

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of: \_\_\_\_\_

ALTERNATIVE RATE ADJUSTMENT FILING OF ) CASE NO.  
SOUTH HOPKINS WATER DISTRICT ) 2013-00428

NOTICE OF FILING OF COMMISSION STAFF REPORT

Notice is hereby given that, in accordance with the Commission's Order of January 14, 2014, the attached report has been filed in the record of the above-styled proceeding. Pursuant to the Commission's January 14, 2014 Order, South Hopkins Water District ("South Hopkins") is required to file written comments regarding the findings in this report no later than April 16, 2014.

  
\_\_\_\_\_  
Jeff Derouen  
Executive Director  
Public Service Commission  
P.O. Box 615  
Frankfort, KY 40602

DATED APR 02 2014

cc: Parties of Record

STAFF REPORT  
ON  
SOUTH HOPKINS WATER DISTRICT  
CASE NO. 2013-00428

South Hopkins Water District (“South Hopkins”), a water district organized pursuant to KRS Chapter 74, provides retail water service to approximately 3,004 customers that reside in the Kentucky counties of Caldwell and Hopkins.<sup>1</sup> It also provides contracted wholesale water service to Caldwell County Water District (“Caldwell County”) and the cities of Mortons Gap and Earlington.

On January 2, 2014, South Hopkins filed an application with the Commission requesting to increase its retail water service rates by 3.64 percent pursuant to 807 KAR 5:076 to generate additional annual revenues of \$37,560. It did not request to increase its wholesale rates, which are adjusted annually pursuant to a formula that is included in the wholesale contract agreements. The proposed retail rates would increase a monthly bill for 5,000 gallons of water purchased through a 5/8-inch x 3/4-inch meter from \$29.17 to \$30.23, an increase of \$1.06, or 3.63 percent.

South Hopkins based its requested rates on the test year ended December 31, 2012. The financial exhibits shown in South Hopkins’ application that support the requested rates are summarized below in condensed form. Although South Hopkins is requesting an increase only in its retail rates, both South Hopkins’ retail and wholesale operations are accounted for in the exhibit.

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<sup>1</sup> *Annual Report of South Hopkins Water District to the Public Service Commission for the Calendar Year Ended December 31, 2012 (“Annual Report”)* at 1.

Pro Forma Operating Expenses	\$1,307,090
Plus: Average Annual Debt Principal and Interest Payments	42,332
Additional Cash Working Capital	<u>8,466</u>
Overall Revenue Requirement	1,357,888
Less: Other Operating Revenues	(46,887)
Interest Income	<u>(4,283)</u>
Revenue Required from Retail and Wholesale Rates	1,306,718
Less: Pro Forma Present Retail and Wholesale Rate Revenue	<u>(1,260,842)</u>
Required Revenue Increase from Retail and Wholesale Sales	<u>\$ 45,876</u>
Percentage Increase	<u>3.64%</u>

South Hopkins allocated the required revenue increase calculated above to its current rate design evenly across the board as shown below.<sup>2</sup>

	Pro Forma Present Rate Revenue	Allocation of Increase	Allocated Revenue Increase
Retail Customers			
Meter Size			
5/8-Inch x 3/4-Inch, Rate 1	\$ 873,684	3.64%	\$ 31,802
5/8-Inch x 3/4-Inch, Rate 2	9,667	3.64%	352
1-Inch	46,736	3.64%	1,701
2-Inch	88,769	3.64%	3,231
3-Inch	<u>13,013</u>	3.64%	<u>474</u>
Total Retail	1,031,869		37,560
Wholesale Customers	<u>215,842</u>	3.64%	<u>7,857</u>
Total	<u>\$ 1,247,711</u>		<u>\$ 45,417</u>

Because South Hopkins requested to increase retail rates only, it sought recovery of only \$37,560 of the \$45,876 required revenue increase.

<sup>2</sup> Due to rounding, South Hopkins' allocation method resulted in a revenue increase of only \$45,417, not the \$45,876 calculated in its financial exhibits.

To determine the reasonableness of the proposed rates, Staff performed a limited financial review of South Hopkins' test-year operations. The scope of the review was limited to determining whether operations reported for the test year were representative of normal operations. Known and measurable changes to test-year operations were identified and adjustments were made when their effects were deemed to be material. Insignificant and immaterial discrepancies were not pursued or addressed.

Staff's findings and recommendations are summarized in this report. David Foster reviewed the calculation of South Hopkins' Overall Revenue Requirements. Jason Green reviewed South Hopkins' reported revenues and rate design.

#### Summary of Findings

1. Overall Revenue Requirement and Required Revenue Increase. By applying the Debt Service Coverage ("DSC") method, as generally accepted by the Commission, Staff found South Hopkins' overall revenue requirement to be \$1,377,644 and that a revenue increase of \$78,763, or 6.313 percent, over pro forma present rate revenues is necessary to generate the overall revenue requirement.

2. Rates. The Commission has previously found that the allocation of a revenue increase evenly across the board to a utility's current rate design is appropriate when there has been no evidence entered into the record demonstrating that this method is unreasonable. Finding no such evidence in this case, Staff followed the method proposed by South Hopkins and allocated the \$78,763 revenue increase evenly across the board to South Hopkins' current rate design as shown below.

	Pro Forma Present Rate Revenue	Allocation of Increase	Allocated Revenue Increase
Retail Customers			
Meter Size			
5/8-Inch x 3/4-Inch, Rate 1	\$ 873,684	6.313%	\$ 55,156
5/8-Inch x 3/4-Inch, Rate 2	9,667	6.313%	610
1-Inch	46,736	6.313%	2,950
2-Inch	88,769	6.313%	5,604
3-Inch	13,013	6.313%	822
	<u>1,031,869</u>		<u>65,142</u>
Total Retail	1,031,869		65,142
Wholesale Customers	<u>215,842</u>	6.313%	<u>13,626</u>
Total	<u>\$ 1,247,711</u>		<u>\$ 78,768</u>

Staff agrees that South Hopkins' contracted wholesale rates should not be adjusted in this proceeding and that only retail rates should be increased. South Hopkins relies on the mechanism located in the water purchase contract to determine the wholesale rate annually. Any increase or decrease in its wholesale water rate should be determined by the formula located in the contracts. The retail rates calculated by Staff are shown in Attachment A to this report and will increase the monthly cost of 5,000 gallons of water purchased through a 5/8-inch x 3/4-inch meter from \$29.17 to \$31.00, an increase of \$1.83, or 6.27 percent. These retail rates will generate approximately \$65,142 in additional annual retail revenues.

As provided by the Commission's Order in this proceeding dated January 14, 2014, South Hopkins may request to adopt the rates calculated by Staff; however, adoption of these rates is not required. The rates requested by South Hopkins will provide revenues that are sufficient to meet its cash-related operating expenses and

its DSC.<sup>3</sup> If South Hopkins adopts the rates shown in Attachment A, it must provide notice to its customers of these rates as required by 807 KAR 5:076, Section 11(4)(f).

3. Depreciable Lives. In this report, Staff revised the depreciable lives assigned to many of South Hopkins' assets for ratemaking purposes. The revised lives should be used for accounting purposes in all future reporting periods. They better match the life expectancy of South Hopkins' assets and will better match expenses to the revenues generated by the water rates approved in this proceeding. This action will minimize the erosion of South Hopkins' equity. No adjustment to accumulated

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<sup>3</sup> South Hopkins currently has outstanding bonds payable to the United States Department of Agriculture Rural Development ("RD") requiring South Hopkins to assess rates for water service that produce net revenues that are equal to at least 120 percent of the average annual bond principal and interest payments. As shown below, the rates requested by South Hopkins will produce net revenues that result in a 224 percent DSC ratio, while the rates calculated by Staff will produce a 289 percent DSC ratio.

Pro Forma Present Rate Retail Revenue	\$	1,031,869	\$	1,031,869
Times: Percentage Increase		3.640%		6.313%
		<hr/>		
Revenue Increase		37,560		65,142
Plus: Pro Forma Present Rate Retail Revenue		1,031,869		1,031,869
Pro Forma Present Rate Wholesale Revenue		215,842		215,842
Pro Forma Other Operating Income		46,887		46,887
Pro Forma Interest Income		4,283		4,283
		<hr/>		
Gross Revenues		1,336,441		1,364,022
Less: Pro Forma Cash Related Operating Expenses				
Operation and Maintenance		(1,213,725)		(1,213,725)
Taxes		(27,783)		(27,783)
		<hr/>		
Net Revenues		94,932		122,514
Divide by: Average Annual Principal and Interest Payment		42,332		42,332
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DSC Ratio		224%		289%
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depreciation or retained earnings should be made to account for the retroactive effect of this change in accounting estimate.

### Pro Forma Operating Statement

South Hopkins' Pro Forma Operating Statement for the test year ended December 31, 2012, as determined by Staff, appears below.

	Test Year	Adjustments	Ref.	Pro-forma
<b>Operating Revenues</b>				
<b>Sales of Water</b>				
Retail Water Sales	\$ 1,076,204	\$ (44,335)	(A)	\$ 1,031,869
Wholesale Water Sales	232,248	(16,406)	(B)	215,842
Water Audit Recovery Charge ("WARC")	<u>(47,610)</u>	<u>47,610</u>	(C)	<u>0</u>
Total Sales of Water	1,260,842	(13,131)		1,247,711
Other Operating Revenue	<u>60,087</u>	<u>(13,200)</u>	(D)	<u>46,887</u>
<b>Total Operating Revenue</b>	<u>1,320,929</u>	<u>(26,331)</u>		<u>1,294,598</u>
<b>Operating Expenses</b>				
<b>Operation and Maintenance Expenses</b>				
Salaries and Wages - Employees	265,988	38,881	(E)	304,869
Salaries and Wages - Officers	18,200			18,200
Employee Pension and Benefits	108,173	16,334	(F)	124,507
<b>Purchased Water:</b>				
Water Cost at Contract Rate	618,951	(45,372)	(G)	
Debt Reserve Payment	16,992	(7,743)	(H)	565,836
2012 WARC Refund	(86,705)	(16,992)	(I)	0
Purchased Power	45,804	85,894	(C)	(811)
Materials and Supplies	71,446	(618)	(H)	45,186
Contractual Services	12,055	(2,542)	(J)	
Water Testing	3,218	650	(K)	69,554
Transportation Expenses	29,139			12,055
Insurance	26,889			3,218
Bad Debt	6,943			29,139
Miscellaneous Expenses	<u>8,141</u>			<u>26,889</u>
Total Operation and Maintenance Expenses	1,145,234	68,491		1,213,725
Depreciation Expense	76,577	8,760	(L)	85,337
Taxes Other Than Income	<u>24,153</u>	<u>3,630</u>	(M)	<u>27,783</u>
<b>Total Operating Expenses</b>	<u>1,245,964</u>	<u>80,882</u>		<u>1,326,846</u>
<b>Net Operating Income</b>	74,965	(107,213)		(32,248)
<b>Interest and Dividend Income</b>	<u>4,283</u>			<u>4,283</u>
<b>Income Available to Service Debt</b>	<u>\$ 79,248</u>	<u>\$ (107,213)</u>		<u>\$ (27,965)</u>

(A) Purchased Water Adjustment. South Hopkins purchases wholesale water from the Dawson Springs Municipal Waterworks and Sewer System (“Dawson Springs”) and the city of Madisonville (“Madisonville”). Effective October 1, 2013, Dawson Springs decreased the wholesale rate charged to South Hopkins. In Case No. 2013-00376, the Commission authorized South Hopkins to adjust its retail water service rates to pass through this wholesale rate decrease.<sup>4</sup> Staff determined that the rates authorized in Case No. 2013-00376 will generate annual revenues of \$1,031,869, requiring a decrease to test-year Water Sales Revenues of \$44,335 as shown below.

Pro Forma Water Sales at Current Rates taken from Billing Analysis Shown in the Application	\$ 1,031,869
Less: Test Year	<u>(1,076,204)</u>
Decrease	<u>\$ (44,335)</u>

(B) Wholesale Water Sales Revenues. The contract wholesale rate charged to Mortons Gap, Earlington, and Caldwell County was decreased from \$2.81 per thousand gallons to \$2.48 per thousand gallons on July 1, 2012, and that rate is still in effect. As shown below, Staff determined that test-year revenues should be decreased by \$16,406 to account for this 2012 wholesale rate decrease.

Total Wholesale Test-Year Gallons Sold	87,033,079
Times: Current Rate, Per 1,000 Gallons	<u>\$ 2.48</u>
Pro Forma Present Rate Wholesale Revenue	215,842
Less: Test Year	<u>(232,248)</u>
Decrease	<u>\$ (16,406)</u>

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<sup>4</sup> Case No. 2013-00376, *Purchased Water Adjustment Filing of South Hopkins Water District* (Ky. PSC Nov. 12, 2013).



(C) WARC. South Hopkins' purchased water contract with Dawson Springs includes a true-up mechanism referred to as the WARC ("Water Audit Recovery Charge"). Dawson Springs calculates the WARC by comparing its cost to provide water to South Hopkins to the revenue it receives from South Hopkins at the contracted rate.

The WARC is calculated by an independent Certified Public Accountant as part of Dawson Springs' annual financial audit. Dawson Springs applies the entire amount of the WARC to the bill delivered to South Hopkins in the month following completion of the audit. The WARC can be a charge or a refund and can be of a material amount, as occurred in 2011 and in 2012. In 2011, Dawson Springs assessed a WARC charge of \$80,963, but in 2012 it made a WARC refund of \$86,705.

South Hopkins is required to pass the WARC through to its wholesale customers and its retail customers using different methods. In accordance with its wholesale water contracts, South Hopkins passes the WARC through to its wholesale customers in the month following Dawson Springs' assessment of the WARC. The pass-through to retail customers is performed over multiple billing periods. The Commission's Order in Case No. 2010-00074<sup>5</sup> required that a WARC charge be collected from retail customers over a 12-month period, while a WARC refund is made over a two-month period in accordance with 807 KAR 5:068, Section 7. In all instances, the WARC pass-through by South Hopkins is shown as a separate line item from all other charges or credits on a customer's bill.

South Hopkins accounts for a WARC assessed by Dawson Springs using the Purchased Water Expense account and a WARC refund pass-through using the Water

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<sup>5</sup> Case No. 2010-00074, *Application of South Hopkins Water District for Approval of a Proposed Increase in Rates for Water Service* (Ky. PSC Sept. 22, 2010) at 10.

Sales Revenue account. A summary of the WARC transactions reported in the test year is shown below.

	Test Year
Water Sales Revenue	
2011 WARC Charge from Dawson Springs Passed-Through on 2012 Retail Bills	\$ 36,663
2012 WARC Refund from Dawson Springs that was Passed-Through on 2012 Retail Bills	(50,989)
2012 WARC Refund from Dawson Springs that was Passed-Through on 2012 Wholesale Bills	<u>(33,284)</u>
Net Effect on Revenue	<u>(47,610)</u>
Purchase Water Expense	
2012 WARC Refund from Dawson Springs that was Attributed to Retail Customers	(53,421)
2012 WARC Refund from Dawson Springs that was Attributed to Wholesale Customers	<u>(33,284)</u>
Net Effect on Expenses	<u>(86,705)</u>
Net Effect on Net Operating Income	<u>\$ 39,095</u>

Because the WARC pass-through is separate from South Hopkins' retail and wholesale water service rates, its effects would generally be removed from the test year so that it has no impact on the calculation of South Hopkins' water-service rates. However, in this case, Staff made an exception with an adjustment that increased South Hopkins' test-year Net Operating Income by \$811 to complete the pass-through to retail customers of the WARC refund received by South Hopkins in 2012.

To explain, South Hopkins reported the total \$86,705 refund as a credit to its test-year Purchased Water expense. It determined that \$33,284 of the refund amount should be passed through to wholesale customers and \$53,421 to retail customers.

The \$33,284 was refunded to the wholesale customers in accordance with the wholesale water contracts by crediting one month's bill.

South Hopkins performed the refund to retail customers over a two-month period, as required by 807 KAR 5:068, Section 7(2)(c), through application of a refund factor that was calculated by dividing the refund amount by the estimated water sales to be made during the refund period. Because actual sales during the refund period were lower than the estimated sales, the actual amount refunded was only \$50,989, which is reflected in test-year operations as a reduction to test-year Water Sales Revenues. This difference between the intended and actual refund amounts effectively caused South Hopkins' test-year Net Operating Income to be overstated by \$2,432, the balance of the retail WARC that was not refunded. If left unadjusted, this unrefunded amount would reduce the revenue requirement, meaning that retail customers would effectively receive an annual refund of this amount through South Hopkins' base rates. Staff finds that the unrefunded amount should be amortized and refunded through retail rates during the three-year period the rates established in this proceeding will likely be in effect.<sup>6</sup> Accordingly, Staff removed only \$52,610 of the retail portion of the test-year

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<sup>6</sup> Generally, when there is no evidence to support an alternative amortization period, the Commission amortizes an intangible regulatory asset or liability identified in a rate proceeding over the anticipated life of the utility rates that are approved in that proceeding. This life is generally based on the frequency of the utility's historic rate case filings. Finding that South Hopkins' general rate filing prior to the case at bar occurred approximately three years ago in Case No. 2010-00074, Staff anticipates that the rates approved in this proceeding will remain in effect for three years and amortized the unrefunded WARC over a three-year period.

WARC credit leaving a credit balance of \$811 in pro forma operations.<sup>7</sup>

(D) Other Operating Revenue. South Hopkins reduced test-year other operating revenue by \$13,200. This revenue was generated through the rental of water storage tank space for cellular phone antennas that South Hopkins will no longer receive due to expiration of its contract with Nextel WIP Lease Corp. ("Nextel") on July 31, 2014. Nextel informed South Hopkins that the contract would not be renewed. Staff finds that the adjustment requested by South Hopkins is appropriate.

(E) Salaries and Wages – Employees. South Hopkins accrued \$269,096 for test-year employee wages, of which it expensed \$265,988 and capitalized \$3,108 as Utility Plant in Service ("UPIS") for new meter installations. Staff determined that an additional \$4,892 should be reclassified from expenses to UPIS to properly account for wages incurred to install new meter connections. As shown below, Staff's adjustment results in an expense ratio of 97.03 percent and capitalization ratio of 2.97 percent.

Payroll Expense	\$ 265,988	\$ (4,892)	\$ 261,096	97.03%
Capitalize	<u>3,108</u>	<u>4,892</u>	<u>8,000</u>	<u>2.97%</u>
Total	<u>\$ 269,096</u>		<u>\$ 269,096</u>	<u>100%</u>

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7

Retail WARC Refund Credited to Purchase Water Expense	\$ 53,421
Less: Retail WARC Refund Debited to Water Sales Revenue	<u>(50,989)</u>
Increase to Net Operating Income	2,432
Divide by: 3 Years	<u>3</u>
Annual Recognition	<u>\$ 811</u>

To calculate the capitalization adjustment, Staff assumed that the total meter-connection costs were equal to the tap fees collected by South Hopkins, in the amount of \$16,000 (\$800 tap fee x 20 taps), to recover the cost of the installations. Ideally, each expense account that contains installation costs, (i.e., employee wages, employee benefits, materials and supplies, transportation costs, insurance, and depreciation on equipment) would be reduced by a portion of the capitalized costs, but for simplicity, Staff decreased only the wages expense account and materials and supplies expense account by one-half of the connection costs.

Staff also adjusted test-year wages to account for South Hopkins' current level of employees and current wage rates. Currently, South Hopkins has eight full-time employees and one part-time employee. Staff determined total pro forma wage expense to be \$314,210 by applying the current pay rate of each employee to the actual hours each employee worked during the test year. Staff's calculations are shown below.

	2013 Wages		2012 Hours		Total Salaries
	Regular	Overtime	Regular	Overtime	
Employee 1	\$ 17.50	26.25	2,092	87.00	\$ 38,894
Employee 2	Salary				54,000
Employee 3	15.05	22.58	2,080		31,304
Employee 4	17.40	26.10	2,080		36,192
Employee 5	15.00	22.50	2,100	60.00	32,850
Employee 6	Salary				40,500
Employee 7	20.55	30.83	2,092	76.50	45,349
Employee 8	12.95	19.43	732	5.00	9,577
Employee 9	12.00	18.00	2,080	32.50	<u>25,545</u>
Pro Forma Wages					\$ 314,210
Times: Test-Year Expensed Ratio					<u>97.03%</u>
Pro Forma Expense					304,869
Less: Test Year					<u>(265,988)</u>
Increase					<u>\$ 38,881</u>

(F) Employee Pensions and Benefits. South Hopkins reported \$108,173 for test-year Employee Pensions and Benefits expense. It proposed to increase this amount by \$18,076 to account for the cost of insurance benefits and retirement benefits paid on behalf of all current employees and Commissioners. As shown below, Staff determined that an increase of \$16,334 is appropriate.

Pro Forma Retirement	\$ 57,545
Pro Forma Insurance	<u>66,962</u>
Pro Forma Expense	124,507
Less: Test Year	<u>(108,173)</u>
Increase	<u>\$ 16,334</u>

Staff calculated pro forma retirement to be \$57,545 by applying the district's current contribution rate to the County Employee Retirement System to pro forma

wages that are subject to retirement benefits.<sup>8</sup> Staff calculated pro forma insurance benefits that should be recovered through rates to be \$66,962 by annualizing the current monthly insurance premiums that are paid on behalf of all current employees that receive benefits. Part-time employees do not receive these benefits.<sup>9</sup>

Staff's adjustment excludes vision and dental insurance premiums paid on behalf of its Commissioners. In Case No. 2003-00224,<sup>10</sup> the Commission denied the recovery of the costs associated with health insurance, life insurance, and dental insurance coverage to members of a District's Board of Commissioners that it generally provided only to full-time employees. The Commission found, since members of the Board of Commissioners attend only one board meeting per month and are not required to work 40-hour work weeks, that they were part-time employees. As South Hopkins did not

8

Pro Forma Wages	\$	314,210
Less: Part-Time Wages		<u>(9,577)</u>
Pro Forma Wages Subject to Retirement		304,633
Times: Current Contribution Rate		<u>18.89%</u>
Pro Forma Retirement Expense	\$	<u><u>57,545</u></u>

9

Monthly Premium for Medical, Life, Dental, and Vision Insurance	\$	5,580
Times: 12 Months		<u>12</u>
Pro Forma Insurance Expense	\$	<u><u>66,962</u></u>

<sup>10</sup> Case No. 2003-00224, *Application of Northern Kentucky Water District for (A) an Adjustment of Rates; (B) a Certificate of Public Convenience and Necessity for Improvements to Water Facilities if Necessary; and (C) Issuance of Bonds* (Ky. PSC June 14, 2004) at 11-12.

provide its other part-time employees with comparable benefits, Staff eliminated the costs of the commissioner benefits from pro forma operations.

(G) Changes to Wholesale Purchase Water Rates. Effective October 1, 2013, Dawson Springs decreased its wholesale rate from \$1.73657 per thousand gallons to \$1.7257 per thousand gallons. Effective March 15, 2014, Madisonville increased its wholesale rate from \$3.65 per thousand gallons to \$3.71 per thousand gallons. As shown below, Staff determined that test-year purchased water expense should be decreased by \$45,372 to account for the current wholesale rates paid by South Hopkins.

	Test-Year Gallons Purchased	Current Rate Per Thousand Gallons	Pro Forma
Dawson Springs	318,192,010	\$ 1.7257	\$ 549,104
Madisonville	6,597,000	\$ 3.71	<u>24,475</u>
Pro Forma			573,579
Less: Test Year			<u>(618,951)</u>
Decrease			<u>\$ (45,372)</u>

(H) Excess Water Loss. 807 KAR 5:066, Section 6(3), limits water loss to 15 percent for ratemaking purposes unless an alternative level is found reasonable by the Commission. Staff calculated South Hopkins' test-year water loss to be 16.35 percent, or 1.35 percent above the allowable limit, as shown below.



Water Purchased, 2012 Annual Report	324,789,000
Less: Volume Sold During the Test Year	(269,049,239)
Water Used for Line Flushing	(2,421,950)
Fire Department Usage	<u>(219,950)</u>
Water Loss	53,097,861
Divide by: Total Purchased	<u>324,789,000</u>
Percent Lost	16.35%
Allowable Water Loss	<u>-15.00%</u>
Excess Water Loss Percentage	<u><u>1.35%</u></u>

With the adjustments shown below, Staff removed from test-year operations the cost of purchasing and pumping the excess water loss.

	Purchased Water	Purchased Power
Test-Year	\$ 618,951	\$ 45,804
Less: Purchased Water Rate Decrease	<u>(45,372)</u>	
Test-Year Subject to Water Loss Adjustment	573,579	45,804
Times: Water Loss in Excess of 15 Percent	<u>-1.35%</u>	<u>-1.35%</u>
Decrease	<u>\$ (7,743)</u>	<u>\$ (618)</u>

(I) Debt Service Reserve Payment to Dawson Springs. In accordance with its purchased water contract with Dawson Springs, South Hopkins made test-year payments that totaled \$16,992 to Dawson Springs to fund a debt service reserve fund required by one of Dawson Springs' lenders. Subsequent to the test year, the loan associated with this reserve fund was fully retired by Dawson Springs, releasing South Hopkins from future payments. Accordingly, Staff removed these payments from test-year operations.

(J) Materials and Supplies. During the test year, South Hopkins capitalized materials and supplies in the amount of \$5,458 for the installation of new meter connections. As previously discussed in Reference Item (E), Staff determined that the appropriate amount is \$8,000. Accordingly, Staff decreased test-year materials and supplies expense by \$2,542.<sup>11</sup> Depreciation to be accrued on the additional capital costs are include in Staff's calculation of pro forma depreciation expense.

(K) Amortization of Tank Inspections. South Hopkins has five elevated storage tanks. Subsequent to the test year, South Hopkins contracted with Wet or Dry Water Tank Inspection Services to perform inspections on all tanks at a total cost of \$3,250. These contracted inspections are routinely performed every five years. South Hopkins requested to increase test-year expenses by the amount of the contracted fee. Staff finds that test-year expenses should be increased by \$650 to reflect amortization of the fees over five years.<sup>12</sup>

(L) Depreciation. South Hopkins, which reported test-year depreciation expense of \$76,577, proposed to increase the test-year expense by \$15,880 to account for the purchase of a truck and telemetry system subsequent to the test year. As

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11

Capitalized Per Books	\$	5,458
Less: Capitalized by Staff		<u>(8,000)</u>
Decrease	\$	<u><u>(2,542)</u></u>

12

Cost of Tank Inspection	\$	3,250
Amortize: 5 Years		<u>5</u>
Annual Recognition	\$	<u><u>650</u></u>

explained below, Staff made adjustments to test-year depreciation that result in a net increase of \$8,760.

Decrease Due to Change in Depreciable Lives	\$ (4,895)
Increase Due to Post-Test-Year Plant Additions	13,470
Increase Due to Meter Installations Capitalized by Staff	<u>186</u>
Net Increase	<u><u>\$ 8,760</u></u>

Change to Depreciable Lives. Staff reviewed the depreciable lives assigned to all assets by South Hopkins. A summary of Staff's review is found at Attachment B to this report. To account for the effects of the changes to the depreciable lives recommended in Attachment B, Staff decreased depreciation expense by \$4,895 as calculated below.

Asset Classification	Original Cost	Depreciable Life	Pro Forma	Test Year	Adjustment
Structures and Improvements	\$ 54,536	37.5	\$ 1,454	\$ 3,229	\$ (1,775)
Electric Pumping Equipment	21,340	20	1,067	1,423	(356)
Transportation Equipment	39,119	7	5,588	7,824	(2,235)
Tools, Shop, & Garage Equipment	8,710	17.5	498	995	(497)
Power Operated Equipment	1,400	12.5	112	140	(28)
Communication Equipment	43	10	4	9	<u>(4)</u>
Decrease					<u><u>\$ (4,895)</u></u>

Post Test Period Plant Additions. On May 22, 2013, South Hopkins purchased a new service vehicle at a cost of \$16,728. Also, on April 21, 2014, South Hopkins will begin the installation of a telemetry system that has an estimated cost of \$110,800.<sup>13</sup> The telemetry system is anticipated to be fully installed and become operational by May 5, 2014. South Hopkins requested to increase test-year depreciation by \$15,880 to

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<sup>13</sup> The estimated cost is based on the construction bid awarded to C.I. Thornburg.

include recovery of these assets in pro forma operations.<sup>14</sup> South Hopkins did not show the computation of the requested amount. Staff agrees that inclusion of depreciation on these post-test-period plant additions is appropriate in pro forma operations, but calculated the proper amount to be \$13,470 as shown below.

	Cost	Depreciable Life	Pro Forma Depreciation Expense
2013 Ford F150 Truck	\$ 16,728	7	\$ 2,390
Telemetry System	110,800	10	<u>11,080</u>
Increase			<u><u>\$ 13,470</u></u>

Meter Installation Costs. As previously discussed at Reference Items (E) and (J), Staff determined that South Hopkins understated the cost of test-year meter installations by \$7,434. Staff increased test-year depreciation by \$186, as calculated below, to account for depreciation that will accrue on the additional meter installation costs.

Additional Wages Capitalized by Staff, Ref. Item (E)	\$ 4,892
Additional Materials and Supplies Capitalized by Staff, Ref. Item (J)	<u>2,542</u>
Total Additional Meter Installation Costs Capitalized by Staff	7,434
Divide by: Depreciable Life	<u>40</u>
Increase to Depreciation Expense	<u><u>\$ 186</u></u>

(M) Taxes Other Than Income Tax. South Hopkins reported \$24,153 for test-year Taxes Other Than Income. This amount included payroll taxes of \$21,799 and the Public Service Commission's assessment of \$2,354. As shown below, Staff increased

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<sup>14</sup> Application, Page 11, Item E.

payroll taxes by \$3,630 to account for the increase that will result from Staff's increase to test-year employee wages.

Employee Pro Forma Wages	\$ 314,210
Commissioner Wages	<u>18,200</u>
 Total Wages Subject to Payroll Taxes	 332,410
Times: Tax Rate	<u>7.65%</u>
 Payroll Tax Expense	 25,429
Less: Test Year Payroll Tax Expense	<u>(21,799)</u>
 Increase	 <u>\$ 3,630</u>

Overall Revenue Requirement and Required Revenue Increase

The Commission has historically applied a DSC method to calculate the Overall Revenue Requirement of water districts and water associations. This method allows for recovery of: 1) cash related pro forma operating expenses; 2) recovery of depreciation expense, a non-cash item, to provide working capital;<sup>15</sup> 3) the average annual principal and interest payments on all long-term debts, and 4) working capital that is in addition to depreciation expense. A comparison of South Hopkins' and Staff's calculation of the Overall Revenue Requirement and Required Revenue Increase using the DSC method is shown below.

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<sup>15</sup> The Kentucky Supreme Court has held that the Commission must permit a water district to recover its depreciation expense through its rates for service to provide internal funds for renewing and replacing assets. See *Public Serv. Comm'n of Kentucky v. Dewitt Water Dist.*, 720 S.W.2d 725, 728 (Ky.1986). Although a water district's lenders require that a small portion of the depreciation funds be deposited annually into a debt reserve/depreciation fund until the account's balance accumulates to a required threshold, neither the Commission nor the Court requires that revenues collected for depreciation be accounted for separately from the water district's general funds or that depreciation funds be used only for asset renewal and replacement. The Commission has recognized that the working capital provided through recovery of depreciation expense may be used for purposes other than renewal and replacement of assets. See, Case No. 2012-00309, *Application of Southern Water and Sewer District for an Adjustment in Rates Pursuant to the Alternative Rate Filing Procedure for Small Utilities* (Ky. PSC Dec. 21, 2012).

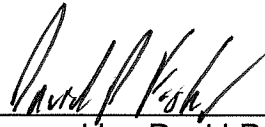
	South Hopkins	Staff
Pro Forma Operating Expenses	1,307,090	1,326,846
Plus: Average Principal and Interest Payments	42,332	42,332
Additional Cash Working Capital	<u>8,466</u>	<u>8,466</u>
Overall Revenue Requirement	1,357,888	1,377,644
Less: Other Operating Revenues	(46,887)	(46,887)
Interest Income	<u>(4,283)</u>	<u>(4,283)</u>
Revenue Required from Rates	1,306,718	1,326,474
Less: Pro Forma Present Rate Revenue	<u>(1,260,842)</u>	<u>(1,247,711)</u>
Required Revenue Increase	<u>45,876</u>	<u>78,763</u>
Percentage Increase	<u>3.64%</u>	<u>6.313%</u>

(1) Average Annual Principal and Interest Payments. South Hopkins has two outstanding bond series payable to the United States Department of Agriculture Rural Development ("RD"). In its Application, South Hopkins requested recovery of the three-year average principal and interest payments due in 2013, 2014, and 2015. Staff agrees that the \$42,332 requested by South Hopkins represents, in all material respects, the average annual debt payments that will be made in each year that the water rates approved by the Commission in this proceeding will be in effect.

(2) Additional Working Capital. The DSC method, as historically applied by the Commission, includes an allowance for additional working capital that is equal to the minimum net revenues required by a district's lenders that are above its average annual debt payments. In this case, Staff agrees with the amount requested by South Hopkins as calculated below.

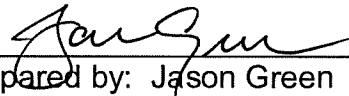
Average Annual Principal and Interest	\$ 42,333
Times: DSC Coverage Ratio	<u>120%</u>
Total Net Revenues Required	50,799
Less: Average Annual Principal and Interest Payments	<u>(42,333)</u>
Additional Working Capital	<u>\$ 8,466</u>

Signatures




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Prepared by: David P. Foster  
 Financial Analyst, Water and Sewer  
 Revenue Requirements Branch  
 Division of Financial Analysis




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

ATTACHMENT A  
 STAFF REPORT CASE NO. 2013-00428  
 RATES CALCULATED BY STAFF

Monthly Rates

5/8- X 3/4-Inch Meter

First	1,000	Gallons	\$ 10.00	Minimum Bill
Next	9,000	Gallons	5.25	per 1,000 Gallons
Next	10,000	Gallons	4.87	per 1,000 Gallons
Next	30,000	Gallons	4.49	per 1,000 Gallons
All Over	50,000	Gallons	3.77	per 1,000 Gallons

1-Inch Meter

First	10,000	Gallons	\$ 57.28	Minimum Bill
Next	10,000	Gallons	4.87	per 1,000 Gallons
Next	30,000	Gallons	4.49	per 1,000 Gallons
All Over	50,000	Gallons	3.77	per 1,000 Gallons

2-Inch Meter

First	20,000	Gallons	\$ 105.96	Minimum Bill
Next	30,000	Gallons	4.49	per 1,000 Gallons
All Over	50,000	Gallons	3.77	per 1,000 Gallons

3-Inch Meter

First	50,000	Gallons	\$ 240.41	Minimum Bill
All Over	50,000	Gallons	3.77	per 1,000 Gallons



APPENDIX B  
 STAFF REPORT, CASE NO. 2013-00428  
 SOUTH HOPKINS WATER DISTRICT  
 ENGINEERING DIVISION'S  
 ANALYSIS OF ASSET SERVICE LIVES

Historically, the Commission has relied on the National Association of Regulatory Utility Commissioners Study of Depreciation Practices for Small Water Utilities ("NARUC Study"), dated August 15, 1979, to evaluate the reasonableness of a utility's depreciation practices. This study outlines expected service life ranges for various asset groups designed, installed, and maintained in accordance with good water works practices. Typically, an adjustment is made when the Commission finds that a utility is proposing to use a service life that falls outside of this range while service lives falling within these ranges are generally accepted.

In the following table, Engineering staff has identified the account classifications for which the utility's current service lives are not consistent with the service lives contained in the NARUC Study. The table shows the utility's current and Engineering staff's recommended reasonable and appropriate service lives based on a review of information contained in the record of this case.

<b>Asset Classification</b>	<b>Current</b>	<b>Staff Recommended</b>	<b>NARUC Study</b>
Group # 1: Structures & Improvements (office bldg., storage bldg., new pumphouse, and pumpstation)	20	37.5	35-40
Group # 2: Electric Pumping Equipment	5, 15, 29 and 40	20	20
Group # 9: Transportation Equipment	5	7	7
Group #10: Tools, Shop, & Garage Eqp.	3-10	17.5	15-20
Group # 12: Power Operated Equipment	3-10	12.5	10-15
Group # 13: Communication Equipment	5-10	10	10

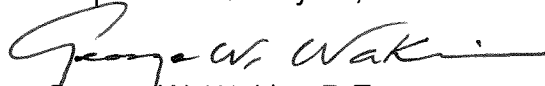
Group # 1, Structures & Improvements, also contains certain assets that appear to be improvements to the major assets identified above. The NARUC Study does not address service life recommendations for these specific asset improvements.

For Group # 3, Distribution Reservoirs, the major assets appear to have service lives that are consistent with the service life recommendations contained in the NARUC Study.

Note: Group # 2, Electric Pumping Equipment, lists telemetry system and appurtenances assets and group # 12, Power Operated Equipment, lists an asset identified as a test bench w/tanks. Both assets mentioned do not appear to have been assigned to the proper asset groups.

Absent any specific and verifiable evidence supporting alternative service lives, Engineering Staff finds that service lives based on the NARUC Study, as shown in the above table, are reasonable and appropriate.

Prepared February 27, 2014



George W. Wakim, P.E.  
Manager, Water and Sewer Branch

Robert J Tucker  
Chairman  
South Hopkins Water District  
129 South Main Street  
P. O. Box 487  
Dawson Springs, KY 42408