

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN ADJUSTMENT OF RATES OF THE) CASE NO.
SOUTH SHORE WATER WORKS CO.) 2003-00044

ORDER

On February 5, 2003, South Shore Water Works Co. (South Shore) applied to the Commission for authority to adjust its rates for service rendered on and after March 10, 2003. The application did not meet the minimum filing requirements, but all deficiencies were cured and the application deemed filed as of February 25, 2003.


Commission Staff, having performed a limited financial review of South Shore's operations, has prepared the attached report containing Staff's findings and recommendations regarding the proposed rates. All parties should review the report carefully and submit any written comments on Staff's findings and recommendations 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, no later than 10 days from the date of this Order, submit written comments, if any, regarding the attached Staff Report or request for hearing or informal conference. If no request for a hearing or informal conference is received by this date, this case shall stand submitted to the Commission for a decision on all issues raised by the application.

Done at Frankfort, Kentucky, this 20th day of June, 2003.

By the Commission

ATTEST:

A handwritten signature in black ink, appearing to read "Thomas H. (D)", written over a horizontal line.

Executive Director

Case No. 2003-00044

STAFF REPORT
ON
SOUTH SHORE WATER SYSTEM
CASE NO. 2003-00044

On February 5, 2003, South Shore Water Works Co. (South Shore) applied to the Commission for authority to adjust its rates for service rendered on and after March 10, 2003. The application did not meet the minimum filing requirements, but all deficiencies were cured and the application deemed filed as of February 25, 2003. The proposed water rates will generate annual revenues of \$547,616, \$40,698 or 8.03 percent over South Shore s normalized test period revenues from water sales of \$406,918.

In order to evaluate the requested increase Commission Staff performed a limited financial review of South Shore s test period operations for the 2002 calendar year. 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. Insignificant of immaterial discrepancies were not pursued and are not addressed herein.

Mark Frost and Eddie Beavers of the Commission s Division of Financial Analysis began the limited review on April 15, 2003. This report summarizes Staff s review and recommendations. Mr. Frost is responsible for the preparation of this Staff Report except for the determination of normalized operating revenue, and Attachment D, the Cost-of-Service Study, which were prepared by Mr. Beavers.

Attachment A is the comparison of South Shore's actual and pro forma operations. Based upon Staff's recommendations, South Shore's operating statement would appear as set forth in Attachment B.

As shown in Attachment C, Staff's recommended pro forma operations, an allowance for income taxes, and a 88 percent operating ratio, results in a revenue requirement from rates of \$542,110, an increase of \$44,428 or 8.20 percent over Staff's normalized revenue from rates of \$497,682. Staff's recommended revenue requirement from rates will allow South Shore to meet its pro forma test-period operating expenses including depreciation expense and provide for adequate equity growth. Staff's proposed rates are calculated in the Cost-of-Service Study attached hereto as Attachment D.

Signatures

Prepared by: Mark C. Frost
Financial Analyst, Water and Sewer
Revenue Requirements Branch
Division of Financial Analysis

Prepared by: Eddie Beavers
Acting Manager, Communications,
Water and Sewer Rate Design Branch
Division of Financial Analysis

ATTACHMENT A
STAFF REPORT CASE NO. 2003-00044
SOUTH SHORE S PRO FORMA OPERATIONS

	Test Period Operations	Pro Forma Adjustments	Pro Forma Operations
Operating Revenues:			
Water Sales	\$ 469,250	\$ 37,668	\$ 506,918
Other Operating Revenue	12,434	0	12,434
Total Operating Revenues	<u>\$ 481,684</u>	<u>\$ 37,668</u>	<u>\$ 519,352</u>
Operating Expenses:			
Operation & Maintenance:			
Wages	\$ 121,713	\$ 3,652	\$ 125,365
Salaries	74,387	(21,692)	52,695
Employee Insurance	54,413	0	54,413
Pensions	3,673	0	3,673
Power Plant	34,136	0	34,136
Chemicals	10,970	0	10,970
Materials & Supplies - Office	18,537	0	18,537
Materials & Supplies - Plant	12,079	0	12,079
Well Amortization Expense	8,877	(1,862)	7,015
Purchased Water	3,887	359	4,246
Materials & Supplies - Distribution	8,190	0	8,190
Reservoir Amortization	45,979	(39,918)	6,061
Accounting	2,400	0	2,400
Accounting Amortization	600	(200)	400
Legal	133	0	133
Legal Amortization	23,972	(13,857)	10,115
Property Rentals Building	9,900	0	9,900
Property Leases Tanks	850	0	850
Property Rentals Easements	300	0	300
Equipment Rentals	12,077	964	13,041
Transportation Expense	8,687	0	8,687
Insurance Vehicles	3,232	0	3,232
Insurance Property/Liability	6,043	0	6,043
Workers' Compensation	5,680	0	5,680
Insurance Other	2,898	0	2,898
Total Operation & Maint. Exp.	<u>\$ 473,613</u>	<u>\$ (72,554)</u>	<u>\$ 401,059</u>
PSC Assessment	894	0	894
Taxes Property	12,448	0	12,448
Taxes Payroll	15,371	(1,381)	13,990
Depreciation	43,555	0	43,555
Total Operating Expenses	<u>\$ 545,881</u>	<u>\$ (73,935)</u>	<u>\$ 471,946</u>
Net Operating Income	<u>\$ (64,197)</u>	<u>\$ 111,603</u>	<u>\$ 47,406</u>

Non-Operating Income/(Expense):			
Jobbing Revenue	\$ 10,264	\$ (5,132)	\$ 5,132
Jobbing Expenses	(61)	61	0
Interest Income	1,221	0	1,221
Interest Income Investment	752	(752)	0
Recurring Non-Utility Income	270	0	270
Interest Expense	(11,447)	881	(10,566)
Total Non-Operating Income/(Exp.)	<u>\$ 999</u>	<u>\$ (4,942)</u>	<u>\$ (3,943)</u>
Net Income Before Income Taxes	<u>\$ (63,198)</u>	<u>\$ 106,661</u>	<u>\$ 43,463</u>

ATTACHMENT B
STAFF REPORT CASE NO. 2003-00044
STAFF S PRO FORMA OPERATIONS

	Test Period Operations	Pro Forma Adjustments	Adj. Ref	Pro Forma Operations
Operating Revenues:				
Water Sales	\$ 466,654	\$ 31,028	(b)	\$ 497,682
Fire Protection Hydrants	2,596	(188)	(a)	2,408
Other Operating Revenue	12,434	0		12,434
Total Operating Revenues	\$ 481,684	\$ 30,840		\$ 512,524
Operating Expenses:				
Operation & Maintenance:				
Wages	\$ 121,713	\$ 3,652	(a)	\$ 125,365
Salaries	74,387	(23,084)	(c)	51,303
Employee Insurance	54,413	(15,124)	(d)	39,289
Pensions	3,673	(800)	(e)	2,873
Power Plant	34,136	0		34,136
Chemicals	10,970	0		10,970
Materials & Supplies - Office	18,537	0		18,537
Materials & Supplies - Plant	12,079	(1,980)	(f)	10,099
Well Amortization Expense	8,877	(2,845)	(g)	6,032
Purchased Water	3,887	360	(a)	4,247
Materials & Supplies - Distribution	8,190	(1,267)	(h)	6,923
Reservoir Amortization	45,979	(39,174)	(i)	6,805
Accounting	2,400	0		2,400
Accounting Amortization	600	0		600
Legal	133	0		133
Legal Amortization	23,972	(14,958)	(j)	9,014
Property Rentals Building	9,900	0		9,900
Property Leases Tanks	850	0		850
Property Rentals Easements	300	0		300
Equipment Rentals	12,077	967	(a)	13,044
Transportation Expense	8,687	(2,344)	(k)	6,343
Lease Termination Amortization	0	2,576	(l)	2,576
Insurance Vehicles	3,232	0		3,232
Insurance Property/Liability	6,043	0		6,043
Workers' Compensation	5,680	0		5,680
Insurance Other	2,898	0		2,898
Total Operation & Maint. Exp.	\$ 473,613	\$ (94,021)		\$ 379,592
PSC Assessment	894	0		894
Taxes Property	12,448	0		12,448
Taxes Payroll	15,371	(1,487)	(m)	13,884
Depreciation	43,555	2,987	(n)	46,542
Total Operating Expenses	\$ 545,881	\$ (92,521)		\$ 453,360
Net Operating Income	\$ (64,197)	\$ 123,361		\$ 59,164

Non-Operating Income/(Exp.):			
Jobbing Revenue	\$ 10,264	\$ (5,132)	(a) \$ 5,132
Jobbing Expenses	(61)	61	(a) 0
Interest Income	1,221	0	1,221
Interest Income Investment	752	(752)	(a) 0
Recurring Non-Utility Income	270	0	270
Interest Expense	(11,447)	881	(a) (10,566)
Total Non-Operating Income/(Exp.)	<u>\$ 999</u>	<u>\$ (4,942)</u>	<u>\$ (3,943)</u>
Net Income Before Income Taxes	<u>\$ (63,198)</u>	<u>\$ 118,419</u>	<u>\$ 55,221</u>

(a) Accepted Adjustments. South Shore proposes the following adjustments. Upon its review of South Shore's proposed adjustments and the supporting documentation, Staff recommends that they be accepted.

Account Title	Adjustment
Fire Protection Hydrants	\$ (188)
Wages	\$ 3,652
Purchased Water	\$ 360
Equipment Rentals	\$ 967
Jobbing Revenues	\$ (5,132)
Jobbing Expenses	\$ 61
Interest Income Investment	\$ (752)
Interest Expense	\$ 881

(b) Operating Revenues. South Shore recorded test period operating revenues from water sales of \$469,250. South Shore received Commission approval for an increase in water rates for service rendered on or after September 27, 2002.¹ By applying these rates to the 2002 water sales of 133,904,000 gallons,² South Shore arrives at its

¹ See Case No. 2002-00108, An Adjustment of Rates of the South Shore Water Works Co. (September 27, 2002).

² Application, Exhibit 6, 2002 Gallons Sold Register.

normalized operating revenues from water sales of \$506,918, which is \$37,670 greater than the actual test period level.

Using the 2002 usage information Staff prepared its billing analysis, which shows that South Shore's test-period water sales were 134,045,100 gallons. Applying the September 27, 2002 water rates to Staff's billing analysis results in a normalized level of operating revenues from water sales of \$497,682, which is \$31,028 greater than the test period level. Accordingly, Staff adjusts test period operating revenues to reflect the results of its billing analysis and to normalize revenues to reflect a full 12-months of the increased water rates.

(c) Salary. As the president and majority stockholder, George J. Hannah is responsible for overseeing the daily operations of South Shore. In South Shore's last rate proceeding, Staff found that South Shore did not demonstrate how Mr. Hannah's duties and responsibilities had substantially changed since its last rate cases³ or that \$79,500 is reasonable compensation for the work performed by Mr. Hannah. In that proceeding Staff calculated a pro forma salary for Mr. Hannah of \$49,028 using the base salaries established in the prior cases adjusted for the 3 percent cost of living allowances (COLA) given to all other South Shore employees since 1997.

In its application, South Shore compares the hourly wages paid to its full-time employees during the period of 1997 through 2002 and concludes that over this period,

³ See Case No. 1994-00188, An Adjustment of Rates of the South Shore Water Works Co. (March 8, 1995).

See Case No. 1997-00321, An Adjustment of Rates of the South Shore Water Works Co. (November 14, 1997).

its full-time employees received average merit pay increases of 5.04 percent. Applying this average increase to the salary determined reasonable in Case No. 1997-00321 and including the 2002 COLA of 3 percent, South Shore arrives at its pro forma salary for Mr. Hannah of \$52,695, \$21,692 less than the test period salary of \$74,387.⁴

Upon its review of Exhibit 7, Staff determined that in 2002 South Shore gave its full-time employees average merit wage increases of 4.06 percent rather than the customary 3 percent COLA. Staff recommends that Mr. Hannah's salary be adjusted to reflect the 2002 average merit wage increases of 4.06 percent and the 3 percent COLA for 2003. Staff's adjustment is calculated as follows:

Pro forma salary Case No. 1997-00321	\$ 42,292
Multiplied by: 1.030 COLA for 1998	43,561
1.030 COLA for 1999	44,868
1.030 COLA for 2000	46,214
1.030 COLA for 2001	47,600
1.046 Avg. Adj. for 2002	49,809
1.030 COLA Pro Forma	51,303
Less: Test Period Actual Salary	- 74,387
Pro Forma Adjustment	<u>\$ (23,084)</u>

(d) Employee Health Insurance. South Shore reports a test period level of employee health insurance expense of \$54,413. On January 1, 2003, South Shore changed its employee health insurance provider from Medical Mutual of Ohio to United Health Care resulting in a decrease to the annual health insurance expense of \$15,124.⁵ Accordingly, employee health insurance expense has been decreased by that amount.

⁴ Application, Exhibit 7, Payroll and Adjustments to Test Year.

⁵ Test-Period Health Insurance Premiums	\$ 54,413
\$3,274.09 (Monthly Premium) x 12-Months ≅	- 39,289
Pro Forma Adjustment	<u>\$ 15,124</u>

(e) Pensions. South Shore contributes 1.75 percent of each full-time employee's gross pay to a retirement fund. Staff has adjusted the test period contribution to reflect the pro forma salaries and wages of the full-time employees recommended herein.

Pro Forma full-time wages	\$ 112,806
Add: Pro forma salaries	+ 51,303
Total full-time salaries & wages	\$ 164,199
Multiplied by: Contribution rate	<u>x 1.75%</u>
Pro Forma Pensions	\$ 2,873
Less: Test Period Actual	- 3,673
Pro Forma Adjustment	<u>\$ (800)</u>

(f) Materials and Supplies Plant. South Shore reports a test-period level of materials and supplies plant expense of \$12,079. Upon its review of the invoices, Staff determined that South Shore expensed the purchase of manganese green sand in the amount of \$1,980. The cost to replace the sand in South Shore's filters is a non-recurring expenditure that should be amortized rather than expensed. Therefore, the materials and supplies plant expense has been reduced by \$1,980 to eliminate this cost from the test-period operating expenses. A provision for the recovery of the manganese green sand is included in the reservoir amortization adjustment.

(g) Well Cleaning Amortization. In Case No. 2008-00108, South Shore presented evidence of the well cleaning costs it incurred during the period of 1998 through 2002. In that proceeding, Staff amortized these costs over 5 years, which resulted in a well cleaning amortization of \$7,160. Using the historical well cleaning costs, South Shore calculates a pro forma level of well cleaning amortization of \$7,015⁶ a reduction of \$1,862 to the reported test period level of \$8,877.

⁶ Application, Exhibit 8, Detailed Description of Amortization Expense, Well Cleaning.

Included in South Shore's proposed level is amortization for well #5 of \$1,063, which was fully recovered in 2002. Eliminating amortization expense for well #5 and correcting the amortization for the muriatic acid purchased on January 15, 2001, Staff calculates a pro forma level of \$6,032 as follows:

Description	Year	Cost	Life	Accumulated Amortization 2002	Pro Forma Amortization
Well #5	1998	\$ 5,313	5	\$ 5,313	\$ 0
Well #2	1999	\$ 4,941	5	\$ 3,952	988
Well #9	2000	\$ 3,650	5	\$ 2,190	730
Well #11 & #12	2000	\$ 4,930	5	\$ 2,958	986
Muriatic Acid	2000	\$ 400	5	\$ 240	80
Well #2	2000	\$ 1,350	5	\$ 810	270
Well #1	2000	\$ 1,350	5	\$ 810	270
Well #8	2000	\$ 1,350	5	\$ 810	270
Muriatic Acid	2000	\$ 270	5	\$ 162	54
Muriatic Acid	2000	\$ 169	5	\$ 102	34
Muriatic Acid	2000	\$ 169	5	\$ 102	34
Muriatic Acid	2000	\$ 169	5	\$ 102	34
Muriatic Acid	2001	\$ 778	5	\$ 234	156
Well #9	2001	\$ 1,450	5	\$ 580	290
Muriatic Acid	2001	\$ 300	5	\$ 120	60
Muriatic Acid	2002	\$ 617	5	\$ 123	123
Well #4	2002	\$ 2,639	5	\$ 528	528
Well #5	2002	\$ 2,953	5	\$ 591	591
Well #6	2002	\$ 2,668	5	\$ 534	534
Totals					\$ 6,032
Less: Test-Period Actual					8,877
Pro Forma Adjustment					\$ (2,845)

(h) Materials and Supplies Distribution. South Shore reports a test-period level of materials and supplies distribution expense of \$8,190. Included in this expense is South Shore's purchase of meter box covers in the amount of \$1,267. The purchase of a meter box cover is a capital expenditure that should be depreciated rather than expensed. Therefore, the materials and supplies distribution expense has been reduced by \$1,267 to eliminate the cost of the meter box covers from the test-period

operating expenses. A provision for the recovery of the capital expenditures is included in the depreciation expense adjustment.

(i) Reservoir Amortization. In Case No. 2002-00108, Staff amortized South Shore's tank painting costs over 10 years. South Shore proposes to amortize the cost of painting the Fullerton and Morton tanks over 10 years, which results in a pro forma reservoir amortization expense of \$6,061, a reduction of \$39,918 to the reported test period level of \$45,979.

Amortizing the painting of the Fullerton and Morton Tanks, the purchase of the manganese sand and the cost to repair the filter over 10 years Staff calculates a pro forma level of reservoir amortization expense of \$6,805 as follows:

Description	Year	Cost	Life	Pro Forma Amortization
Fullerton	2002	\$ 17,475	10	\$ 1,748
Morton	2002	\$ 850	10	85
Morton	2002	\$ 5,778	10	578
Morton	2002	\$ 3,216	10	322
Morton	2002	\$ 12,659	10	1,266
Morton	2002	\$ 6,000	10	600
Morton	2003	\$ 14,100	10	1,410
Manganese Sand	2002	\$ 1,980	10	198
Repair Filter	2003	\$ 5,980	10	598
Pro Forma Amortization				\$ 6,805
Less: Test-Period Actual				45,979
Pro Forma Adjustment				\$ (39,174)

(j) Legal Amortization. South Shore proposes to reduce test period legal amortization expense of \$23,972 by \$13,857 to a pro forma level of \$10,115. This

adjustment reflects amortizing over 3 years the anticipated legal fees related to this case, and the actual legal fees incurred in Case No. s 2002-00108 and 2002-00003.⁷

To date, South Shore has incurred legal fees associated with this current proceeding of \$1,135 and additional fees for Case No. 2003-00003 of \$2,130. Amortizing the legal fees associated with the prior rate case, the complaint case and this current proceeding over 3 years, Staff calculates a pro forma legal amortization expense of \$9,014 as follows:

Description	Year	Cost
Case No. 2002-00108	2002	\$ 6,180
Case No. 2002-00003	2002	17,597
Case No. 2002-00003	2003	2,130
Case No. 2003-00044	2003	1,135
Total Legal Fees		\$ 27,042
Divided by: 3 Years		3
Pro Forma Expense		\$ 9,014
Less: Test-Period Actual		23,972
Pro Forma Adjustment		\$ (14,958)

(k) Transportation. South Shore reports a test-period level of transportation expense of \$8,687. After reviewing the invoices, Staff determined that South Shore expensed the payment of an automobile lease termination fee of \$2,344. The payment for the lease termination is a non-recurring expenditure that should be amortized rather than expensed. Therefore, the transportation expense has been reduced by \$2,344 to eliminate this cost from the test-period operating expenses. A provision for the recovery of the termination payment is included the section that follows.

⁷ See Case No. 2002-00003, South Shore Water Works Company, Complainant, v. City of Greenup, Kentucky Defendant (July 24, 2002).

(l) Lease Termination. During and subsequent to the test period South Shore has paid vehicle lease termination fees in the amount of \$7,729.⁸ The fees represented charges for excessive miles and wear/tear to the leased vehicles. South Shore proposes and Staff agrees that the lease termination fees should be amortized over 3 years, the terms of the respective vehicle leases. Therefore, Staff recommends that operating expenses be increased by \$2,576.⁹

(m) Payroll Taxes. South Shore proposes a pro forma payroll tax expense of \$13,990, a decrease of \$752 to the test period level of \$15,371. This adjustment reflects the corresponding impact South Shore's proposed salary and wage adjustments would have on this expense. Staff recommends that test period payroll taxes be decreased by \$1,487 to reflect its pro forma wages and salary adjustments. Staff's payroll tax adjustment is calculated as follows:

Pro Forma full-time wages	\$ 112,806
Add: Pro forma salaries	+ 51,303
Total full-time salaries & wages	<u>\$ 176,668</u>
Multiplied by: Contribution rate	x 7.65%
Pro Forma Pensions	\$ 13,515
Less: Test Period Actual	<u>- 15,002</u>
Pro Forma Adjustment	<u>\$ (1,487)</u>

(n) Depreciation. South Shore reported test period depreciation expense of \$43,555. Subsequent to the test period South Shore recorded capital expenditures of \$15,989. Staff recommends a pro forma depreciation adjustment of \$2,987 to reflect

⁸ 2000 Toyota Sienna 02/14/2002	\$ 2,344
2000 Chevrolet Truck 02/14/2003	2,389
2000 Chevrolet Truck 02/14/2003	+ 2,996
Total Vehicle Lease Termination Fees	<u>\$ 7,729</u>

⁹ \$7,729 (Vehicle Lease Termination Fees) ÷ 3 Years = \$2,576.

depreciating these capital expenditures over their estimated useful lives. Staff's depreciation adjustment is calculated as follows:

Description	Year	Cost	Life	Pro Forma Depreciation
Well #12	2003	\$ 3,876	5	\$ 775
Well #3	2003	\$ 630	5	126
Well #6	2003	\$ 650	5	130
Well #8	2003	\$ 6,149	5	1,230
Pumping Equipment	2003	\$ 3,091	5	618
Pumping Equipment	2003	\$ 913	10	91
Services	2003	\$ 680	40	17
Pro Forma Adjustment				<u>\$ 2,987</u>

ATTACHMENT C
 STAFF REPORT CASE NO. 2003-00044
 STAFF S RECOMMENDED
 REVENUE REQUIREMENT

Revenue Requirement Determination

Pro Forma Operating Expenses	\$ 453,360
Divided by: Operating Ratio	88%
Subtotal	<u>\$ 515,182</u>
Less: Pro Forma Operating Expenses	453,360
Net Operating Income After Income Taxes	\$ 61,822
Multiplied by: Gross-up Factor	1.6118633
Net Operating Income Before Income Taxes	<u>\$ 99,649</u>
Add: Pro Forma Operating Expenses	453,360
Other Income & Deductions	3,943
Total Revenue Requirement	<u>\$ 556,952</u>
Less: Other Operating Revenues	12,434
Fire Protection Hydrants	2,408
Revenue Requirement from Rates	<u><u>\$ 542,110</u></u>

Increase in Operating Revenue from Rates

Revenue Requirement from Rates	\$ 542,110
Less: Normalized Operating Revenue from Rates	497,682
Recommended increase in Revenue from Rates	<u><u>\$ 44,428</u></u>

Calculation of State and Federal Income Taxes

Total Revenue Requirement	\$ 556,952
Less: Recommended Operating Expenses Net Income Tax	453,360
Net Income Before Interest & Income Tax	<u>\$ 103,592</u>
Less: Interest Expense	3,943
Net Income Before State & Federal Income Tax	<u>\$ 99,649</u>
Less: State Income Tax at 6%	5,979
Net Income Before Federal Tax	<u>\$ 93,670</u>
Less: Federal Income Tax at 34%	31,848
Net Income	<u><u>\$ 61,822</u></u>

ATTACHMENT D
STAFF REPORT CASE NO. 2003-00044
STAFF S COST-OF-SERVICE STUDY

In seeking to establish fair, just and reasonable rates for a water utility, a sound analysis must be performed that reflects the actual cost of providing water service to each customer classification. That analysis must allocate the costs of providing water service among the customer classes commensurate with their service requirements so that the differences in costs of providing services to different types of customers is recognized. Therefore, to develop a proper rate schedule for South Shore Water Works Company, Commission Staff prepared a cost of service study based on the commodity demand methodology as set out in the America Water Works Association (AWWA) Manual M-1. This study recognizes that a utility must be prepared for meeting peak demand requirements as well as the average water use needs. In other words, a system must be sized to meet the demand of most small usage customers that use very little water throughout the day, but place a tremendous burden on the system at the peak times such as mornings and evenings. Most large-usage customers place a more consistent demand on the system by using a constant rate of water throughout the day and night. Therefore, those customers do not contribute to a system s strain to meet peak demands.

Retail Rates: Staff s review established the total revenue required for South Shore is \$556,952 and \$12,434 is obtained though other operating revenue and \$2,571 is obtained through fire protection rates. The next step is to develop rates that will collect the remaining \$541,947 from the company s retail customers. The utility s expenses are analyzed and allocated according to three different classifications: Commodity, Demand and Customer.

Commodity costs are those directly associated with the cost of water. The major expense in this classification is the amount paid to run the power plant of the utility. The only other commodity cost that the company experienced was for the chemicals to treat the water.

Demand costs are those associated with providing the facilities to meet the peak demands placed on the system. Costs consist of the salaries and other expenses associated with monitoring and maintaining these facilities.

Customer costs are those incurred to serve customers without regard to varying usage. These costs include the salaries and expenses associated with meter reading, billing, collections, accounting expenses and the costs associated with service lines and meters.

On the Allocation of O&M Expense schedule the allocation of operation and maintenance expenses are allocated to the functional cost components, Staff utilized information obtained through the utility's application and field reviews to allocate these costs. Administrative and general expenses are allocated to the cost components based on the subtotal allocated percentages of Demand and Customer expenses, excluding commodity costs.

On the Allocation of Cost of Service schedule the revenue requirement from rates is allocated to the functional cost components. The allocation process results in \$49,353 in commodity costs, \$394,728 in demand costs and \$97,866 in customer costs.

The Calculation of Water Rates schedule is Staff's calculation of the South Shore's retail water rates. Total commodity costs are allocated across the rate steps in accordance with usage percentages. Total demand costs are allocated across the rate

steps in accordance with usage that has been adjusted to reflect the higher peak demands that are caused in the lower rate steps. Total customer costs are all collected in the first rate step, or minimum bill, since those costs do not differ with varying usage.

The total for the first rate step is \$200,843 which is divided by the number of bills issued on an annual bases which calculates to a minimum bill of \$7.92 for the first 1,000 gallons. The totals for the remaining rate steps are each divided by the actual water usage for each rate step to calculate the remainder of the rates.

Additionally, Staff reviewed the information provided in the South Shore's application and determined there was not enough information to support the requested increase in the fire protection rates. Utilizing information filed with their application in this case, Staff reviewed the previous case, Case No. 2002-00108, and utilized the method of allocation of the fire prevention in the same manner. After review of the information provided by South Shore. Staff determined that there was not enough supporting information available to agree with an eight percent (8%) increase in these rates. Staff determined that the most fair, just and reasonable method to increase the fire protection rates is to determine the percentage increase in the allocated Demand Expenses from Case No. 2002-00108 to the allocated Demand Expenses in this case and increase the fire protection revenue accordingly with that percentage. The allocated Demand Expenses were increased by six and eight-tenths percent (6.8%) over the previous case, adjusting the revenue of \$2,408 by this percentage increases revenue of fire protection to \$2,571. Dividing this figure by the total number of bills issued on an annual basis for fire protection, the rate for the hydrant charge and the fire line charge should be \$9.74.

Allocation of Plant Value				
	Total	Commodity	Demand	Customer
Land & Land Rights	\$4,529		\$4,529	
Structures and Improvements	49,752		49,752	
Wells and Springs	269,308		269,308	
Pumping Equipment	94,187		94,187	
Water Treatment Equipment	97,688		97,688	
Distribution Reservoirs & Standpipes	213,622		213,622	
Transmission & Distribution Mains	682,696		682,696	
Services	66,641			\$66,641
Meters & Meter Installations	139,647			139,647
Hydrants	12,907			12,907
Subtotal	\$1,630,977		\$1,411,782	\$219,195
Allocation Percentages	100%		86.6%	13.4%
Office Furniture & Equipment	\$25,914		\$22,442	\$3,472
Tools, Shop & Garage Equipment	21,724		18,813	2,911
Subtotal	\$47,638		\$41,255	\$6,383
Total	\$1,678,615		\$1,453,037	\$225,578
Percentages	100%		86.6%	13.4%
Allocation Percentages	100%		86.6%	13.4%

Source: PSC Annual Report 2001

Allocation of Depreciation				
	Total	Commodity	Demand	Customer
Land & Land Rights	4529		4529	
Wells	\$268,879		\$268,879	
Pumping Equipment	94,690		94,690	
Treatment Equipment	97,688		97,688	
Dist. Reservoirs & Standpipes	243,165		243,165	
Transmission & Distribution Mains	267,992		267,992	
Meters	144,786			\$144,786
Hydrants	61,374			61,374
Subtotal	\$1,183,103		\$976,943	\$206,160
Allocation Percentages	100%		82.6%	17.4%
Office Furniture & Equipment	\$27,589		\$22,789	\$4,800
Building	46,422		38,345	8,077
Tools, Shop & Garage Equip	22,466		18,557	3,909
Subtotal	\$96,477		\$79,691	\$16,786
Total	\$1,279,580		\$1,056,634	\$222,946
Percentages	100%		82.6%	17.4%

Source: South Shore Application for Rate Adjustment 2003-00034

Allocation of Operation & Maintenance Expense				
	Total	Commodity	Demand	Customer
Wages	\$105,307		\$78,980	\$26,327
Employee Insurance	33,003		24,752	8,251
Pension	2,413		1,810	603
Insurance-Workers Comp	4,771		3,578	1,193
Power Plant	34,136	34,136		
Chemicals	10,970	10,970		
Purchased Water	4,247	4,247		
Materials & Supplies-Plant	10,099		10,099	
Materials & Supplies-Distribution	6,923		6,923	
Property Rentals Tanks	850		850	
Property Rentals Easements	300		300	
Well Cleaning Amortization	6,032		6,032	
Reservoir Amortization	6,805		6,805	
Subtotal	\$225,856	\$49,353	\$140,129	\$36,374
Less Commodity	(\$49,353)			
Total	\$176,503	\$49,353	\$140,129	\$36,374
Allocation Percentages	100%		79%	21%
Wages-Admin	\$20,058		\$15,846	\$4,212
Salaries Officers	51,303		40,529	10,774
Employee Insurance	6,286		4,966	1,320
Pension	460		363	97
Accounting Amortization	600		474	126
Accounting	2,400		1,896	504
Legal	133		105	28
Legal Amortization	9,014		7,121	1,893
Lease Termination Amortization	2,576		2,035	541
Materials & Supplies-Office	18,537		14,644	3,893
Property Rentals Building	9,900		7,821	2,079
Equipment Rentals	13,044		10,305	2,739
Transportation Expense	6,343		5,011	1,332
Insurance-Vehicles	3,232		2,553	679
Insurance-Property & Liability	6,043		4,774	1,269
Insurance-Workers Comp	909		718	191
Insurance-Other	2,898		2,289	609
Income Taxes	37,827		29,883	7,944
PSC Assessment	894		706	188
Property Taxes	12,448		9,834	2,614
Payroll Taxes	13,884		10,968	2,916
Interest Expense	3,943		3,115	828
Subtotal	\$222,732		\$175,956	\$46,776
Total Operating Expenses	\$448,588	\$49,353	\$316,085	\$83,150

Allocation of Cost of Service South Shore Water Works Company				
	Total	Commodity	Demand	Customer
Operation & Maintenance	\$448,588	\$49,353	\$316,085	\$83,150
Operating Ratio ¹	61,822		53,538	8,284
Depreciation ²	46,542		38,444	8,098
General Water Service Cost	\$556,952	\$49,353	\$408,067	\$99,532
<i>Less:</i>				
Other Operating Revenue	(12,434)		(10,768)	(1,666)
Fire Protection Revenue	(2,571)		(2,571)	
Revenue Required from Rates	\$541,947	\$49,353	\$394,728	\$97,866

NOTES:

¹Operating Ratio has been allocated by the percentage on the Allocation of Plant Value Sheet.

²Depreciation has been allocated by the percentage on the Allocation of Depreciation Sheet.

Calculation of Water Rates				
	Total	First 1,000 gallons	Next 9,000 gallons	Over 10,000 gallons
Actual Water Sales:				
Thousand Gallons	134,045,100	23,408,100	76,732,000	33,905,000
Percent	100%	17.5%	57.2%	25.3%
Weighted Sales for Demand:				
		2	1.5	1
Thousand Gallons	195,819,200	46,816,200	115,098,000	33,905,000
Percent	100%	23.9%	58.8%	17.3%
Allocation of Volumetric Costs:				
Commodity	\$49,353	\$8,637	\$28,230	\$12,486
Demand	394,728	94,340	232,100	68,288
Customer	97,866	97,866		
Total	\$541,947	\$200,843	\$260,330	\$80,774
Number of Bills				
	25,416			
Proposed Rates				
		\$7.92	\$3.39	\$2.38

\$0.02 added to Minimum Bill to provide revenue to obtain Staff's Revenue Requirement from Rates.

Verification of Rates				
	Bills	Gallons	Rate	Revenue
First 1,000 gallons	25,416	23,408,100	\$7.92	\$201,295
Next 9,000 gallons		76,732,000	3.39	260,121
Over 10,000 gallons		33,905,000	2.38	80,694
Total Revenue from Rates				\$542,110
Other Operating Income				12,434
Fire Protection	264		9.74	2,571
Total Operating Revenue		134,045,100		\$557,115

Cost of Service Monthly Water Rates			
First 1,000 gallons		\$7.92	Minimum bill
Next 9,000 gallons		3.39	per 1,000 gallons
Over 10,000 gallons		2.38	per 1,000 gallons
Fire Protection Rates:			
Hydrant Charge		\$9.74	
Fire Line Charge		\$9.74	

Comparison of Rates				
Gallon Usage	Current Rates	Cost of Service Rates	Increase	Percentage
1,000	\$7.76	\$7.92	\$0.16	2.1%
2,000	10.77	11.31	0.54	5.0%
3,000	13.78	14.70	0.92	6.7%
4,000	16.79	18.09	1.30	7.7%
5,000	19.80	21.48	1.68	8.5%
6,000	22.81	24.87	2.06	9.0%
7,000	25.82	28.26	2.44	9.5%
8,000	28.83	31.65	2.82	9.8%
9,000	31.84	35.04	3.20	10.1%
10,000	34.85	38.43	3.58	10.3%
15,000	45.40	50.33	4.93	10.9%
20,000	55.95	62.23	6.28	11.2%
25,000	66.50	74.13	7.63	11.5%
30,000	77.05	86.03	8.98	11.7%
35,000	87.60	97.93	10.33	11.8%
40,000	98.15	109.83	11.68	11.9%
50,000	119.25	133.63	14.38	12.1%
75,000	172.00	193.13	21.13	12.3%
100,000	224.75	252.63	27.88	12.4%
150,000	330.25	371.63	41.38	12.5%
200,000	435.75	490.63	54.88	12.6%
250,000	541.25	609.63	68.38	12.6%
300,000	646.75	728.63	81.88	12.7%
350,000	752.25	847.63	95.38	12.7%

Comparison of Rates				
	Block Usage		Current Rates	Cost of Service Rates
First	1,000	Gallons	\$7.76	\$7.92
Next	9,000	Gallons	3.01	3.39
Over	10,000	Gallons	2.11	2.38

Effect on Customer s Average Bill 5,000 Gallons Usage			
Current Rates	Proposed Rates	Amount Increase	% Increase
\$19.80	\$21.48	\$1.68	8.50%