/General	45,943			45,943
Commissioner Fees	12,000			12,000
Employee Pension/Benefits				
Admin/General	11,585			11,585
Taxes Other Than Income				
Admin/General	3,373			3,373
Materials & Supplies				
Admin/General	3,983			3,983
Contract Services				
Accounting	8,300			8,300
Legal	3,000			3,000
Transportation Expense	10,711			10,711
Insurance				
General Liability	21,278			21,278
Worker's Comp/Admin-General	1,274			1,274
Other	432			432
Amort - Rate Case Expense	3,333			3,333
Amort - Non-Recurring Expense	1,738			1,738
Regulatory Comm Expense	1,989			1,989
Miscellaneous Expense	12,126			12,126
Total O/M Expense	677,790		110,492	567,298
Depreciation	440,659	Note 1	134,914	305,745
Debt Service	634,255	Note 2	216,852	417,403
	\$1,752,704		\$462,258	\$1,290,446
Less Other Operating Income	(18,469)			(18,469)
Total Revenue Required	\$1,734,235		\$462,258	\$1,271,977
Depreciation Adjustment	(265,867)		(90,900)	(174,967)
Debt Service Adjustment	(115,290)		(39,418)	(75,872)
Revenue Requested by Utility	\$1,353,078		\$331,940	\$1,021,138

Note 1: Wholesale Depreciation based on \$394,601 x Ratio of Total Produced to Sales to Wholesale.

Note 2: Wholesale Debt Service based on Ratio of Total Produced to Sales to Wholesale.

Wholesale Rate

Based on \$1,734,236 Revenue	\$5.15
Based on \$1,353,079 Revenue	\$3.70

ALLOCATION OF PLANT VALUE

	Total	Commodity	Demand	Customer
Structures and Improvements				
Source of Supply & Pumping Plant	461,268		461,268	
New Raw Water Intake Structure	877,877		877,877	
Water Treatment Plant	574,010		574,010	
New WTP Structures	1,200,000		1,200,000	
Other Costs-Eng, Legal etc	932,901		932,901	
Transmission & Dist. Plant	5,870		5,870	
General Plant	77,961		77,961	
Wells and Springs	130,777		130,777	
Supply Mains	108,762		108,762	
Raw Water Intake Mains	238,943		238,943	
Pumping Equipment	35,117		35,117	
Water Treatment Equipment	259,523		259,523	
New Water Treatment Equip	2,891,190		2,891,190	
Dist. Reservoirs & Standpipes	1,418,212		1,418,212	
Transmission & Dist. Mains	5,640,714		5,640,714	
Land-Source of Supply	30,512		30,512	
Land-Water Treatment Plant	33,322		33,322	
Land-Trans & Dist Plant	11,573		11,573	
Meter & Meter Installations	221,539			221,539
Hydrants	52,622			52,622
Other Plant & Misc. Equipment	14,515			14,515
Subtotal	\$15,217,208		14,928,532	288,676
Percentage Subtotal	100.00%		98.10%	1.90%

ALLOCATION OF RETAIL OPERATION AND MAINTENANCE EXPENSES

	Total	Commodity	Demand	Customer
Salaries				
Meter Reading/Collecting	59,135			59,135
Trans/Dist.	145,922		145,922	
Employee Pension/Benefits				
Meter Reading/Collecting	15,206			15,206
Trans/Dist.	37,676		37,676	
Worker's Comp				
Meter Reading/Collecting	1,672			1,672
Trans/Dist.	4,144		4,144	
Taxes Other Than Income				
Meter Reading/Collecting	4,427			4,427
Trans/Dist.	10,970		10,970	
Purchased Power	51,918	51,918		
Chemicals	46,603	46,603		
Materials & Supplies	35,906		30,161	5,745
Bad Debt Expense	580			580
Miscellaneous Expense	12,074		10,030	2,044
Subtotal	426,233	98,521	238,903	88,809
Less Commodity	(98,521)			
TOTAL	327,712			
Percentage	100.00%		72.90%	27.10%
Salaries				
Admin/General	45,943		33,492	12,451
Commissioner Fees	12,000		8,748	3,252
Employee Pension/Benefits				
Admin/General	11,585		8,445	3,140
Taxes Other Than Income				
Admin/General	3,373		2,459	914
Materials & Supplies				
Admin/General	3,983		2,904	1,079
Contract Services				
Accounting	8,300		6,051	2,249
Legal	3,000		2,187	813
Transportation Expense	10,711		7,808	2,903
Insurance				
General Liability	21,278		15,512	5,766
Worker's Comp/Admin-General	1,274		929	345
Other	432		315	117
Amort - Rate Case Expense	3,333		2,430	903
Amort - Non-Recurring Expense	1,738		1,267	471
Regulatory Comm Expense	1,989		1,450	539
Miscellaneous Expense	12,126		8,840	3,286
Subtotal	141,065		102,837	38,228
Total O/M Expense	567,298	98,521	341,740	127,037
Depreciation	305,745		292,262	13,483
Debt Service	417,403		409,472	7,931
Subtotal	\$1,290,446		\$1,043,474	\$148,451
Less Other Operating Income	(18,469)			(18,469)
Total Revenue Required (1)	\$1,271,977	98,521	\$1,043,474	\$129,982
Depreciation Adjustment	(174,967)		(167,251)	(7,716)
Debt Service Adjustment	(75,872)		(74,430)	(1,442)
Revenue Requested by Utility (1)	\$1,021,138	98,521	\$801,793	\$120,824

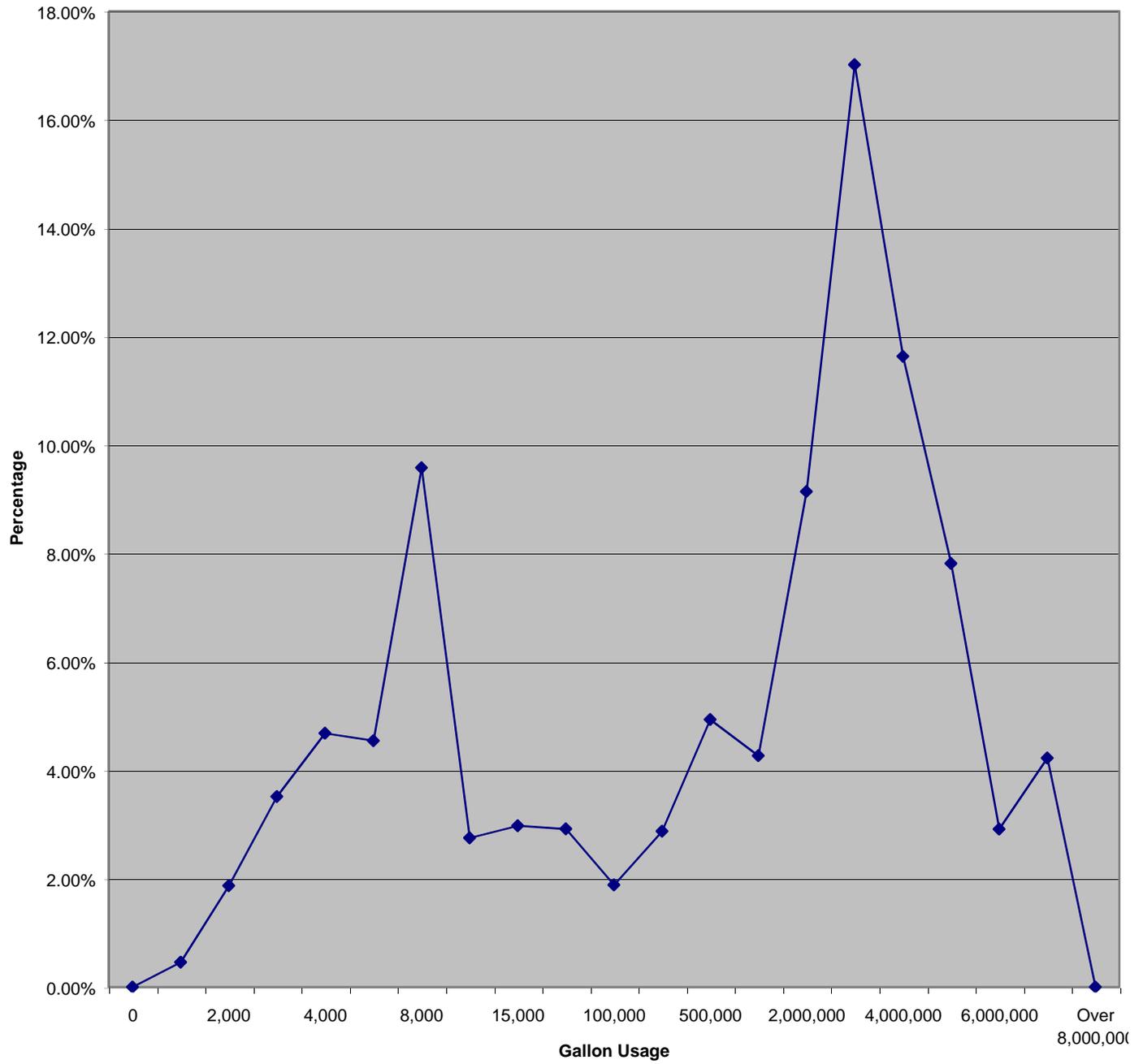
(1) Total Required from Sheet 5 - Allocation of Wholesale Rate

ALLOCATION OF RETAIL COST OF SERVICE

Utility Requested

	Total	Commodity	Demand	Customer
Operation & Maintenance	\$567,298	\$98,521	\$341,740	\$127,037
Depreciation	130,778		125,011	5,767
Debt Service	341,531		335,042	6,489
General Water Service Cost	\$1,039,607	98,521	\$801,793	\$139,293
Less: Other Revenue	(18,469)			(18,469)
Total Required from Rates	\$1,021,138	98,521	\$801,793	\$120,824

Webster Co WD Usage Pattern-Retail Customers Sheet 9



CALCULATION OF RETAIL WATER RATES
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Utility Requested Revenue

	Total	First 2,000,000	Over 2,000,000
Actual Water Sales:			
Thousand Gallons	172,729,178	143,416,478	29,312,700
	100.00%	83.03%	16.97%
Weighted Sales for Demand:			
Thousand Gallons	244,437,417	215,124,717	29,312,700
Percent	100.00%	88.01%	11.99%
Allocation of Volumetric Costs:			
Commodity	\$98,521	\$81,802	\$16,719
Demand	801,793	705,658	96,135
Total	\$900,314	\$787,460	\$112,854
Proposed Rates		\$5.49	\$3.85
Customer Costs	\$120,824		
Number of Bills	14,288		
Customer Charge	\$8.46		

VERIFICATION OF RATES

Utility Requested Revenue

	Bills	Gallons	Rate	Revenue
Customer Charge	14,288		8.47	\$121,019
First 2,000,000 gallons		143,416,478	5.49	787,356
Over 2,000,000 gallons		29,312,700	3.85	112,854
Retail Revenue				\$1,021,229
Wholesale Revenue		89,751,000	3.70	331,940
Total Revenue		262,480,178		\$1,353,169

Customer charge raised by \$0.01 to produce required revenue.

ALLOCATION OF RETAIL COST OF SERVICE

Based on Staff Revenue Requirement

	Total	Commodity	Demand	Customer
Operation & Maintenance	\$567,298	\$98,521	\$341,740	\$127,037
Depreciation	305,745		292,262	13,483
Debt Service	417,403		409,472	7,931
General Water Service Cost	1,290,446	98,521	1,043,474	148,451
Less: Other Revenue	(18,469)			(18,469)
Total Required from Rates	\$1,271,977	\$98,521	\$1,043,474	\$129,982

CALCULATION OF RETAIL WATER RATES

Based on Staff Revenue Requirement

	Total	First 2,000,000	Over 2,000,000
Actual Water Sales:			
Thousand Gallons	172,729,178	143,416,478	29,312,700
	100.00%	83.03%	16.97%
Weighted Sales for Demand:			
Thousand Gallons	244,437,417	215,124,717	29,312,700
Percent	100.00%	88.01%	11.99%
Allocation of Volumetric Costs:			
Commodity	\$98,521	\$81,802	\$16,719
Demand	1,043,474	918,361	125,113
Total	\$1,141,995	\$1,000,163	\$141,832
Proposed Rates		\$6.97	\$4.84
Customer Costs	\$129,982		
Number of Bills	14,288		
Customer Charge	\$9.10		

VERIFICATION OF RATES

Based on Staff Revenue Requirement

	Bills	Gallons	Rate	Revenue
	14,288		9.10	\$130,021
First 2,000,000 gallons		143,416,478	6.97	999,613
Over 2,000,000 gallons		29,312,700	4.86	142,460
Retail Revenue				\$1,272,094
Wholesale Revenue		89,751,000	5.15	462,218
Total Revenue		262,480,178		\$1,734,312

*Note: Over 2,000,000 gallons raised by \$0.02 to produce required revenue.

COMPARISON OF RATES

Gallon Usage	Current Rates	Staff Revenue Requirement	% Increase	Utility Revenue Requirement	% Increase
2000	\$15.10	\$23.04	52.58%	\$19.45	28.81%
3000	21.85	30.01	37.35%	24.94	14.14%
5000	35.35	43.95	24.33%	35.92	1.61%
10000	65.10	78.80	21.04%	63.37	-2.66%
20000	122.60	148.50	21.13%	118.27	-3.53%
50000	295.10	357.60	21.18%	282.97	-4.11%
100000	582.60	706.10	21.20%	557.47	-4.31%
200000	887.60	1,192.10	34.31%	942.47	6.18%
1000000	3,327.60	5,080.10	52.67%	5,498.47	65.24%
2000000	6,377.60	12,050.10	88.94%	10,988.47	72.30%
3000000	9,427.60	16,910.10	79.37%	14,838.47	57.39%

ATTACHMENT D
STAFF REPORT CASE NO. 98-182
RECOMMENDED RATES FOR UTILITY REQUESTED REVENUE

Monthly Water Rates

Customer Charge	\$8.47	per month
First 2,000,000 gallons	5.49	per 1,000 gallons
Over 2,000,000 gallons	3.85	per 1,000 gallons
Wholesale Rate	\$3.70	per 1,000 gallons

ATTACHMENT E
STAFF REPORT CASE NO. 98-182
RECOMMENDED RATES FOR STAFF REVENUE REQUIREMENT

Monthly Water Rates

Customer Charge	\$9.10	per month
First 2,000,000 gallons	6.97	per 1,000 gallons
Over 2,000,000 gallons	4.86	per 1,000 gallons
Wholesale Rate	\$5.15	per 1,000 gallons

ATTACHMENT F
STAFF REPORT CASE NO. 98-182

1. Should inflation indexing be used for an annual adjustment of rates, the effective date of Commission's final order in the case shall establish the utility's anniversary date on which future inflation indexed rate adjustments will become effective.
2. No less than 90 days prior to the utility's anniversary date, the utility shall request in writing from the Executive Director of the Commission the proper index factor to be used in calculating the rate adjustment.
3. No less than 60 days prior to the utility's anniversary date, the utility shall file with the Commission revised tariff sheets setting out the utility's adjusted rates along with documentation showing how the adjustments were calculated. If the calculations are correct, the adjusted rates will be accepted as submitted. If the adjusted rates submitted by the utility are incorrectly calculated, then properly calculated rates will be established by the Commission.
4. Within 30 days of receiving the utility's revised tariff sheets, an Order will be issued establishing new rates and directing the utility to give proper customer notification of the rate adjustment.