

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

PROPOSED ADJUSTMENT OF THE WHOLESALE)
WATER SERVICE RATES OF THE CITY OF) CASE NO. 2006-00403
FALMOUTH)

ORDER

Commission Staff, having performed a limited financial review of the city of Falmouth's operations, has prepared the attached Staff Report containing Staff's findings and recommendations regarding the city of Falmouth's proposed wholesale rate. All parties should review the report carefully and provide any written comments or requests for a hearing or informal conference no later than 10 days from the date of this Order.

IT IS THEREFORE ORDERED that all parties shall have no more than 10 days from the date of this Order to provide written comments regarding the attached Staff Report or requests for hearing or informal conference. If no request for a hearing or informal conference is received, this case will be submitted to the Commission for a decision.

Done at Frankfort, Kentucky, this 11th day of May, 2007.

By the Commission

ATTEST:


Executive Director

STAFF REPORT
ON
CITY OF FALMOUTH
CASE NO. 2006-00403

By letters dated August 18, 2006, the city of Falmouth ("Falmouth") notified Pendleton County Water District ("Pendleton") and East Pendleton County Water District ("East Pendleton") that Falmouth's wholesale water rate charged to each of them would be increased to \$2.10 and \$2.02 per thousand gallons, respectively. The current rate charged by Falmouth to each of the districts is \$1.98 per thousand gallons. By letter dated September 1, 2006, Pendleton and East Pendleton requested that the Kentucky Public Service Commission ("Commission") suspend Falmouth's proposed wholesale rate and investigate its reasonableness.

By Order dated September 22, 2006, the Commission suspended Falmouth's proposed wholesale rate and opened this case to review its reasonableness. That Order established a procedural schedule and included the Commission's initial request for information. Falmouth filed its response to the initial request on November 15, 2005. The Commission followed Falmouth's response with a second request for information by Order dated December 6, 2006. By a filing received by the Commission on January 8, 2007, Falmouth responded to the second request by asking that an informal conference be held. The Commission granted the request and directed an informal conference be held between Commission Staff ("Staff") and all parties on January 11, 2007. Pursuant to the conference the Commission issued an Order dated January 23, 2007, suspending all procedural schedules and Ordered Staff to perform a

limited financial review of Falmouth's operations and issue a report summarizing its findings and recommendations. Pursuant to the Commission Order, Staff performed a review and offers this report stating its findings and recommendations.

Jack Scott Lawless is responsible for Attachment A of this report which contains the adjusted pro forma operating statement and revenue requirement calculations. Jason Green is responsible for Attachment B of this report which is the cost of service study used to allocate the revenue requirements to Falmouth's customer classes for the development of the wholesale rate recommended by Staff.

The test-year used by Falmouth to determine its proposed wholesale rate was the fiscal year ended June 30, 2005. Staff's limited financial review was of Falmouth's test-year operations. The scope of Staff's review was limited to obtaining information as to whether the test-period operating revenues and expenses were representative of normal operations. All adjustments to test-year operations must be known and measurable as required by administrative regulation 807 KAR 5:001 Section 10 (7). Insignificant or immaterial discrepancies were not pursued and are not addressed herein.

All adjustments to test-year operations are shown and discussed in Attachment A of this report. As shown at page 35 of Attachment A Falmouth's revenue requirement from rates as determined by Staff is \$600,986. The portion of the revenue requirement from rates allocated to Pendleton and East Pendleton through the cost of service study as shown at page 6 of Attachment B is \$91,330 and \$149,016, respectively, and results in wholesale rates of \$1.68 and \$1.64 per thousand gallons, respectively. The total revenue requirement allocated to Pendleton and East Pendleton by Staff is \$240,346, a

decrease of 16 percent from test-year revenues of \$287,628 from wholesale water sales.

In its cost of service study Staff applied the “inch-miles” method to allocate expenses to Falmouth’s wholesale customers. This method has been accepted by the Commission in past proceedings and it is Staff’s opinion that this method is reasonable in this case. Since Falmouth supplies water to the two wholesale customers using differing portions of the system, two separate rates are appropriate.

Signatures:

Prepared by: Jack Scott Lawless, CPA
Financial Analyst, Water and Sewer
Revenue Requirements Branch
Division of Financial Analysis

Prepared by: Jason Green
Rate Analyst, Communications, Water,
and Sewer Rate Design Branch
Division of Financial Analysis

ATTACHMENT A
STAFF REPORT CASE NO. 2006-00403
ADJUSTED OPERATIONS AND DETERMINATION
OF REVENUE REQUIREMENT

Summary of Review:

In performing its review Staff obtained a general understanding of Falmouth's accounting and reporting system. Falmouth's accounting system is designed to account for each of its operating divisions separately. Each of Falmouth's operating divisions is accounted for in two separate funds: the general fund and the utility fund. The operating divisions accounted for in the general fund are Falmouth's police department, fire department, and city council while the utility fund includes accounting for Falmouth's electricity operations, water operations, sewer operations, garbage services and the city clerk's office.

Pro forma revenues and expenses for the Water Division as determined by Staff can be placed into one of these three categories: 1) directly assignable, 2) common to the utility fund, or 3) common to the utility and general funds.

Revenues and expense that are directly assignable to the Water Division are those that are identified as being collected or incurred as a direct result of providing water service and are not related to the operation or function of any other operating division. Pro forma revenues and expenses that are not directly assignable are common to Falmouth's water operations and either the general fund, the utility fund, or both. Common items were identified and allocated to the appropriate operating division based upon reasonable allocation methods. All allocation methods are discussed in the sections of this report where they are applied.

It is important to note that Staff's review was limited. Staff obtained a reasonable understanding of Falmouth's operations and internal controls and performed substantive and analytical procedures to attempt to insure that there are no misrepresentations in Staff's pro forma operating statement that would have a material effect on Staff's recommendations contained herein. However, Staff did not review 100 percent of Falmouth's business transactions, therefore, it is possible that the pro forma water operations as determined by Staff are not totally representative of the cost to operate Falmouth's water system.

Determination of Pro Forma Operations:

For the test-year Falmouth reported Water Division operating expenses of \$644,699¹ which it proposed to increase by \$122,586 as shown below.

	Test Year	Adjustments	Pro forma
Salaries and Wages	\$ 272,629	\$ (43,827)	\$ 228,802
Retirement, Health Insurance, FICA Tax	65,292	9,262	74,554
Other Operation and Maintenance	225,249	74,680	299,929
Depreciation	81,529	82,471	164,000
Total	<u>\$ 644,699</u>	<u>\$ 122,586</u>	<u>\$ 767,285</u>

Falmouth's proposed adjustments to Salaries and Wages and Depreciation will be discussed by Staff in the sections of this report dedicated to those accounts.

The adjustment proposed by Falmouth to Retirement, Health Insurance and FICA Taxes is not detailed in Falmouth's cost of service study. Not knowing the nature of Falmouth's adjustment, Staff recommends that it be denied. Retirement, Health

¹ See Falmouth's Response to Commission Order Dated September 22, 2006, Item 2, Page 90 of 94.

Insurance and FICA Taxes has been adjusted by Staff as described in the sections of this report dedicated to those accounts.

Falmouth proposed adjustments to all other operation and maintenance expenses to collectively increase test-year operations by \$74,680. These adjustments were based upon a budgeted “2-year projection.”² Staff recommends that Falmouth’s adjustments be denied as they do not meet the rate-making criteria of known and measurable as required by administrative regulation 807 KAR 5:001, Section 10 (7). Staff has recommended various adjustments to these operations and maintenance expense accounts as described in the following sections of this report.

Additionally, test-year other operation and maintenance expenses as determined by Falmouth and shown above includes interest expense and amortization of loan fees in the amounts of \$10,105 and 5,667, respectively. These expenses should have been reported “below the line.” Staff has made this correction on its Adjusted Pro Forma Operating Statement shown below by not including them in the calculation of Net Operating Income.

Based upon the adjustments recommended by Staff, Falmouth’s Water Division Adjusted Pro Forma Operating Statement appears as shown below. Explanation of all adjustments follows the Adjusted Pro Forma Operating Statement.

² Id., Item 25 Page 15 of 26.

	Test Year	Adjustments	Pro forma
Operating Revenue			
Sales of Water	\$ 642,371	\$ (7,200) (A)	\$ 635,171
Other Water Revenue		13,035 (B)	13,035
	<hr/>		
Total Operating Revenue	642,371	5,835	648,206
	<hr/>		
Operating Expenses			
Operation and Maintenance			
Salaries and Wages	272,629	(74,367) (D)	198,262
Retirement	19,681	12,572 (E)	32,253
Employee Insurance	27,635	(6,547) (F)	21,088
Workman's Compensation Insurance	23,545	(15,246) (E)	8,299
Bank Fees	1,363	(542) (G)	821
Electricity		24,662 (H)	
		(3,699) (I)	20,963
Chemicals	53,212	(4,405) (C)	
		(7,321) (I)	41,486
Consulting and Analysis	16,389	(7,198) (J)	9,191
Advertising	1,884		1,884
Printing	309		309
Legal and Accounting	4,221	(1,597) (K)	2,624
Insurance	71,827	(22,223) (L)	49,604
Repairs and Maintenance	4,755	23,126 (C)	
		(2,515) (M)	25,366
Travel	1,781		1,781
Education and Training	899		899
Postage	1,046		1,046
Utilities - Heat and Gas	748		748
Telephone	4,762		4,762
Supplies	18,109	(1,200) (D)	
		(7,419) (N)	9,490
Uniforms	4,594	(2,288) (O)	2,306
Gasoline	(697)	4,405 (C)	
		(1,827) (P)	1,881
Dues and Subscriptions	634		634
Equipment Expense	904	(255) (Q)	649
Miscellaneous	51		51
Bad Debts	2,400		2,400
Maintenance Garage		2,315 (R)	2,315
City Hall		6,603 (S)	6,603
	<hr/>		
Total Operation and Maintenance Expenses	532,681	(84,968)	447,713
Taxes Other Than Income	14,717	542 (E)	15,259
Depreciation Expense	81,529	(2,088) (T)	79,441
	<hr/>		
Total Operating Expenses	628,927	(86,514)	542,413
	<hr/>		
Net Operating Income	13,444	92,349	105,793
Plus: Interest Income		2,357 (U)	2,357
	<hr/>		
Net Income Available to meet Operating Ratio	\$ 13,444	\$ 94,706	\$ 108,150
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(A) Water Sales. Tap-fee collections of \$7,200 were reported in test-year water sales revenue. These collections are contributions in aid of construction and have been eliminated from operating revenues for rate-making purposes.

(B) Other Operating Revenue. During the test-year Falmouth's Utility Fund reported revenue from late fees and penalties of \$35,739 and other revenues of \$5,777. Falmouth's accounting and reporting system does not directly assign or allocate these revenues to the individual Operating Divisions responsible for their generation.

The penalty revenue is generated by a 10 percent late payment penalty on Falmouth's electric, water, sewer, and garbage services. The other revenues are derived from returned check charges, turn-on fees, and merchandising activities. Since a portion of this revenue is derived from water operations an allocation is necessary.

Staff recommends that test-year other operating revenues be increased by \$13,035, as calculated below, to allocate a portion of the penalty and other revenue to the Water Division. The allocation method is based upon test-year service revenue of the Electric, Water, Sewer, and Garbage Divisions. Falmouth should start directly assigning other revenues to the proper Operating Divisions to more accurately report revenues.

Operating Unit	Test Year Service Revenue	Percentage	Allocated Penalties and Other
Electric	\$ 1,013,124	50%	\$ 20,559
Water	642,371	31%	13,035
Sewer	215,235	11%	4,368
Garbage	175,170	9%	3,555
Total	<u>\$ 2,045,900</u>	<u>100%</u>	<u>\$ 41,516</u>

(C) Reversal of Prior Period Payables. When posting the test-year end audit adjustments certain reversing entries were posted to the wrong accounts. To correct this error the following entries are recommended by Staff.

	Dr.	Cr.
Gasoline	4,405	
Chemicals		4,405
Repairs and Maintenance	23,126	
Plant In Service		23,126

(D) Salaries and Wages and Supplies. As previously stated Falmouth proposed to decrease test-year salaries and wages expense by \$43,827.³ Staff proposes to decrease test-year salaries and wages by \$74,367. Staff's adjustment is necessary to account for current employee and pay levels allocated to the Water Division and capitalized labor. Staff is not able to reconcile its adjustment to that of Falmouth as there are no employee names or job titles on Falmouth's worksheet detailing its calculations. Staff's adjustment is shown and explained in detail below.

Pro Forma Field Employees	\$169,793
Pro Forma Office Employees	29,670
Less: Capitalized Labor	(1,200)
Less: Test Year Expense	(272,629)
Decrease	<u><u>\$ (74,367)</u></u>

Staff calculated its pro form adjustment based upon estimates of time worked by city field and office employees during the test-year on behalf of the Water Division. Direct assignment of pro forma salaries and wages was not possible in the absence of

³ Id., Item 24, Page 16 of 26, for a detail of Falmouth's pro forma Salary and Wage amount of \$228,802.

direct time reporting during the test-year. Direct time reporting requires that each employee track and record actual time worked for each operating division so that direct assignment of an employee's time can be charged to the appropriate Operating Division. It is Staff's understanding that Falmouth has recently implemented direct time reporting to more accurately account for salaries and wages as well as payroll overhead costs. This change will improve Falmouth's accounting system by charging payroll and payroll overhead costs to the appropriate operating division as expenditures are incurred.

Staff's calculation of pro forma salaries and wages allocated to the Water Division is \$169,793 for field employees and \$29,670 for office employees. Falmouth's Deputy Clerk identified 10 Falmouth field employees that performed duties on behalf of the Water Division during the test-year. The Deputy Clerk also provided the estimated time worked by these employees on behalf of the Water Division.

Staff calculated pro forma gross salaries and wages for the field employees by applying current pay rates to total hours worked in the test-year. Where new employees replaced former employees the new employee's pay rate was applied to the former employee's test-year hours. Staff then applied the estimated percentage of time worked on behalf of the Water Division to the pro forma gross salary and wage for each employee except for the three meter readers. For the meter readers Staff broke out meter reading time separately. This was necessary because the time estimates for the water operating division provided by the Deputy Clerk included meter reading for all electric and water services. The meter reading time was split among the Electric, Water and Sewer Divisions. Sewer billings are determined using water meter readings making

it appropriate and necessary to allocate a portion of the meter reading costs to the Sewer Division. The allocation method was based upon total customers served by each Operating Division.

The city clerk's office performs all administrative duties of the Utility Fund. Through discussions with Falmouth's Deputy Clerk, Staff developed the calculation of pro forma office salaries and wages to be allocated to the Water Division. In determining the pro forma amount Staff first calculated total pro forma salaries and wages by applying current pay rates to test year hours worked. Where a new employee replaced a former employee the new employee's pay rate was applied to the former employee's test year hours worked. The Deputy Clerk estimated that the clerk's office spent 90 percent of its time performing duties on behalf of the Utility Fund. Staff therefore allocated 90 percent of the pro forma salaries and wages to the Utility Fund Operating Divisions based upon the number of customers served by each Operating Division at the end of the test-year.

The following schedules detail Staff's calculations as discussed above.

Field Employees Title	Current	Regular	Overtime	Pro forma	Percent of	Percent of
	Pay Rate (Col. A)	Hours (Col. B)	Hours Paid at 1.5 (Col. C)	Salary (Col. D) (AxB)+(Ax1.5xC)	Time Dedicated to Water Operations and Meter Reading for Water and Electric (Col. E)	Time Spent Reading Me (Col. F)
Maint.-Water, Sewer, Electric	9.00	2,080.00		18,720.00	30.00%	
Water Plant Operator	14.36	2,073.00	289.00	35,993.34	100.00%	
Maint.-Water, Electric (Meter Reader)	13.38	2,028.50	117.00	29,489.52	45.00%	13
Maint.-Water, Sewer, Electric (Meter Reader)	11.45	2,083.50	51.50	24,740.59	45.00%	13
Oper. Manager-Water, Sewer	928.85	per week		48,300.20	50.00%	
Maint.-Water, Sewer, Electric (Meter Reader)	11.45	2,080.00	58.00	24,812.15	40.00%	13
Maint.-Water, Sewer	13.58	2,084.00	461.00	37,691.29	60.00%	
Supervisor-Water, Sewer, Electric, Garbage	928.85	per week		48,300.20	30.00%	
Forman-Electric, Water	16.15	2,086.00	174.50	37,916.16	25.00%	
Water Plant Operator	13.68	2,076.00	100.50	30,461.94	100.00%	
Total				<u>\$ 336,425</u>		

Allocation for Meter Reading	Number of Customers 6/30/2005	Meter Reading Allocation
Utility Fund Operating Unit		
Water	1,042	32.92%
Sewer	1,012	31.97%
Electric	1,111	35.10%
Total	<u>3,165</u>	<u>100.00%</u>

Total Workda Days Spent R
Percent Of D Times: Mete
Percent of M Water for l

Office Employees	Current Pay Rate (Col. A)	Regular Hours (Col. B)	Overtime Hours Paid at 1.5 (Col. C)	Pro forma Salary (Col. D) (AxB)+(Ax1.5xC)	Percent of	Amount
					Time Dedicated to Utility Fund Operating Units (Col. E)	Allocated to Utility Fund Operating Units (Col. F)
Title						
Clerk, Part-Time	12.43	1,416.50		17,607.10	90%	15,846.39
County Clerk	928.85	per week		48,300.20	90%	43,470.18
Deputy Clerk	16.16	2,085.00	18.00	34,129.92	90%	30,716.93
Clerk	14.94	2,071.00	17.00	31,321.71	90%	28,189.54
Total				\$ 131,359		\$ 118,223

Allocation for Clerk's Office	Number of Customers 6/30/2005	
Utility Fund Operating Unit		
Water	1,042	25.10%
Sewer	1,012	24.37%
Electric	1,111	26.76%
Garbage	987	23.77%
Total	4,152	100.00%

Staff reduced pro forma salaries and wages by \$1,200 to capitalize labor for the installation of four new taps. During the test-year Falmouth installed four new taps. The cost of these installations was recorded in test-year expenses when they should have been capitalized. The cost of each service installation has been determined by Falmouth to be \$600, the amount of its tap fee charged to recover the costs. The total amount to be capitalized is then \$2,400 (\$600 x 4 taps). The cost of the taps includes payroll and payroll overhead charges, materials and supplies, transportation, and equipment costs. Technically, all the accounts to which these expenses were charged should be adjusted, however, to simplify the matter Staff has applied its adjustment to Salaries and Wages and Supplies Expense on a 50/50 basis by removing \$1,200 from each account. This simpler approach does not result in a material misstatement. The rate recovery of these costs is included in Staff's calculation of pro forma depreciation expense as addressed later in this report.

(E) Retirement, Workers Compensation Insurance, Taxes Other Than Income.

These accounts all require adjustment as a result of the aforementioned payroll adjustments. Due to Staff capitalizing all new tap costs through the salaries and wages and supplies expense accounts, the adjustments to these accounts ignore capitalization for new tap installations.

Falmouth participates in the County Employees Retirement Systems by making retirement contributions on behalf of its employees based upon their pay. The contribution rate for the fiscal year end June 30, 2008 is 16.17 percent. Staff has

increased test-year expenses to reflect this contribution rate applied to the pro forma salaries and wages allocated to the Water Division.

Retirement	
Pro form Salaries and Wages	\$199,462
Times: Contribution Rate FYE 6/30/08	<u>16.17%</u>
Pro Forma	32,253
Less: Test Year	(19,681)
Increase	<u><u>\$ 12,572</u></u>

Falmouth reported test-year workers compensation insurance of \$23,545. Staff has decreased this amount by \$15,246. Staff's adjustment is shown below and was determined by applying test-year workers compensation rates to the Water Division's allocated pro forma salaries and wages as previously determined and discussed.

Field Employee's Pay	\$169,793
Workers Comp Rate	4.83%
Pro forma Workers Comp Field	<u>8,201</u>
Office Employee's Pay	29,670
Workers Comp Rate	0.33%
Workers Comp Office	<u>98</u>
Total Pro Forma	8,299
Less: Test Year	(23,545)
Decrease	<u><u>\$ (15,246)</u></u>

Staff has increased test-year FICA taxes by \$542 calculated as follows:

Pro Forma Salaries and Wages	\$199,462
Times: FICA Tax Rate	<u>7.65%</u>
Pro Forma	15,259
Less: Test Year	(14,717)
Increase	<u><u>\$ 542</u></u>

(F) Employee Insurance. Falmouth provides single coverage health, life and disability insurance to all full-time employees. The Water Division reported employee insurance of \$27,635 for the test-year. Staff has decreased that amount by \$6,547 to account for current employee levels, monthly premiums, and allocations to the Water Division following the salaries and wages allocations. The percentage used to allocate insurance for the Clerk's Office is 22.59 percent (90 percent for Utility Fund x 25.10 percent number of water customers). The calculations are shown below.

Title	Monthly Premium			Payroll Percent Allocated to Water	Insurance Allocated to Water
	Health	Life/ Disability	Total		
Maint.-Water, Sewer, Electric	\$ 291.50	\$ 19.59	\$ 311.09	30.00%	\$ 93
Water Plant Operator	291.50	19.59	311.09	100.00%	311
Maint.-Water, Electric (Meter Reader)	291.50	19.59	311.09	35.71%	111
Maint.-Water, Sewer, Electric (Meter Reader)	291.50	19.59	311.09	35.71%	111
Oper. Manager-Water, Sewer	291.50	19.59	311.09	50.00%	156
Maint.-Water, Sewer, Electric (Meter Reader)	291.50	19.59	311.09	30.71%	96
Maint.-Water, Sewer	291.50	19.59	311.09	60.00%	187
Supervisor-Water, Sewer, Electric, Garbage	291.50	19.59	311.09	30.00%	93
Forman-Electric, Water	291.50	19.59	311.09	25.00%	78
Water Plant Operator	291.50	19.59	311.09	100.00%	311
Clerk, Part-Time			-	22.59%	-
County Clerk	291.50	19.59	311.09	22.59%	70
Deputy Clerk	291.50	19.59	311.09	22.59%	70
Clerk	291.50	19.59	311.09	22.59%	70
Pro Forma Monthly Expense Allocated to Water					1,757
Times: 12 Months					12
Pro Forma Expense					21,088
Less: Test Year					(27,635)
Decrease					<u>\$ (6,547)</u>

(G) Bank Fees. The Water Division reported bank fees in the amount of \$1,363. This amount represents the Water Division's allocated portion of Falmouth's total test-

year payroll check preparation expense of \$4,613 paid to Paycor. Staff has reallocated the test-year amount by decreasing test-year expenses by \$528. Staff calculated its adjustment by determining the gross processing costs per check for the test-year for all Operating Divisions, applying that amount to the number of checks written to employees performing duties for the Water Division, and allocating the result based upon the payroll allocation percentages previously calculated and discussed. Staff's calculations appear below.

Calculation of Cost Per Check		
Total Invoice	Number of Checks	Cost Per Check
\$ 349.60	132	\$ 2.65
349.61	132	2.65
349.60	132	2.65
431.42	161	2.68
349.60	132	2.65
369.35	132	2.80
525.99	181	2.91
355.30	133	2.67
364.75	136	2.68
433.71	161	2.69
373.19	154	2.42
361.36	131	2.76
\$ 4,613	1,717	\$ 2.69

Title	Number of Checks	Cost Per Check	Payroll Percent Allocated to Water	Allocated to Water
Maint.-Water, Sewer, Electric	52	\$ 2.69	30.00%	\$ 41.92
Water Plant Operator	52	2.69	100.00%	139.72
Maint.-Water, Electric (Meter Reader)	52	2.69	35.71%	49.90
Maint.-Water, Sewer, Electric (Meter Reader)	52	2.69	35.71%	49.90
Oper. Manager-Water, Sewer	52	2.69	50.00%	69.86
Maint.-Water, Sewer, Electric (Meter Reader)	52	2.69	30.71%	42.91
Maint.-Water, Sewer	52	2.69	60.00%	83.83
Supervisor-Water, Sewer, Electric, Garbage	52	2.69	30.00%	41.92
Forman-Electric, Water	52	2.69	25.00%	34.93
Water Plant Operator	52	2.69	100.00%	139.72
Clerk, Part-Time	52	2.69	22.59%	31.56
County Clerk	52	2.69	22.59%	31.56
Deputy Clerk	52	2.69	22.59%	31.56
Clerk	52	2.69	22.59%	31.56
Pro Forma				821
Less: Test Year				(1,363)
Decrease				<u>\$ (542)</u>

(H) Purchased Power. During the test-year Falmouth paid \$22,982 from its Electric Division funds to Kentucky Utilities for purchased power to operate its water treatment facilities and \$1,680 to Bluegrass Energy for purchased power to operate its two water pumping stations. These amounts were charged to the expenses of Falmouth's Electric Division when they should have been included in the Water Division operating expenses. Staff has increased Water Division test-year expenses by \$24,662 to properly account for this purchased power expense.

(I) Purchased Power and Chemicals / Excess Water Loss. Falmouth did not track water loss during the test year. They began calculating water loss in January, 2006. For the annual period ending December 31, 2006, Falmouth had an annual water loss of 30 percent. Administrative regulation 807 KAR 5:066 Section 6 (3) states that

“[e]xcept for purchased water rate adjustments for water districts and water associations, and rate adjustments pursuant to KRS 278.023(4), for rate-making purposes a utility’s unaccounted-for water loss shall not exceed fifteen (15) percent of total water produced and purchased, excluding water used by a utility in its own operations. Upon application by a utility in a rate case filing or by separate filing, or upon motion by the commission, an alternative level of reasonable unaccounted-for water loss may be established by the commission. A utility proposing an alternative level shall have the burden of demonstrating that the alternative level is more reasonable than the level prescribed in this section.”

Falmouth did not demonstrate in its application that a water loss in excess of 15 percent is reasonable. By decreasing purchased power for pumping and chemicals by \$3,699 and \$7,321, respectively, Staff has eliminated 15 percent (30 percent lost – 15 percent allowed) of the direct cost to produce the excess loss. Detail of the adjustments is shown below.

Water Loss	
Purchased Power for Pumping	\$ 24,662
Times: 15 percent lost	15%
Decrease	<u>\$ (3,699)</u>
Test Year Chemicals	\$ 53,212
Less: Staff Reversing Adjustment	<u>(4,405)</u>
Sub-Total	48,807
Times: 15 percent lost	15%
Decrease	<u>\$ (7,321)</u>

(J) Consulting and Analysis. Water Division test-year expenses includes \$7,198 paid to Cardinal Laboratories, Inc. for wastewater analysis that should have been

charged to the Sewer Division. Staff has eliminated this amount from test-year operations.

(K) Legal and Accounting. Included in the test-year expenses is \$1,997 paid to the Kentucky League of Cities for legal services related to a water employee nepotism lawsuit filed against Falmouth. This expense is non-recurring and should be amortized. By making the following adjustment Staff has accounted for the five-year amortization of this expense. A five-year period was chosen to coincide with the time to elapse between water rate adjustments. While the actual time between rate adjustments may be longer, a longer amortization period in Staff's opinion would be unreasonable.

Test Year Expense	\$	1,997
Divide by: Five Years		<u>5</u>
Annual Recovery		399
Less: Test Year		(1,997)
Decrease	\$	<u><u>(1,597)</u></u>

(L) Insurance. The Water Division reported test-year insurance expense of \$71,827 for property, general liability, and vehicle insurance. Staff recommends that the test-year amount be decreased by \$22,223 as shown below to account for reallocation of the test-year expense.

Property	\$	14,481
Vehicle		7,275
General Liability		26,360
Finance Charge		<u>1,488</u>
Pro Forma		49,604
Less: Test Year		(71,827)
Decrease	\$	<u><u>(22,223)</u></u>

The property insurance premiums included in Water Division operations by Staff are shown below. The amounts were determined by analysis of vendor premium summaries.

Property Insurance	
Kentucky League of Cities	
512 Shelby Street Building	\$ 1,457
512 Shelby Street Chemical Building	3,211
US 27 South Water Tower	707
WTP Clearwell	195
WTP Backwash Basin	162
WTP New Clearwell	142
WTP Old Filter Building	1,066
WTP Settling Basin	106
WTP Sludge Pump	64
WTP Aeration Basin	373
WTP Blower Buildings	267
Backhoe and Bob Cat \$851 Total, Split Water/Sewer/ Electric, 32.92% to Water	280
Hartford Fire Insurance Company	
508 Shelby Street Chemical Building	6,451
Total Property	<u>\$ 14,481</u>

All property insurance listed above is related entirely to water operations except for the backhoe and Bob Cat which are also used by the Sewer and Electric Divisions. The Water Division was allocated \$280 of the total \$851 premium based on the number of customers served by each division. Calculation of this allocation percentage was shown previously in the Salaries and Wages adjustment.

In the test-year Falmouth insured 53 vehicles or pieces of equipment excluding the backhoe and Bob Cat referred to above. Staff's allocation of insurance for these items to the Water Division is \$7,275. Staff's allocation was determined from a premium summary sheet listing all 53 items. Falmouth employees identified each item on the sheet that was used by the Water Division. Some items were identified as water use

only while others were identified as used to provide water, sewer, electric, and/or garbage services. The shared items were allocated based upon the number of customers served by each Operating Division using the item. Calculation of the allocation percentages used by Staff is shown below followed by the calculation of the vehicle and equipment insurance expense allocations.

	Number of Customers	Percentage		Number of Customers	Percentage
Water Unit	1,042	50.73%	Water Unit	1,042	48.40%
Sewer Unit	1,012	49.27%	Electric Unit	1,111	51.60%
Total	<u>2,054</u>	<u>100.00%</u>	Total	<u>2,153</u>	<u>100.00%</u>

Vehicle Insurance				
			Percent to	Allocated
	Kentucky League of Cities	Premium	Water Unit	Amount
	Water Only			
	1989 Ford F600	\$ 1,371	100%	\$ 1,371
	1989 Chevrolet 3/4 Ton P/U	1,344	100%	1,344
	1995 Chevrolet Dump Truck	1,376	100%	1,376
	Shared by Water and Electric			
	1979 Chevrolet Dump Truck	1,590	48.40%	770
	Shared by Water and Sewer			
	1999 Ford P/U	1,611	50.73%	817
	2001 Ford P/U	1,474	50.73%	748
	1988 Dodge 1/2 Ton P/U	856	50.73%	434
	1970 Ford 2 Ton Dump	818	50.73%	415
	Total Vehicle			<u>\$ 7,275</u>

The Water Division's portion of the test-year general liability insurance paid to the Kentucky League of Cities was \$26,360. Staff included this amount in its pro forma calculation.

Falmouth financed the total test-year insurance premium paid to the Kentucky League of Cities in the amount of \$163,892. The interest charge for this financing was

\$5,852. Staff has included an allocation of this finance charge in its pro forma insurance calculation. Staff's finance charge allocation was based upon the total insurance premiums paid to the Kentucky League of Cities allocated by Staff to the Water Division (\$48,116 total water allocation - \$6,451 paid to Hartford Insurance) compared to the total financed insurance premium. The calculation is detailed below.

Finance Charges	
Total Kentucky League of Cities Insurance Allocated to the Water Unit	\$ 41,665
Divide by: Total Financed	<u>163,892</u>
Percent of Finance Charge to Water	25.42%
Times: Finance Charge	5,852
Finance Charge to Water	<u><u>\$ 1,488</u></u>

(M) Repairs and Maintenance. The Water Division reported test-year repairs and maintenance expense of \$4,755. Staff previously increased this amount by \$23,126 as discussed in the section of this report pertaining to Reversal of Prior Period Payables. Through analysis of entries to this account Staff further recommends to decrease this account by \$2,515 as detailed below.

Eliminated	\$ (560)
Capitalized	(709)
Allocated to Sewer	(1,080)
Allocated to Sewer, Electric, and Garbage	(167)
Decrease	<u><u>\$ (2,515)</u></u>

The eliminated amounts were incurred by Falmouth for operations other than those of the Water Division and are detailed below.

American Family Insurance	(260)	Employee paid insurance
Econo Sign & Barricade	(49)	Street signs
Kavanaugh Trucking	(199)	Gravel city barn parking lot
Econo Sign & Barricade	(51)	Handicapped signs
Total	<u>\$ (560)</u>	

The capitalized portion of the adjustment was for \$709 paid on January 18, 2005, to Neptune Equipment Co. in return for 10, 5/8"x3/4" meters and 3, 1" meters. This amount has been capitalized and included in Staff's determination of pro forma depreciation expense.

Repairs and maintenance included expenses totaling \$2,193 incurred for meter repairs. Staff has allocated a portion of this expense to the Sewer Division based on the total number of customers served by the Water and Sewer Divisions. The Sewer Division should share in the cost of maintaining meters since sewer billings are based on the water meter readings. The adjustment is shown below.

Florence Winwater Works	\$ 632	Miscellaneous meter repairs expense
National Waterworks	1,360	Miscellaneous meter repairs expense
Florence Winwater Works	<u>200</u>	Miscellaneous meter repairs expense
Total	2,193	
Times: Percent to Water Unit	<u>50.73%</u>	Calculation shown in insurance adjustment
Allocated to Water Unit	1,112	
Less: Test Year	(2,193)	
Decrease	<u>\$ (1,080)</u>	

The test-year expense included the cost of purchasing a 55 gallon barrel of oil held at the maintenance garage and used by all members of the Utility Fund. By making the following adjustment Staff has accounted for allocating this expense to each operating division of the Utility Fund using the maintenance garage based on the number of customers served by each division.

Kentucky Motor Service East, Inc.	\$	223	55 gallons of 10W40
Times: Percent to Water Unit		<u>25.10%</u>	Calculation shown in salary adjustment
Allocated to Water Unit		56	
Less: Test Year		(223)	
Decrease	\$	<u>(167)</u>	

(N) Supplies. The Water Division reported test-year supplies of \$18,109. Staff previously decreased this amount by \$1,200 to capitalize the supply cost of installing four taps as discussed in the section of this report pertaining to the Salaries and Wages adjustment. Through analysis of entries to this account Staff further recommends to decrease Supplies by \$7,419 as detailed below.

Eliminated	\$ (2,500)
Capitalized	(2,500)
Allocated to Sewer	(1,716)
Allocated to Sewer and Electric	(338)
Allocated to Sewer, Electric, and Garbage	(366)
Decrease	<u>\$ (7,419)</u>

The eliminated amounts were incurred by Falmouth for operations other than those of the Water Division and are detailed below.

Econo Sign & Barricade	\$ (930)	Stop signs
Reis Concrete Products	(876)	Concrete storm culvert
Econo Sign & Barricade	(103)	No dumping signs
ORR Safety Corp.	(536)	Wastewater equipment
Econo Sign & Barricade	(55)	Railroad sign
Total	<u>\$ (2,500)</u>	

The amount capitalized by Staff includes the cost of a small utility trailer used jointly by the Water and Sewer Divisions and the cost of meters and meter installation supplies that should be capitalized. These capitalized meter supplies have been off-set by the amount previously capitalized by Staff for the four new taps. The cost of these

taps was included in test-year supplies expenses but Staff has already removed \$1,200 of them through a previous adjustment. To remove them again would understate expenses and overstate plant in service. The following details this portion of the adjustment.

Viking Supply, Inc.	\$ (1,358)	Meters and supplies
M&M Traylor	(775)	Water and sewer utility trailer
Neptune Equipment	(1,117)	20 water meters and supplies
Florence Winwater	<u>(450)</u>	24 meter boxes
Total	(3,700)	
Plus: Amount already capitalized by Staff as explained in the Salary and Wage adjustment	1,200	
Additional to Capitalize	<u><u>\$ (2,500)</u></u>	

Staff identified the following items included in the supplies account that are shared with the Sewer Division. As previously discussed sewer billings are based on the water meter readings making allocation of meter expenses to the Sewer Division appropriate and necessary. The weed trimmer is used at the water and sewer plants. The allocation is based upon the number of customers served by each division.

Anderson's Garage	\$ 299	Weed trimmer
National Waterworks	769	Meter repair supplies
Florence Winwater	225	Meter repair supplies
Viking Supply	1,322	Meter repair supplies
Viking Supply	869	Meter repair supplies
Total	<u>3,483</u>	
Times: Percent to Water Unit	<u>50.73%</u>	Calculation shown in insurance adjustment
Allocated to Water Unit	1,767	
Less: Test Year	(3,483)	
Decrease	<u><u>\$ (1,716)</u></u>	

Included in the test-year expense was a \$503 repair to the backhoe that is used by the Water, Sewer, and Electric Divisions. The following adjustment was made to

reallocate this expense based on the number of customers served by each Operating Division.

Bowen Farm Supplies	\$ 503	Backhoe repair
Times: Percent to Water Unit	<u>32.92%</u>	Calculation shown in salary adjustment
Allocated to Water Unit	166	
Less: Test Year	(503)	
Decrease	<u><u>\$ (338)</u></u>	

Included in the test-year expense was \$549 for the purchase of storage bins for the maintenance garage which is used by the Water, Sewer, Electric, and Garbage Divisions. The following adjustment was made to reallocate this expense based on the number of customers served by each Operating Division.

Falmouth Lumber and Supply	\$ 549	Bolt bins at maintenance garage
Times: Percent to Water Unit	<u>25.10%</u>	Calculation shown in salary adjustment
Allocated to Water Unit	138	
Less: Test Year	(503)	
Decrease	<u><u>\$ (366)</u></u>	

(O) Uniforms. Test-year employee uniform expense was reported at \$4,594 by the Water Division. Staff has decreased this amount by \$2,288 to account for the reallocation of current uniform expenses. Currently, Falmouth pays water plant operators, field employees, and office employees, \$500, \$381.68, and \$125, respectively, per year for uniforms. The allocation of these expenses follows the allocation of employee salaries and wages as previously discussed. Staff's adjustment is calculated below.

	Annual Allowance	Percent of Payroll to Water	Uniforms to Water
Field Employees			
Maint.-Water, Sewer, Electric	\$ 382	30.00%	\$ 115
Water Plant Operator	500	100.00%	500
Maint.-Water, Electric (Meter Reader)	382	35.71%	136
Maint.-Water, Sewer, Electric (Meter Reader)	382	35.71%	136
Oper. Manager-Water, Sewer	500	50.00%	250
Maint.-Water, Sewer, Electric (Meter Reader)	382	30.71%	117
Maint.-Water, Sewer	382	60.00%	229
Supervisor-Water, Sewer, Electric, Garbage	382	30.00%	115
Forman-Electric, Water	382	25.00%	95
Water Plant Operator	500	100.00%	500
Total Field	<u>4,172</u>		<u>2,193</u>
Office Employees			
Clerk, Part-Time	125	22.59%	28
County Clerk	125	22.59%	28
Deputy Clerk	125	22.59%	28
Clerk	125	22.59%	28
Total Office	<u>500</u>		<u>113</u>
Total	<u>\$ 4,672</u>		2,306
Less: Test Year			(4,594)
Decrease			<u><u>\$(2,288)</u></u>

(P) Gasoline. The Water Division reported test-year gasoline expense of (\$697). The negative balance was the result of posting errors to the account for reversing entries as discussed and corrected by Staff previously. Staff's adjustment to correct the posting error restated the amount to \$3,708. Staff further recommends this amount be decreased by \$1,827 to account for the allocation of Sewer Division gasoline expenses.

All gasoline purchases of the Utility Fund Operating Divisions are made from Licking Valley Oil, Inc. The purchases are charged directly to the Water, Electric, and Garbage Divisions by the clerk's office when monthly review of the purchase invoice summaries is performed to make payment on the account. During this process all

gasoline used for sewer operations is charged to the Water Division. An allocation is then necessary to remove the sewer related expense from the Water Division's operations. Absent a better allocation method Staff has used the number of customers served by each division as its basis for allocation. Staff's adjustment is detailed below.

Book Balance	\$	(697)	
Reversing Entry Adjustment		<u>4,405</u>	
Water and Sewer Gasoline		3,708	
Times: Percent to Water		<u>50.73%</u>	Calculation shown in insurance adjustment
Amount to Water		1,881	
Less: Water and Sewer Gasoline		(3,708)	
Decrease		<u><u>\$ (1,827)</u></u>	

(Q) Equipment Expense. Rental fees for a port-o-potty located at the city park were included in test-year equipment expense. This amount has been removed by Staff.

(R) Maintenance Garage. Falmouth operates and maintains a city garage from which it manages the daily operation and maintenance of its Water, Sewer, Electric, and Garbage Divisions. The Water Division should be allocated a share of the cost for operating and maintaining this facility. Test-year expenses have been increased by \$2,315 to account for this allocation.

The costs identified for operating this facility are listed below. Absent a more reasonable allocation method, Staff has allocated these expenses based on the number of customers served by each division. Staff adjusted the depreciable life assigned to the garage from the 20 years as used by Falmouth to 50 years. Falmouth used a 20-year depreciable life for this building but 50 for other buildings included on its depreciation schedules reviewed by Staff. It is Staff's position that 50 years is more reasonable.

Electric	\$ 1,104
Gas	2,074
Telephone	2,124
Insurance	796
Depreciation (\$156,235 cost / 50 Years)	<u>3,125</u>
Total Maintenance Garage to Allocate	9,223
Times: Percent to Water	25.10% Calculation shown in salary adjustment
Allocated to Water	<u><u>\$ 2,315</u></u>

(S) City Hall. As discussed previously all administrative functions of the Water Division are performed by the City Clerk's Office which is housed in the City Hall building. As such, a portion of the costs to operate City Hall should be allocated to the Water Division. The following expenses were identified as being incurred for the operation of City Hall and allocable.

Electric	\$ 2,611
Water	228
Sewer	98
Garbage	192
Phone	3,464
Door Mats	1,073
Supplies	2,250
Repair and Maintenance	2,194
Cleaning	375
Insurance	2,711
Depreciation	22,492
City Hall Expense to Allocate	<u><u>37,689</u></u>

The identified expenses were first allocated to all offices that are housed in City Hall which are the Mayor's Office, the County Clerk's Office, and the City Council's Chambers. These office's and chambers consist of one, four, and six people, respectively. The allocation to each office was based on the total number of annual hours spent by these people in City Hall on official business. The allocations are shown below.

	City Hall Collective Hours Used Annually	Percent	City Hall Expense Allocation
Mayor (1 person, 8 hrs./day, 5 days/week, 52 weeks per year)	2,080.00	20.99%	\$ 7,909
Clerk's Office (Used actual test-year hours as shown in salary adjustment + 2,080 hrs. for Clerk)	7,687.50	77.56%	29,232
City Council (6 members, 2 hrs/mth each)	144.00	1.45%	548
Total City Hall Hours	<u>9,911.50</u>	<u>100.00%</u>	<u>\$ 37,689</u>

The \$29,232 allocated to the Clerk's Office was then allocated to the Water Division following the City Clerk's salaries and wages allocation as previously discussed.

Clerk's Share of City Hall Expense	\$ 29,232	
Times: 90 percent	<u>90%</u>	Shown and explained in salary adjustment
Allocated to Utility Fund	26,309	
Times: Water Unit Customers	<u>25.10%</u>	Calculation shown in salary adjustment
Water Unit's Share of City Hall Expense	<u>\$ 6,603</u>	

Water Division test-year expenses have been increased by \$6,603 to account for the allocation of expenses to operate City Hall.

(T) Depreciation. For the test-year the Water Division reported depreciation expense of \$81,529. Falmouth calculates Water Division depreciation using a combined Water and Sewer Division depreciation schedule. This schedule includes all Water and Sewer Division assets. The Water Division is allocated half of the depreciation expense taken on all assets included on this schedule. Falmouth requested to recover \$50,000 of the

test-year depreciation, plus \$114,000 for its capital improvement plan, as shown below, for a total recovery of \$164,000.⁴

Falmouth's Capital Improvement Plan	
Baffle Clearwells	\$ 30,000
Paint Clearwell	10,000
Replace Raw Water Totalizer	4,000
Valve Replacement	20,000
Paint Elevated Tank Exterior	10,000
Hydrant Replacement	10,000
Meter Replacement	10,000
Main Replacement	15,000
Main Cleaning	5,000
Total	<u>\$ 114,000</u>

Staff recommends that test-year depreciation expense be decreased by \$2,088 as calculated and explained below.

Depreciation of Plant from Water and Sewer Plant Schedule	\$ 70,316
Depreciation on Meter Replacements	1,360
Depreciation on Capitalized Items by Staff	71
Tank Painting Amortization	5,956
Raw Water Totalizer	68
Backhoe	<u>1,669</u>
Pro Forma	79,441
Less: Test Year	(81,529)
Adjustment	<u>\$ (2,088)</u>

With the assistance of Falmouth's employees Staff identified those assets included on Falmouth's combined Water and Sewer Division depreciation schedule that are dedicated 100 percent to water operations. All depreciation on these assets was assigned by Staff to the Water Division. The depreciable lives assigned to these assets by Falmouth fall within those prescribed by the National Association of Regulatory Utility

⁴ Id., Item 25, Page 15 of 26.

Commissioners (“NARUC”) and have been adopted by Staff. The following schedule details depreciation of these assets.

Year in Service	Asset	Cost	Life	Annual Expense
1974	Oak Haven Water Line	\$ 11,970	50	\$ 239
1983	Clorinator	1,634	50	33
1988	Equipment	54,480	50	1,090
1988	Equipment	45,667	50	913
1988	Water Line	10,364	50	207
1987	New Water Plant	930,336	40	23,258
1993	Water Plant Renovation	1,442,206	50	28,844
1996	Chlorination Booster	4,048	50	81
1997	Water Plant Equipment	60,890	50	1,218
1997	Water Plant Equipment	1,996	50	40
1997	Water Tower/Central Coating	38,670	50	773
1997	Heritage Ent-fix water plant	26,353	50	527
1998	Waterfill Station	9,800	50	196
2001	Tank	600,000	50	12,000
2001	Waterfill Station	44,814	50	896

Total Water Plant included by Staff from Water and Sewer Plant Schedule Other Than 2004 Meters and Vehicles

\$ 70,316

Test-year depreciation expense includes \$2,623 for depreciation of meter replacements made during 2004. The cost of the meter replacements listed on Falmouth’s depreciation schedule is \$78,707. The test-year depreciation expense represents a 15-year service life for the meters with half the annual depreciation expense being allocated to the Water Division while half is allocated to the Sewer Division. These meter replacements are not included by Staff in the schedule above.

The meter replacement cost is included in Falmouth’s capital improvement plan annually at \$10,000. Also, a portion of the meter replacement cost is related to Staff’s adjustment to correct the reversal of prior period payables for Plant in Service in the amount of \$23,126 as previously discussed. To minimize confusion regarding these accounting entries, Staff has not attempted to make adjustments to Falmouth’s records.

Instead, Staff has reviewed all related invoices and information regarding meter replacements to determine the appropriate annual recovery.

Through Falmouth's meter replacement program it has replaced one 6" compound meter used to serve Pendleton County Water District at a cost of \$11,790, one 8" Dyer meter used to serve East Pendleton Water District at a cost of \$11,552, another 8" Dyer meter used to serve East Pendleton Water District at a cost of \$11,700, one 3" meter for an industrial customer at a cost of \$3,700 and 1,100, 3/4-inch meters and three, 1-inch meters at a total cost of \$46,406.

Depreciation of the three wholesale meters has been assigned entirely to the Water Division but the others have been split 51 percent to the Water Division and 49 percent to the Sewer Division based on the number of customers served by each division. This percentage is calculated in the section of this report dedicated to insurance. This split is appropriate and necessary since the sewer billings are based on the meter readings. To determine the annual recovery Staff assigned a service-life of 40-years with a 10 percent salvage value as recommended by NARUC. The 40-year life is the middle of NARUC's recommended life range of 35-45 years. Staff's calculation is presented below.

Date	Vendor	Amount	Cost Less 10% Salvage	Life	Annual Recovery	Percent Allocate to Water	Allocated to Water
10/03	National Waterworks	\$ 11,790	\$ 10,611	40	\$ 265	100.00%	\$ 265
2/04	National Waterworks	11,552	10,397	40	260	100.00%	260
12/06	Dyer Meter Service	11,700	10,530	40	263	100.00%	263
12/06	Dyer Meter Service	3,700	3,330	40	83	50.73%	42
6/04	Neptune, 3/4 & 1 inch	23,676	21,308	40	533	50.73%	270
7/04	Neptune, 3/4 & 1 inch	20,115	18,104	40	453	50.73%	230
8/04	Neptune, 3/4 & 1 inch	2,615	2,354	40	59	50.73%	30
		<u>\$ 85,148</u>					<u>\$ 1,360</u>

Staff has included a provision for depreciation of test-year expenses that were capitalized by Staff as discussed throughout the previous sections of this report. The following details Staff's calculation.

New Taps	\$	2,400	
Capitalized from Repairs and Maintenance			
Neptune Equipment		709	10 - 5/8" and 3 - 1" meters
Capitalized From Supplies Expense			
Viking Supply, Inc.		1,358	Meters and supplies
M&M Trailor		775	Water and sewer utility trailor
Neptune Equipment		1,117	20 water meters and supplies
Florence Winwater		450	24 meter boxes
Less: Supplies Capitalized for New Tap Adjustment		<u>(1,200)</u>	
Total Capitalized from Test-Year Expenses		5,609	
Divide by: Service Life		<u>40</u>	
Annual Recovery		140	
Percent to Water		50.73%	Calculation shown in insurance adjustment
Annual Expense to Water	\$	<u><u>71</u></u>	

Falmouth included tank painting in its capital improvement plan. Falmouth provided Staff a bid for this painting of \$59,562. Staff has included a provision for the 10-year amortization of this amount in its pro forma depreciation. The 10-year period is the anticipated life of the painting and is a standard rate-making methodology. Staff's calculation is shown below.

Tank Painting	\$	59,562
Amortize over 10 years		10
Annual Recovery	\$	<u><u>5,956</u></u>

In August, 2006, Falmouth replaced its raw water totalizer at a total cost of \$2,724. Staff has included a provision for depreciation of this item as calculated below.

Staff assigned a 40-year life to this asset which is the middle of the life range recommended by NARUC.

Raw Water Totalizer	\$	2,724
Depreciable Life		40
Depreciation Expense	\$	<u>68</u>

The Water Division should be assigned depreciation taken on vehicles and equipment used for its operations. Through Staff's allocation of insurance for vehicles and equipment, as previously discussed, various vehicles and equipment were identified that are used for water operations. Staff obtained and analyzed depreciation schedules for Falmouth's General Fixed Asset Account Group and Utility Fund and found only the backhoe used by the Water Division has a depreciable balance after the fiscal year end June 30, 2007. Therefore, a provision for depreciation of that asset only has been included by Staff. Staff's allocation of the backhoe depreciation follows that of the insurance for the backhoe and is calculated below.

Backhoe	\$	50,700
Depreciable Life		<u>10</u>
Deprecation Expense		5,070
Percent to Water		32.92% Calculation shown in salary adjustment
Depreciation Expense to Water	\$	<u>1,669</u>

The projects included in Falmouth's capital improvement plan for which Staff has not included a provision for rate recovery have not been put out for bid or constructed and, therefore, do not meet the known and measurable requirement of administrative regulation 807 KAR 5:001, Section 10 (7) and should not be included in rates.

(U) Interest Income. The Utility Fund reported \$7,508 in interest income for the test-year. This amount was not assigned or allocated to the Utility Fund Operating Divisions. Since the interest was earned on cash and investments funded by service revenues from the Utility Fund Operating Divisions an allocation is appropriate. Staff recommends that test year Water Division operations be allocated \$2,357 in interest income based upon test year service revenues as calculated below.

Operating Unit	Service Revenue	Percentage	Allocated Interest
Electric	\$ 1,013,124	50%	\$ 3,718
Water	642,371	31%	2,357
Sewer	215,235	11%	790
Garbage	175,170	9%	643
Total	<u>\$ 2,045,900</u>	100%	<u>\$ 7,508</u>

Revenue Requirement Calculation:

Falmouth stated its revenue requirement equal to its pro forma operating expenses of \$767,285. Traditionally, the Commission determines the revenue requirement of a non-profit corporation based on its annual debt service requirements. Falmouth has no long-term debt allocable to its Water Division. Although Falmouth's Water Division did report test-year interest expense and amortization of issuance cost the related debt had been fully retired at the time of Staff's field work.

In the absence of debt Staff recommends that an operating ratio of 88 percent be used to determine Falmouth's revenue requirement. Through this method the revenue requirement is determined by dividing pro forma operating expenses by 88 percent. This method has been used by the Commission in the past to provide an operating margin when a utility has no debt. The calculation is shown below.

Pro Forma Operating Expenses	\$ 542,413
Divide by: Operating Ratio	<u>88%</u>
Revenue Requirement	616,379
Less: Other Operating Revenue	(13,035)
Interest Income	<u>(2,357)</u>
Revenue Required from Rates	600,986
Less: Present Rate Revenues	(635,171)
Revenue Sufficiency	<u><u>\$ (34,185)</u></u>

ATTACHMENT B
 STAFF REPORT CASE NO. 2006-00403
 COST OF SERVICE STUDY

CITY OF FALMOUTH		
WATER PURCHASED AND SOLD		
Total Purchased	337,776,900	
Fire Department and Sewer	-	0.0000
System Use	6,624,700	0.0192
Line Loss	114,235,800	0.3317
Retail Sales	78,274,500	0.2273
Wholesale Sales (E Pendleton)	91,038,400	0.2643
Wholesale Sales (Pendleton)	54,228,200	0.1575
Total	344,401,600	1.00

CITY OF FALMOUTH									
INCH MILE RATIO									
	Total System			Pendleton County			East Pendleton County		
Size	Feet	Miles	Inch Miles	Feet	Miles	Inch Miles	Feet	Miles	Inch Miles
16	1,336	0.25	4.05	-	-	-	1,136	0.22	3.44
12	6,488	1.23	14.74	5,502	1.04	12.51	2,679	0.51	6.09
8	28,318	5.36	42.91	4,492	0.85	6.81	10,596	2.01	16.05
6	29,522	5.59	33.55	6,653	1.26	7.56	-	-	-
4	30,476	5.77	23.09	4,905	0.93	3.72	-	-	-
2	7,692	1.46	2.91	-	-	-	-	-	-
1	1,697	0.32	0.32	-	-	-	-	-	-
	105,529	19.99	121.57	21,552	4.08	30.59	14,411	2.73	25.58
Inch Mile Ratio		0.2516	0.2104						

CITY OF FALMOUTH		
WHOLESALE ALLOCATION FACTORS		
		Factor
Line Loss Percentage		0.1500
Plant Use Percentage		0.0192
Allowable Line Loss & Plant Use	$0.1500 + 0.192$	0.1692
Production Multiplier	$1/1-0.1692$	1.2037
Inch Mile Ratio		
Pendleton County	$30.59 / 121.57$	0.2516
East Pendleton County	$25.58 / 121.57$	0.2104
Wholesale Share of Line Loss		
Pendleton County	$0.2516 * 0.1500$	0.0377
East Pendleton County	$0.2104 * 0.1500$	0.0316
Joint Share Line Loss / Plant Use		
Pendleton County	$0.0377 * 0.0192$	0.0007
East Pendleton County	$0.0316 * 0.0192$	0.0006
Wholesale Production Multiplier		
Pendleton County	$1/1-0.0007$	1.0007
East Pendleton County	$1/1-0.0006$	1.0006
Production Allocation Factor		
Pendleton County	$54,228,200/223,541,100 * (1.0007/1.2037)$	0.2017
East Pendleton County	$91,038,400/223,541,100 * (1.0006/1.2037)$	0.3385
Pipeline Transmission Factor		
Pendleton County	$54,228,200/223,541,100 * 0.2516$	0.0610
East Pendleton County	$91,038,400/223,541,100 * 0.2104$	0.0857
Use Factor		
Pendleton County	$54,228,200/223,541,100$	0.2426
East Pendleton County	$91,038,400/223,541,100$	0.4073

CITY OF FALMOUTH				
WHOLESALE ALLOCATION FACTORS				
				Factor
Line Loss Percentage			Amount Allowable by PSC	0.1500
Plant Use Percentage			Taken From Audit Report	0.0192
Allowable Line Loss & Plant Use	$0.3317 + 0.192$	=	Line Loss % + Plant Use %	0.1692
Production Multiplier	$1/1-0.3509$	=	$1/(1 - \text{Plant Use \%})$	1.2037
Inch Mile Ratio				
Pendleton County	$30.59 / 121.57$	=	Total Jointly Used Inch Miles / Total Inch Miles	0.2516
East Pendleton County	$94.46 / 121.57$			0.2104
Wholesale Share of Line Loss				
Pendleton County	$0.2516 * 0.1500$	=	Inch Mile Ratio X Line Loss %	0.0377
East Pendleton County	$0.7770 * 0.1500$			0.0316
Joint Share Line Loss / Plant Use				
Pendleton County	$0.0377 * 0.0192$	=	Wholesale Share of Line Loss + Plant Use %	0.0007
East Pendleton County	$0.0316 * 0.0192$			0.0006
Wholesale Production Multiplier				
Pendleton County	$1/1-0.0007$	=	$1/1 - \text{Joint Share Line Loss / Plant Use}$	1.0007
East Pendleton County	$1/1-0.0006$			1.0006
Production Allocation Factor				
Pendleton County	$54,228,200/223,541,100 * (1.0007/1.2037)$	=	$(\text{Sales to Wholesale customers} / \text{Total Water Sold}) * (\text{Wholesale Production Multiplier} / \text{Production Multiplier})$	0.2017
East Pendleton County	$91,038,400/223,541,100 * (1.0006/1.2037)$			0.3385
Pipeline Transmission Factor				
Pendleton County	$54,228,200/223,541,100 * 0.2516$	=	$(\text{Sales to Wholesale customers} / \text{Total Water Sold}) * \text{Inch Mile Ratio}$	0.0610
East Pendleton County	$91,038,400/223,541,100 * 0.2104$			0.0857
Use Factor				
Pendleton County	$54,228,200/223,541,100$	=	Sales to Wholesale Customers / Total Water Sold	0.2426
East Pendleton County	$91,038,400/223,541,100$			0.4073

CITY OF FALMOUTH				
ALLOCATION OF EXPENSES				
Expense	Total	Pumping and Treatment	Transmission and Distribution	Customer
Salaries and Wages	\$ 198,262	\$ 115,007	\$ 8,885	\$ 74,370
Employee Benefits	32,253	18,707	1,451	12,095
Payroll Taxes	15,259	8,850	687	5,722
Employee Insurance & Workers Comp.	29,387	17,045	1,322	11,020
Property Insurance - Treatment Plant	14,481	14,481		
Electricity*	20,963	20,963		
Chemicals*	41,486	41,486		
Lab Analysis*	9,191	9,191		
Maintenance - Plant	23,126	23,126		
Postage	1,046			1,046
Subtotal Less Commodity*	\$ 313,814	\$ 197,216	\$ 12,345	\$ 104,253
Percentage		0.6284	0.0393	0.3322
<i>Administrative and General</i>				
Dues & Subscriptions	634	398	25	211
Insurance - General Liability	35,123	22,073	1,382	11,668
Office Supplies	9,490	5,964	373	3,153
Advertising & Printing	2,193	1,378	86	729
Gas Heating	748	470	29	248
Telephone	4,762	2,993	187	1,582
Legal & Accounting	2,624	1,649	103	872
Equipment Expense	649	408	26	216
Bank Fees	821	516	32	273
City Hall	6,603	4,150	260	2,194
Training & Travel	2,680	1,684	105	890
Uniforms	2,306	1,449	91	766
Motor Fuel	1,881	1,182	74	625
Bad Debts	2,400	1,508	94	797
Maintenance Garage	2,315	1,455	91	769
Maintenance	2,240	1,408	88	744
Miscellaneous	51	32	2	17
Subtotal	\$ 462,973	\$ 317,573	\$ 15,395	\$ 130,006
Depreciation	79,441	54,069	23,940	1,431
Total Expenses	\$ 542,413	\$ 371,643	\$ 39,335	\$ 131,438
Commodity Costs designated by ()				

CITY OF FALMOUTH							
WHOLESALE RATE							
Expense	Total	Pendleton Allocation Factor	Amount to Wholesale	Rate to Wholesale	East Pendleton Allocation Factor	Amount to Wholesale	Rate to Wholesale
Commodity							
Lab Analysis & Electricity	\$ 30,154	0.2017	\$ 6,081	0.1121	0.3385	\$ 10,208	0.1121
Chemicals	41,486	0.2017	8,367	0.1543	0.3385	14,045	0.1543
Operation and Maintenance							
Pumping and Treatment	245,933	0.2017	49,599	0.9146	0.3385	83,258	0.9145
Transmission and Distribution	15,395	0.0610	940	0.0173	0.0857	1,319	0.0145
Customer	130,006						
Depreciation							
Pumping and Treatment	54,069	0.2017	10,904	0.2011	0.3385	18,304	0.2011
Transmission and Distribution	23,940	0.0610	1,461	0.0269	0.0857	2,051	0.0225
Customer	1,431						
Total Expenses	\$ 542,413						
Plus Operating Ratio (88%)	\$ 73,966	0.2017	\$ 14,917	0.2751	\$ 0.3385	\$ 25,040	0.2751
Less Interest Income	2,357	0.0610	144	0.0027	0.3385	798	0.0088
Less Other Operating Revenue	13,035	0.0610	796	0.0147	0.3385	4,413	0.0485
Cost of Service Rate	600,987		\$ 91,330	\$ 1.68		\$ 149,016	\$ 1.64