

COMMONWEALTH OF KENTUCKY  
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

THE APPLICATION OF OHIO COUNTY WATER )  
DISTRICT FOR (1) AUTHORITY TO ASSUME )  
OWNERSHIP, OPERATION AND MAINTENANCE )  
OF ROUGH RIVER WATER SYSTEM, INC. (2) ) CASE NO. 95-459  
AUTHORITY TO MAKE GENERAL ADJUSTMENTS )  
IN THE CURRENT RATES AND (3) AUTHORITY )  
TO INCREASE THE CURRENT CONNECTION FEES )

O R D E R

On December 28, 1995, Ohio County Water District ("Ohio Water") petitioned the Commission for authority to adjust its rates and increase its connection fees, using an historical test period, pursuant to 807 KAR 5:001, Section 10(1)(a). Ohio Water also requested approval to assume ownership of the Rough River Water System, Inc. ("Rough River"). Ohio Water's application was not deemed filed until March 28, 1996, when all filing deficiencies were cured.

In its original application, Ohio Water requested a revenue increase of \$337,217 using the calendar year 1994 as its test period. While attempting to cure filing deficiencies, Ohio Water's 1995 financial statements became available. Consequently, the test period was amended to the calendar year 1995. Using 1995 financial information, Ohio Water revised its requested revenue increase to \$445,638.<sup>1</sup>

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<sup>1</sup> Exhibit EE, Ohio Water's response to the Commission's August 1, 1996 Order, Item 1.

The Attorney General of the Commonwealth of Kentucky, by and through his Civil and Environmental Law Division's Public Service Litigation Branch ("Attorney General") is the sole intervenor in this case.

On October 10, 1996, an informal conference was held at the Commission's offices in Frankfort, Kentucky and all parties attended represented by counsel. During the conference, Ohio Water inquired about amending its application to include a wholesale rate for the city of Beaver Dam ("Beaver Dam"). At the conference, Commission Staff ("Staff") provided the parties with its recommended adjustments to Ohio Water's rate request. On November 1, 1996, Staff provided the parties with schedules, attached hereto and incorporated herein as Appendix A, depicting the revenue requirements and cost-of-service information upon which to establish a wholesale rate for Ohio Water.

On November 8, 1996, the Attorney General filed with the Commission a letter waiving his right to a hearing and seeking the Commission's decision based upon the record as established. Ohio Water filed a letter on November 12, 1996 accepting all water rates contained in Table II of Appendix A, Cost-of-Service Study, except the \$1.08 wholesale rate for Beaver Dam. Ohio Water states that the rate of \$1.10 reflects the current rate charged to Beaver Dam and that retaining this rate should minimize the necessity for prospective rate increases. Ohio Water further states that it has recently worked out an agreement with the city of Fordsville ("Fordsville") to establish a stand-by water supply and is planning on a more permanent long-range solution to provide regular water service to Fordsville.

In its November 12, 1996 letter, Ohio Water withdrew its request to increase the connection fee for 1- and 2-inch meters and sought, in lieu thereof, the authority to charge the actual cost of installing these meters. It did not, however, withdraw its proposed connection fee of \$450 for 3/4-inch meters. Finally, Ohio Water waived its right to a hearing and requested the Commission to issue its decision based upon the record.

The Commission, having previously determined that the proposed assumption of ownership of Rough River is in the public interest and having received no objections from the Attorney General concerning that matter, approved the same by separate Order dated December 3, 1996. This Order addresses the remaining issues in this case.

Having considered the evidence of record and being otherwise sufficiently advised, the Commission finds that:

1. The rates proposed by Ohio Water should be denied.
2. The schedules depicting the revenue requirements and the cost-of-service information contained in Appendix A are supported by the evidence of record, are reasonable, and are hereby adopted as the findings of the Commission in this proceeding.
3. Ohio Water's proposed wholesale rate of \$1.10 per 1,000 gallons is reasonable and should be approved.
4. The proposed connection fee of \$450 for a 3/4-inch meter should be approved. Ohio Water should be allowed to charge the actual cost of installation for larger meters.

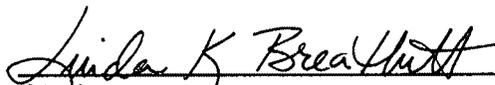
5. The rates in Appendix B, which is attached hereto and incorporated herein, are the fair, just, and reasonable rates to be charged by Ohio Water and will produce gross annual revenues of \$1,407,651, an increase of \$348,085 above normalized operating revenues of \$1,059,566.

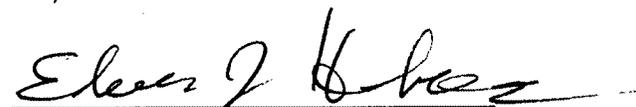
IT IS THEREFORE ORDERED that:

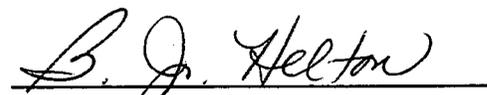
1. The rates proposed by Ohio Water are hereby denied.
2. The rates for water service and the connection fees in Appendix B are approved for service rendered by Ohio Water on and after the date of this Order.
3. Within 30 days from the date of this Order, Ohio Water shall file with the Commission revised tariff sheets setting out the rates approved herein.

Done at Frankfort, Kentucky, this 27th day of January, 1997.

PUBLIC SERVICE COMMISSION

  
Chairman

  
Vice Chairman

  
Commissioner

ATTEST:

  
Executive Director

APPENDIX A  
 AN APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN  
 CASE NO. 95-459 DATED JANUARY 27, 1997

STAFF'S SUGGESTED PRO FORMA OPERATIONS

	Combined System	Pro Forma Adjustments	Adj Ref.	Pro Forma Operations
Operating Revenues				
Water Sales	\$1,098,607	(\$39,041)	I	\$1,059,566
Forfeited Discounts	26,907	0		26,907
Misc. Service Revenues	36,814	(24,305)	I	12,509
Other Water Revenues	2,648	0		2,648
Total Operating Revenues	<u>\$1,164,976</u>	<u>(\$63,346)</u>		<u>\$1,101,630</u>
Operating Expenses				
Operation & Maintenance:				
Salaries & Wages - Employees	\$375,754	\$36,604	A	\$412,358
Employee Pensions & Benefits	67,382	4,524	B	71,906
Purchased Water	55,285	(55,285)	I	0
Purchased Power	128,550	(15,219)	C	113,331
Chemicals	81,558	(9,782)	C	71,776
Materials & Supplies	69,940	(1,786)	I	68,154
Contractual Services - Eng.	37,175	(32,059)	D	5,116
Contractual Services - Acct.	22,915	0		22,915
Contractual Services - Legal	105	0		105
Contractual Services - Other	49,758	(24,305)	I	25,453
Rent Building/Real. Prop.	8,510	0		8,510
Rent Equipment	3,388	0		3,388
Transportation	31,455	0		31,455
Insurance - Vehicle	2,985	0		2,985
Insurance - Gen. Liability	1,607	0		1,607
Insurance - Workers' Comp.	27,998	0		27,998
Insurance - Other	7,135	0		7,135
Advertising	483	0		483
Bad Debt	5,646	0		5,646
Miscellaneous	17,959	0		17,959
Total Operation & Maintenance	<u>\$995,588</u>	<u>(\$97,308)</u>		<u>\$898,280</u>
Depreciation	199,941	1,231	E	201,172
Amortization	0	17,079	F	17,079
Taxes Other Than Income	31,704	2,305	G	34,009
Total Operating Exp.	<u>\$1,227,233</u>	<u>(\$76,693)</u>		<u>\$1,150,540</u>
Utility Operating income	(\$62,257)	\$13,347		(\$48,910)
Gains/(Losses) - Disposition Utility Prop.	9,207	0		9,207
Total Utility Operating Income	<u>(\$53,050)</u>	<u>\$13,347</u>		<u>(\$39,703)</u>
Other Income & Deductions:				
Interest & Dividends	77,707	(38,297)	H	39,410
Net Income Available for Debt Service	<u>\$24,657</u>	<u>(\$24,950)</u>		<u>(\$293)</u>

OHIO COUNTY'S REQUESTED PRO FORMA OPERATIONS

	Ohio County Water Dist.	Rough River Water Sys.	Combined System	Pro Forma Adjustments	Pro Forma Operations
<b>Operating Revenues</b>					
Water Sales	\$993,113	\$105,494	\$1,098,607	(\$39,041)	\$1,059,566
Forfeited Discounts	26,907	0	26,907	0	26,907
Misc. Service Revenues	36,814	0	36,814	(24,305)	12,509
Other Water Revenues	30	2,618	2,648	0	2,648
<b>Total Operating Revenues</b>	<b>\$1,056,864</b>	<b>\$108,112</b>	<b>\$1,164,976</b>	<b>(\$63,346)</b>	<b>\$1,101,630</b>
<b>Operating Expenses</b>					
<b>Operation &amp; Maintenance:</b>					
Salaries & Wages - Employees	\$369,418	\$6,336	\$375,754	\$50,584	\$426,338
Employee Pensions & Benefits	67,382	0	67,382	0	67,382
Purchased Water	0	55,285	55,285	(53,259)	2,026
Purchased Power	126,316	2,234	128,550	0	128,550
Chemicals	81,558	0	81,558	0	81,558
Materials & Supplies	68,154	1,786	69,940	(1,786)	68,154
Contractual Services - Eng.	37,175	0	37,175	0	37,175
Contractual Services - Acct.	22,915	0	22,915	0	22,915
Contractual Services - Legal	105	0	105	0	105
Contractual Services - Other	21,716	28,042	49,758	(24,305)	25,453
Rent Building/Real. Prop.	8,510	0	8,510	0	8,510
Rent Equipment	3,388	0	3,388	0	3,388
Transportation	29,955	1,500	31,455	0	31,455
Insurance - Vehicle	2,985	0	2,985	0	2,985
Insurance - Gen. Liability	1,607	0	1,607	0	1,607
Insurance - Workers' Comp.	27,998	0	27,998	0	27,998
Insurance - Other	6,158	977	7,135	0	7,135
Advertising	483	0	483	0	483
Bad Debt	5,646	0	5,646	0	5,646
Miscellaneous	17,959	0	17,959	0	17,959
<b>Total Operation &amp; Maintenance</b>	<b>\$899,428</b>	<b>\$96,160</b>	<b>\$995,588</b>	<b>(\$28,766)</b>	<b>\$966,822</b>
Depreciation	187,530	12,411	199,941	1,439	201,380
Amortization	0	0	0	10,667	10,667
Taxes Other Than Income	31,048	656	31,704	(495)	31,209
<b>Total Operating Exp.</b>	<b>\$1,118,006</b>	<b>\$109,227</b>	<b>\$1,227,233</b>	<b>(\$17,155)</b>	<b>\$1,210,078</b>
Utility Operating income	(\$61,142)	(\$1,115)	(\$62,257)	(\$46,191)	(\$108,448)
Gains/(Losses) - Disposition Utility Prop.	9,207	0	9,207	0	9,207
<b>Total Utility Operating Income</b>	<b>(\$51,935)</b>	<b>(\$1,115)</b>	<b>(\$53,050)</b>	<b>(\$46,191)</b>	<b>(\$99,241)</b>
<b>Other Income &amp; Deductions:</b>					
Interest & Dividends	77,182	525	77,707	0	77,707
<b>Net Income Available for Debt Service</b>	<b>\$25,247</b>	<b>(\$590)</b>	<b>\$24,657</b>	<b>(\$46,191)</b>	<b>(\$21,534)</b>

A. Salaries & Wages - Employees:

Staff's adjustment reflects: Ohio County's current staff and the actual hours worked in the test period; the July 1996 pay raises; deducting the labor cost incurred to install new meters and to replace the existing meters; eliminating Rough River's employee; and including the new employee hired to implement its line flushing program.

Employee Name	Hours		July '96 Wages	Pro Forma Payroll
	Regular	Overtime		
B. Glenn	2,080	38	\$11.29	\$24,127
M. Harbaugh	2,080	13	\$11.28	23,674
D. Henderson	1,314	30	\$6.47	8,793
R. Henderson	2,080	116	\$10.36	23,344
C. Horn	2,080	41	\$9.50	20,344
D. Horn	2,080	267	\$11.29	27,996
D.C. Morris	2,080	75	\$9.82	21,531
L. Powers	2,080	0	\$11.28	23,462
D. Sampson	2,080	137	\$11.60	26,503
C. Taylor	2,080	40	\$11.28	24,139
S. Thomas	2,080	0	\$12.26	25,501
J. White	2,080	0	\$16.76	34,861
J. Leach	2,080	0	\$8.00	16,640
J. Porter	2,080	0	\$19.11	39,749
C. Stone	2,080	0	\$10.00	20,800
E. Williams	2,080	12	\$16.14	33,862
M. Brown	2,080	178	\$8.72	20,466
J. Sampson	240	0	\$6.00	1,440
Subtotal				\$417,232
Less:	New Meter Installation - Labor			(7,632)
	Meter Replacement Program - Labor			(7,546)
	Rough River Employee			(6,336)
Add:	New Employee \$8 (Proposed Hourly Wage) x 2,080 (Annual Hrs) =			16,640
Pro Forma Salaries & Wages				\$412,358
Reported Salaries & Wages				375,754
Staff Adjustment				\$36,604
<u>New Meter Installation - Labor</u>				
Avg. Hours:	5 (Hours Long Side) + 3 (Short Side) = 8 (Hours) * 50% =			4
Times:	Number of Meters Ohio County Installed in 1995			100
Labor Hours Required to Install New Meters in 1995				400
Times:	Hourly Wages Paid to Install New Meters			\$19.08
New Meter Installation - Labor				\$7,632
<u>Meter Replacement Program - Labor:</u>				
Average Hourly Labor Rate				\$9.54
Times:	Annual Number of Meters to be Replaced			791
Meter Replacement Program - Labor				\$7,546

B. Employee Pensions & Benefits:

The recommended increase in pro forma salaries and wages results in a corresponding increase in Ohio County's contribution into the employee retirement system. Staff's adjustment reflects the increase in Ohio County's contribution and the health insurance premium for the new employee.

Staff Payroll Adjustment	\$36,604
Times: Ohio County's Contribution Rate	8.82%
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Increase in Ohio County's Contribution	\$3,228
Annual Health Ins. Premium - New Employee	1,296
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Employee Pension & Benefit Adjustment	\$4,524
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C. Line Loss:

Ohio County's test-period line loss was 21 percent, which exceeds the Commission's allowable limit of 15 percent. Staff's adjustment to purchased power and chemical expense recognizes the 15 percent limitation on Ohio County's water production costs.

Purchased Power:

Reported Purchased Power Expense	\$128,550
Divided by: Gallons Produced in 1995	476,027
	<hr/>
Purchased Power Cost per 1,000 Gallons	\$0.270
Times: Allowable Purchases 356,781.507 / 85 % (Line Loss Reciprocal) =	419,743.000
	<hr/>
Purchased Power Reduced to Reflect 15 % Line Los	\$113,331
Less: Reported Purchased Power	128,550
	<hr/>
Purchased Power Adjustment	(\$15,219)
	<hr/> <hr/>

Chemicals:

Reported Chemical Cost	\$81,558
Divided by: Gallons Produced in 1995	476,027
	<hr/>
Chemical Cost per 1,000 Gallons (1995 Cost) /	\$0.171
Times: Allowable Purchases	419,743.000
	<hr/>
Chemical Expense Reduced to Reflect 15 % Line Los	\$71,776
Less: Reported Chemicals	81,558
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Chemical Adjustment	(\$9,782)
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D. Contractual Services - Eng.

In 1995 Ohio County performed a hydraulic analysis of its distribution system and included the cost of the analysis in its test-period operations. Because an analysis of this magnitude will not be performed on an annual basis, the cost should be amortized rather than expensed. Therefore, Staff has removed this cost from Ohio County's test-period operations and amortized the cost over 5-years.

Hydraulic Analysis - Nonrecurring	(\$32,059)
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E. Depreciation

Staff has depreciated the cost of the meter replacement program and the labor cost of installing the ne meters over 30-years as proposed by Ohio County.

	Cost	Depreciation Period	Depreciation Expense
New Meters	\$7,632	30	\$254
Meter Replacement Program			
Cost of New Meters	\$37.04		
Times: Annual No of Meters to be Replaced	791		
	<hr/>		
Cost of Meter Replacement Program	\$29,299	30	977
	<hr/>		
Depreciation Adjustment			<hr/> <hr/> \$1,231

F. Amortization:

Staff has amortized the non-recurring expenditure removed from test-period operations and the cost of filing this case over their estimated useful lives of 5 and 3 years, respectively.

	Cost	Amortization Period	Amortization Expense
Rate Case Cost	\$32,000	3	\$10,667
Hydraulic Analysis	\$32,059	5	6,412
			<hr/>
Amortization Adjustment			<hr/> <hr/> \$17,079

G. Payroll Taxes:

Staff's adjustment includes the change in FICA expense resulting from the pro forma payroll adjustment and the removal of the FICA taxes associated with Rough River's payroll.

Staff Payroll Adjustment	\$36,604
Times: Current FICA Rate	7.65%
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FICA Adjustment for Current Payroll	\$2,800
Less: Rough River Payroll Taxes	(495)
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Payroll Tax Adjustment	<hr/> <hr/> \$2,305

H. Interest Income:

Because some of Ohio County's investments are restricted, Staff's has removed the interest income associated with these restricted funds.

Restricted Interest Income	<hr/> <hr/> (\$38,297)
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1. Un-contested Issues:

Ohio County made several adjustments to test period operations, which Staff recommends the Commission accept.

Water Sales:

Water Purchased by Rough River	(\$105,494)
Add: Normalized Water Sales - Ohio County	66,453
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Water Sales Adjustment	(\$39,041)
	<hr/> <hr/>

Misc. Service Revenues:

Ohio County's Receipt of Rough River's Maintenance Fee	(\$24,305)
	<hr/> <hr/>

Purchased Water

Water Sold to Rough River	(\$55,285)
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Materials & Supplies:

Rough River's Office Supplies	(\$1,786)
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Contractual Services - Other:

Rough River's Maintenance Fee Expense	(\$24,305)
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OHIO COUNTY'S AND STAFF'S DEBT SERVICE CALCULATIONS

OHIO COUNTY WATER DISTRICT

Annual Debt Service	\$280,750
Add: Requested Coverage	56,150
Requested Debt Service Coverage	\$336,900
Add: Pro Forma Operating Expenses	1,210,078
Requested Revenue Requirement	\$1,546,978
Less: Other Operating Revenue	42,064
Requested Revenue From Rates	\$1,504,914
Less: Normalized Operating Revenue	1,059,566
Requested Revenue Increase	\$445,348

COMMISSION STAFF

KIA Loan:				Total Payment
	Year	Principal	Interest	
	1996	\$60,067	\$210,702	\$272,765
	1997	\$60,101	\$208,389	270,487
	1998	\$63,883	\$205,952	271,833
Total Debt Payment				\$815,085
3-Year AvG KIA Payment:				271,695
Add: Annual GE Debt Service Payment				10,459
Ohio County's Average Debt Service Payment				\$282,154
Add: 0.2x Debt Coverage:				56,431
Recommended Debt Service Coverage				\$338,585
Add: Staff's Pro Forma Operating Expenses				1,150,540
Recommended Revenue Requirement				\$1,489,125
Less: Interest Income				39,410
Other Operating Revenue				42,064
Recommended Operating Revenue from Rates				1,407,651
Less: Staff's Normalized Operating Revenue				1,059,566
Recommended Revenue Requirement				\$348,085

**OHIO**

**COUNTY WATER**

**DISTRICT**

Case No. 95-459

**COST OF SERVICE STUDY**



## STAFF RECOMMENDED RATES

TABLE 2

	Bills	Gallons	Rate	Revenue
First 2,000 Gallons	48,903	87,308,647	\$11.58	\$566,297
Next 98,000 Gallons		164,234,360	4.34	712,777
Over 100,000 Gallons		7,443,000	3.09	22,999
Retail Revenue				\$1,302,073
Beaver Dam	12	97,795,500	1.08	\$105,619
Total Revenue From Rates				\$1,407,692
Interest Income				39,410
Other Operating Revenue	48,915	356,781,507		42,064
Total Revenue				\$1,489,166

## COST OF SERVICE STUDY RATES (WITH WHOLESALE RATE)

TABLE 3

	Bills	Gallons	Rate	Revenue
First 2,000 Gallons	48,915	87,308,647	\$11.58	\$566,436
Next 98,000 Gallons		164,234,360	4.40	722,631
Over 100,000 Gallons		7,443,000	3.12	23,222
Retail Revenue				\$1,312,289
Beaver Dam	12	97,795,500	0.98	95,840
Total Revenue From Rates				\$1,408,129
Interest Income				39,410
Other Operating Revenue	48,927	356,781,507		42,064
Total Revenue				\$1,489,603

## COST OF SERVICE STUDY RATES (WITHOUT WHOLESALE RATE)

TABLE 4

	Bills	Gallons	Rate	Revenue
First 2,000 Gallons	48,915	87,332,647	\$11.04	\$540,022
Next 98,000 Gallons		165,410,360	3.62	598,786
Over 100,000 Gallons		104,038,500	2.59	269,460
Total Revenue From Rates				\$1,408,267
Interest Income				39,410
Other Operating Revenue	48,915	356,781,507		42,064
Total Revenue				\$1,489,741

# OHIO COUNTY WATER DISTRICT

CASE NO. 95-459

COST OF SERVICE STUDY

WHOLESALE

RATE

CALCULATION

Sheets A-1 to A-6

TOTAL WATER PRODUCED AND SOLD

Plant Use	9,077,500		
Line Loss	112,932,100		
Sales to Retail	257,354,100		
Sales to Beaver Dam	97,795,500		
Total Produced	477,159,200		
Total Sold	355,149,600		
Water Loss Percentage	$112,932,100 / 477,159,200 =$		23.67%
Plant Use Percentage	$9,077,500 / 477,159,200 =$		1.90%
Total System Loss and Plant Use			25.57%

JOINTLY USED LINES

	Total Lines			Jointly Used Lines	
		Inch			Inch
Size	Miles	Miles		Miles	Miles
10	10.00	100.00		7.86	78.6
8	35.80	286.40		2.27	18.16
6	68.90	413.40			
4	99.49	397.96			
3	105.78	317.34			
2	72.54	145.08			
1	0.50	0.50			
Total	393.01	1,660.68		10.13	96.76

ALLOCATION FACTORS

Line Loss Percentage	23.67%
Plant Use	1.90%
Allowable Line Loss and Plant Use	25.57%
Inch Mile Ratio	
$97.76 / 1,660.68$	0.0589
Beaver Dam's Share of Line Loss (1)	
$0.0589 \times .15$	0.0088
Joint Share of Line Loss and Plant Use	
$0.0088 + .0190$	0.0278
Production Factor	
97,795,500	
355,149,600	0.2754
Transmission Factor	
$97,795,500 \times .0589$	0.0162
355,149,600	
(1) 15 Percent Allowed by PSC	

ALLOCATION OF OPERATION AND MAINTENANCE EXPENSE

	Total	Allocation Factor	Allocated to Beaver Dam	Allocated to Ohio County
Transmission and Distribution	\$312,924	0.0162	\$5,069	\$307,855
Salaires and Benefits				
Customer Accounts	94,712	0	1,200	93,512
Salaries and Benefits (1)				
Administrative and General	76,625	0.0162	1,241	75,384
Salaries and Benefits				
Purchased Power (2)	113,331	0.2754	31,211	82,120
Chemicals	71,776	0.2754	19,767	52,009
Materials and Supplies	68,154	0.2754	18,770	49,384
Contractual Services	53,589	0.0162	868	52,721
Rents	11,898	0.0162	193	11,705
Transportation	31,455	0.0162	510	30,945
Insurance	39,725	0.0162	644	39,081
Advertising	483	0.0162	8	475
Bad Debt	5,643	0	0	5,643
Miscellaneous	17,959	0.0162	291	17,668
Taxes	34,009	0.0162	551	33,458
Depreciation & Amortization	218,251	0.0589	12,855	205,396
Total Operation and Maintenance	\$1,150,534		\$93,177	\$1,057,357
Debt Service (3)	338,585		2,462	336,123
Total Expenses	\$1,489,119		\$95,639	\$1,393,480
(1) Allocated \$1,200 for meter reading, maintenance, testing and replacement of Beaver Dam's meter.				
(2) Beaver Dam's purchased power allocated based on joint cost of \$74,714.				
(3) Allocated on Sheet A-5.				

ALLOCATION OF DEBT SERVICE

Loan Amount Per Mile of System = \$4,042,888 / 393.01 Miles	\$10,287
Lines Serving Beaver Dam = 10.13 (joint amount) x \$10,287	104,207
Use Factor (1)	
97,795,500 x 1.0286	0.2833
355,149,600	
Joint Share of Debt Service	
104,207 x \$338,585 (Annual Payment)	\$8,725
4,042,888	
Beaver Dam's Allocated Cost	
\$8,725 x .2833	\$2,472
(1) Joint share of plant use and line loss = .0278	
1	
1-.0278 = 1.0286	

WHOLESALE COST OF SERVICE

Operation and Maintenance Expense	\$80,322 / 97,795.500	\$0.82
Depreciation	\$12,855 / 97,795.500	0.13
Debt Service	\$2,462 / 97,795.500	0.03
Rate to Beaver Dam Per 1,000 Gallons		\$0.98

# OHIO COUNTY WATER DISTRICT

CASE NO. 95-459

COST OF SERVICE STUDY

RETAIL

RATE

CALCULATION

Sheets B-1 to B-5

ALLOCATION OF PLANT VALUE

	Total	Commodity	Demand	Customer
Source of Supply, Pumping and Treatment Plant	\$2,249,551	\$0	\$2,249,551	
Transmission, Distribution Mains & Storage	5,919,931		5,919,931	
Meters, Services & Hydrants	547,004			547,004
Subtotal	8,716,486		8,169,482	547,004
			93.72%	6.28%
General Plant (1)	454,070		425,575	28,495
Total	\$9,170,556	\$0	\$8,595,057	\$575,499
			93.72%	6.28%
(1) Allocated based on percentage of all other plant value.				
Source: Ohio County Water District - 1995 Annual Report at 28.				
Rough River Water System, Inc. - 1995 Annual Report at 20.				

ALLOCATION OF TEST YEAR DEPRECIATION AND AMORTIZATION

	Total	Commodity	Demand	Customer
Plant	\$2,003,006	\$0	\$2,003,006	
Meters and Hydrants	118,083			118,083
Subtotal	2,121,089		2,003,006	118,083
Percentage			94.43%	5.57%
Other	237,810		224,571	13,239
<b>Total</b>	<b>\$2,358,899</b>	<b>\$0</b>	<b>\$2,227,577</b>	<b>\$131,322</b>
	100.00%		94.43%	5.57%
Source: 1995 Annual Reports				

ALLOCATION OF OPERATION AND MAINTENANCE EXPENSE

	Total	Commodity	Demand	Customer
Transmission and Distribution	\$307,855		\$307,855	
Salaries and Benefits				
Customer Accounts	93,512			93,512
Salaries and Benefits				
Purchased Power	82,120	82,120		
Chemicals	52,009	52,009		
Bad Debt	5,643			5,643
Subtotal	541,139	134,129	307,855	99,155
Less Commodity	134,129			
Total	407,010		307,855	99,155
Percentage			75.64%	24.36%
Administrative and General	75,384		57,019	18,365
Salaries and Benefits				
Materials and Supplies	49,384		37,353	12,031
Contractual Services	52,721		39,877	12,844
Rents	11,705		8,853	2,852
Transportation	30,945		23,406	7,539
Insurance	39,081		29,560	9,521
Advertising	475		359	116
Miscellaneous	17,668		13,364	4,304
Taxes	33,458		25,307	8,151
Total	\$851,960	\$134,129	\$542,954	\$174,877
Percentages based on subtotal less commodity				
All allocations after percentage based on percent allocated to demand and customer				

ALLOCATION OF COST OF SERVICE

	Total	Commodity	Demand	Customer
Allocated Plant Value	\$9,170,556	\$0	\$8,595,057	\$575,499
Percentages	100.00%		93.72%	6.28%
Operation and Maintenance	851,960	134,129	542,954	174,877
Depreciation & Amortization (1)	205,396		193,955	11,441
Debt Service (2)	336,123		315,030	21,093
Retail Water Service Cost	1,393,479	134,129	1,051,939	207,411
Less: Interest Income	39,410			39,410
Other Operating Revenue	42,064			42,064
<b>Revenue Required From Rates</b>	<b>\$1,312,005</b>	<b>\$134,129</b>	<b>\$1,051,939</b>	<b>\$125,937</b>
(1) Depreciation and amortization based on test year percentages				
(2) Debt Service based on percentage of plant value				

ALLOCATION OF COSTS TO RATE STEPS

		First	Next	Over
Actual Water Sales	Total	2,000	98,000	100,000
Thousand Gallons	258,986,007	87,308,647	164,234,360	7,443,000
Percent	100.00%	33.71%	63.41%	2.87%
Weighted Sales for Demand				
Thousand Gallons	406,584,672	152,790,132	246,351,540	7,443,000
Percent	100.00%	37.58%	60.59%	1.83%
Allocation for Volumetric Costs				
Commodity	\$134,129	\$45,217	\$85,057	\$3,855
Demand	1,051,939	395,307	637,375	19,257
Total	\$1,186,068	\$440,525	\$722,432	\$23,112
Water Rate (1)		\$9.01	\$4.40	\$3.12
Plus Customer Charge (1)	125,937	2.58		
Total Rate	\$1,312,005	\$11.58	\$4.40	\$3.12
(1) Minimum bill determined by dividing cost by number of bills.				

# OHIO COUNTY WATER DISTRICT

CASE NO. 95-459

COST OF SERVICE STUDY

RATE

CALCULATION

(No Wholesale Rate)

Sheets C-1 to C-6

ALLOCATION OF PLANT VALUE

	Total	Commodity	Demand	Customer
Source of Supply, Pumping and Treatment Plant	\$2,249,551	\$0	\$2,249,551	
Transmission, Distribution Mains & Storage	5,919,931		5,919,931	
Meters, Services & Hydrants	547,004			547,004
Subtotal	8,716,486		8,169,482	547,004
			93.72%	6.28%
General Plant (1)	454,070		425,575	28,495
Total	\$9,170,556	\$0	\$8,595,057	\$575,499
			93.72%	6.28%
(1) Allocated based on percentage of all other plant value.				
Source: Ohio County Water District - 1995 Annual Report at 28.				
Rough River Water System, Inc. - 1995 Annual Report at 20.				

ALLOCATION OF DEPRECIATION AND AMORTIZATION

	Total	Commodity	Demand	Customer
Plant	\$2,003,006	\$0	\$2,003,006	
Meters and Hydrants	118,083			118,083
Subtotal	2,121,089		2,003,006	118,083
Percentage			94.43%	5.57%
Other	237,810		224,571	13,239
<b>Total</b>	<b>\$2,358,899</b>	<b>\$0</b>	<b>\$2,227,577</b>	<b>\$131,322</b>
	100.00%		94.43%	5.57%
Source: 1995 Annual Reports				

ALLOCATION OF OPERATION AND MAINTENANCE EXPENSE

	Total	Commodity	Demand	Customer
Transmission and Distribution	\$312,924		\$312,924	
Salaries and Benefits				
Customer Accounts	94,712			94,712
Salaries and Benefits				
Purchased Power	113,331	113,331		
Chemicals	71,776	71,776		
Bad Debt	5,643			5,643
Subtotal	598,386	185,107	312,924	100,355
Less Commodity	185,107			
Total	413,279		312,924	100,355
Percentage			75.72%	24.28%
Administrative and General	76,625		58,018	18,607
Salaries and Benefits				
Materials and Supplies	68,154		51,604	16,550
Contractual Services	53,589		40,576	13,013
Rents	11,898		9,009	2,889
Transportation	31,455		23,817	7,638
Insurance	39,725		30,079	9,646
Advertising	483		366	117
Miscellaneous	17,959		13,598	4,361
Taxes	34,009		25,751	8,258
<b>Total</b>	<b>\$932,283</b>	<b>\$185,107</b>	<b>\$565,742</b>	<b>\$181,434</b>
Percentages based on subtotal less commodity				
All allocations after percentage based on percent allocated to demand and customer				

ALLOCATION OF COST OF SERVICE

	Total	Commodity	Demand	Customer
Allocated Plant Value	\$9,170,556	\$0	\$8,595,057	\$575,499
Percentages	100.00%		93.72%	6.28%
Operation and Maintenance	932,283	134,129	542,954	174,877
Depreciation & Amortization (1)	218,251		206,094	12,157
Debt Service (2)	338,585		317,337	21,248
Retail Water Service Cost	1,489,119	134,129	1,066,385	208,282
Less: Interest Income	39,410			39,410
Other Operating Revenue	42,064			42,064
<b>Revenue Required From Rates</b>	<b>\$1,407,645</b>	<b>\$134,129</b>	<b>\$1,066,385</b>	<b>\$126,808</b>
(1) Depreciation and amortization based on test year percentages				
(2) Debt Service based on percentage of plant value				

ALLOCATION OF COST TO RATE STEPS

		First	Next	Over
Actual Water Sales	Total	2,000	98,000	100,000
Thousand Gallons	356,781,507	87,308,647	165,410,360	104,038,500
Percent	99.99%	24.47%	46.36%	29.16%
Weighted Sales for Demand				
Thousand Gallons	526,819,334	174,665,294	248,115,540	104,038,500
Percent	100.00%	33.15%	47.10%	19.75%
Allocation for Volumetric Costs				
Commodity	\$185,107	\$45,298	\$85,819	\$53,978
Demand	1,089,173	361,112	512,967	215,094
Total	\$1,274,280	\$406,410	\$598,786	\$269,072
Water Rate (1)		\$8.31	\$4.40	\$3.12
Plus Customer Charge (1)	133,365	2.73		
Total Rate	\$1,407,645	\$11.04	\$3.62	\$2.59
(1) Minimum bill determined by dividing cost by number of bills.				

VERIFICATION OF RATES

	Bills	Gallons	Rate	Revenue
First 2,000 Gallons	48,915	87,332,647	\$11.04	\$540,022
Next 98,000 Gallons		165,410,360	3.62	598,786
Over 100,000 Gallons		104,038,500	2.59	269,460
Total Revenue From Rates				\$1,408,267
Interest Income				39,410
Other Operating Revenue	48,915	356,781,507		42,064
Total Revenue				\$1,489,741

## APPENDIX B

### APPENDIX TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 95-459 DATED JANUARY 27, 1997

The following rates and charges are prescribed for the customers in the area served by Ohio County Water District. 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.

#### Rates: Monthly

First 2,000 gallons	\$ 11.50	Minimum Bill
Next 98,000 gallons	4.35	per 1,000 gallons
Over 100,000 gallons	3.11	per 1,000 gallons
Wholesale Rate	1.10	per 1,000 gallons

#### Connection Fees:

3/4 Inch Meter	\$450.00
Larger than 3/4 Inch Meter	Actual Cost of Installation