COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF SOUTH HOPKINS WATER DISTRICT FOR AN ALTERNATIVE RATE ADJUSTMENT

CASE NO. 2017-00420

NOTICE OF FILING OF STAFF REPORT

Notice is hereby given that, in accordance with the Commission's Order of December 18, 2017, the attached report containing the findings of Commission Staff regarding the Applicant's proposed rate adjustment has been filed in the record of the above-styled proceeding. Pursuant to the Commission's December 18, 2017 Order, South Hopkins Water District is required to file written comments regarding the findings of Staff no later than 14 days from the date of entry of this Staff Report.

Gwen R. Pinson Executive Director

Public Service Commission

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P.O. Box 615

Frankfort, KY 40602

DATED FEB 1 9 2018

cc: Parties of Record

STAFF REPORT

ON

SOUTH HOPKINS WATER DISTRICT

CASE NO. 2017-00420

South Hopkins Water District ("South Hopkins"), a water district organized pursuant to KRS Chapter 74, provides water service to approximately 2,960 residential, commercial, industrial, and public authority customers residing in Caldwell and Hopkins counties, Kentucky.¹ On October 26, 2017, South Hopkins tendered its application ("Application") to the Commission, requesting to adjust its water rates pursuant to 807 KAR 5:076. By letter dated November 3, 2017, the Commission notified South Hopkins that its application was rejected as deficient. On November 14, 2017, South Hopkins filed its responses to the filing deficiency; its Application was accepted for filling on November 14, 2017. To ensure the orderly review of the Application, the Commission established a procedural schedule by Order dated December 18, 2017.

To comply with the requirements of 807 KAR 5:076, Section 9,² South Hopkins based its requested rates on a historic test period that coincides with the reporting period shown in its most recent Annual Report on file with the Commission, the calendar year ended December 31, 2016. Using its pro forma test-year operations, South Hopkins determined that it could justify a revenue increase of \$441,701, or 32.17 percent, as shown in the table

¹ Annual Report of South Hopkins Water District to the Public Service Commission for the Calendar Year Ended December 31, 2016 ("2016 Annual Report") at 50.

² The reasonableness of the proposed rates shall be determined using a 12-month historical test period, adjusted for known and measureable changes, that coincides with the reporting period of the applicant's annual report for the immediate past year.

below.³ The rates requested by South Hopkins would increase the monthly bill of a typical residential customer using 3,904 gallons per month by \$8.60, from \$26.86 to \$35.46, or approximately 32.02 percent.

Debt Coverage Requirement 13,225 Total Revenue Requirement 1,872,078 Less: Other Operating Revenue (54,702) Non- Operating Revenue	penses \$ 1,769,213
Total Revenue Requirement 1,872,078 Less: Other Operating Revenue (54,702 Non- Operating Revenue	Oebt Principal and Interest Payments 89,640
Less: Other Operating Revenue (54,702 Non- Operating Revenue	equirement13,225_
Less: Other Operating Revenue (54,702 Non- Operating Revenue	
Non- Operating Revenue	ent 1,872,078
	Revenue (54,702)
Interest Income (2,477)	evenue
	(2,477)
Revenue Required from Rates 1,814,899	Rates 1,814,899
Less: Normalized Revenues from Water Sales(1,373,198	nues from Water Sales(1,373,198)
Required Revenue Increase/(Decrease) \$ 441,701	ase/(Decrease) \$ 441,701
Percentage Increase 32.2%	32.2%

South Hopkins allocated the required revenue increase from the above table to its current rate design evenly across its retail rates, as shown below.

 $^{^{\}rm 3}$ Application, ARF FORM 1 ATTACHMENT RR-DC - SEPTEMBER 2011, Revenue Requirement Calculation-Debt Service Coverage Method.

	Ra	Present te Revenue		Requested te Revenue		Revenue Increase	Percentage Increase
Retail Customers:							
5/8" × 3/4"	\$	932,778	\$	1,231,309	\$	298,531	32.0%
5/8" x 3/4" bi-monthly		10,813		14,273		3,460	32.0%
1" Meter		61,165		80,755		19,590	32.0%
2" Meter		61,542		81,256		19,714	32.0%
3" Meter		12,626	:	16,670	_	4,044	32.0%
Total Retail Customers		1,078,924		1,424,263		345,339	32.0%
Wholesale Customers		314,620	·	314,620		0	0.0%
Totals	\$	1,393,544	\$	1,738,883	\$	345,339	24.8%

Because South Hopkins requested to increase retail rates only, it sought recovery of only \$345,339 of the \$441,701 required revenue increase.

To determine the reasonableness of the rates requested by South Hopkins, Staff performed a limited financial review of South Hopkins' test-year operations. The scope of Staff's 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 necessarily pursued or addressed.

Staff's findings are summarized in this report. Travis Leach and Mark Frost reviewed the calculation of South Hopkins's Overall Revenue Requirement. Mary Beth Purvis reviewed South Hopkins' reported revenues and rate design.

Summary of Findings

1. <u>Overall Revenue Requirement and Required Revenue Increase</u>. By applying the Debt Service Coverage ("DSC") Method, as generally accepted by the Commission, Staff

found South Hopkins' Overall Revenue Requirement to be \$1,584,652. A revenue increase of \$122,476, or 8.8 percent, is necessary to generate the Overall Revenue Requirement.

2. <u>Water Service Rates</u>. In the Application, South Hopkins proposed to increase all of its monthly retail water service rates evenly across the board by approximately 32 percent. South Hopkins has not performed a cost-of-service study ("COSS"). The Commission has previously found that the allocation of a revenue increase evenly across the board to a utility's rate design is appropriate when there has been no evidence entered into the record demonstrating that this method is unreasonable and in the absence of a COSS. Finding no such evidence in this case, Staff followed the method proposed by South Hopkins and allocated the \$122,476 revenue increase across the board to South Hopkins's monthly retail water service rates.

Staff agrees with South Hopkins that South Hopkins's contracted wholesale rate should not be adjusted in this proceeding and that only retail rates should be increased. South Hopkins relies on the mechanism contained in the water purchase contracts to determine the annual wholesale rate. Any increase or decrease in the wholesale water rate should be determined by that formula, which is the same in South Hopkins's three water purchase contracts. However, the annual revenue requirement determination includes the wholesale contracts; therefore, when Staff's across-the-board revenue increase of 8.79 percent is only applied to the retail rates, an additional revenue of \$94,582 is generated, an amount less than the \$122,476 Staff found warranted. Therefore, Staff finds an across the board increase of 11.35 percent to the retail water service rates will produce the required revenue.⁴

⁴ The revenue produced is \$193 more than what is required due to rounding.

	Pr	esent Rate	Rate	Revenue	Percentage
		Revenue	Revenue	Increase	Increase
Retail Customers					
5/8"x3/4" Meter	\$	932,778	\$1,038,919	\$ 106,141	11.4%
5/8"x3/4" Bi-Monthly Meter		10,813	12,042	1,229	11.4%
1" Meter		61,165	68,085	6,920	11.3%
2" Meter		61,542	68,497	6,955	11.3%
3" Meter		12,626	14,050	1,424	11.3%
				1	
Total Retail Customers		1,078,924	1,201,593	122,669	11.4%
Wholesale Customers		314,620	314,620	0	0.0%
	A				
Totals	\$	1,393,544	\$1,516,213	\$ 122,669	8.8%

Shown in the Attachment of this report are the monthly water service rates calculated by Staff. These rates will increase the monthly cost of 3,904 gallons of water purchased through at 5/8-inch x 3/4-inch meter from \$26.86 to \$29.92, an increase of \$3.06, or 11.4 percent.

Pro Forma Operating Statement

South Hopkins's Pro Forma Operating Statement for the test year ended December 31, 2016, as determined by Staff, appears below.

	2016 Annual Report	Pro Forma Adjustments	Adj Ref	Pro Forma Operations
Operating Revenues:	Annual Nepolt	Adjustitionts		Орегалого
Revenues from Water Sales:				
Metered Water Sales	\$ 1,059,618	\$ 19,306	Α	\$ 1,078,924
Sales for Resale	313,580	1,040	В	314,620
Calco for Flocale			_	
Total Sales of Water	1,373,198	20,346		1,393,544
Other Water Revenues	66,155	0		66,155
Total Operating Revenues	1,439,353	20,346		1,459,699
Operating Expenses:				
Operation & Maintenance:				
Salaries & Wages - Employees	316,186	(41,418)	С	274,768
Salaries & Wages - Commissioners	18,200			18,200
Employee Pension & Benefits	198,629	(56,720)	D	141,909
Purchased Water	669,956	(9,538)	E	660,418
Purchased Power	54,701	(777)	E	53,924
Chemicals	383			383
Materials & Supplies	98,688			98,688
Contractual Services	11,900			11,900
Water Testing	9,083			9,083
Transportation	19,892			19,892
Insurance	41,780			41,780
Bad Debt Expense	11,125			11,125
Miscellaneous	20,766			20,766
Total Operation & Maintenance	1,471,289	(108,453)		1,362,836
Depreciation	86,456	4,385	F	90,841
Taxes Other Than Income	29,717	(4,338)	G	25,379
Utility Operating Expenses	1,587,462	(108,406)		1,479,056
Net Utility Operating Income	\$ (148,109)	\$ 128,752		\$ (19,357)

(A) <u>Billing Analysis Adjustment.</u> South Hopkins provided a billing analysis listing the water usage and water sales revenue for the 12-month test year in its Application. Staff has reviewed South Hopkins's billing analysis provided in the Application and finds that the water sales revenues determined by the billing analysis of \$1,078,924 for all retail customers is an accurate representation of the normalized test-year revenue from water sales; therefore, Staff has increased water sales revenue by \$19,306.

(B) <u>Wholesale Water Sales Revenues</u>. The contract wholesale rate charged to Morton's Gap, Earlington, and Caldwell County is \$2.69 per thousand gallons.⁵ As shown below, Staff determined that test-year revenues should be increased by \$1,040.

Total Wholesale Water Sold - Gallons	1	16,959.000
Multiplied by: Current Wholesale Rater - October 15, 2014	\$	2.69
Pro Forma Wholesale Water Revenue Less: Test-Year Reported Wholesale Water Revenue		314,620 (313,580)
Pro Forma Adjustment	\$	1,040

- (C) <u>Employee Salaries and Wages</u>. South Hopkins reported test-year employee salaries and wages expense of \$316,186. During 2017, South Hopkins experienced a change in its staffing. Several experienced staff members left and were replaced with lower paid, entry-level employees. To reflect the current level of salaries and wages, Staff made an adjustment to reduce employee salaries and wages expense by \$41,418.
- (D) <u>Employee Pensions and Benefits</u>. South Hopkins reported a test-year total employee pension and benefits expense of \$198,629. Staff determined South Hopkins's test-year employee pension and benefits expense will be decreased by \$56,720,6 as explained below:

CERS. South Hopkins provides pension benefits and post-retirement health care benefits to its employees by participating in the County Employee Retirement System ("CERS"). As a participating member, South Hopkins is required to contribute a percentage of its employee wages to CERS. In the fiscal year, beginning July 1, 2016 the CERS

⁵ Application, South Hopkins Water District Rate Analysis.

 $^{^6}$ \$46,109 (CERS) + \$9,333 (Employee Insurance Benefits) + \$1,278 (Commissioner Benefits) = \$56,720.

contribution rate was 17.06 percent. The CERS pension expense South Hopkins reported in the test year conformed to the requirements of the General Accounting Standards Board Pronouncement No. 68 ("GASB 68").

In Case No. 2016-00163,⁷ the Commission discussed in great detail the reporting requirements of GASB 68 and how those requirements would impact a utility's income statement and balance sheet. In that proceeding the Commission found that, the annual pension expense should be equal to the amount of a district's contributions to CERS, which historically have been "fairly constant." Staff determined that South Hopkins' test-year CERS contributions totaled \$57,584, versus the reported amount \$103,692.8 Accordingly, Staff is reducing employee pension expense by \$46,108 to reflect the actual amount South Hopkins paid into the CERS system during the test year.

Employee Benefits. In the test year, South Hopkins reported the payment of \$97,321 in employee insurance premiums. However, using South Hopkins's current staff level and annualizing 2017 premiums, Staff calculates a pro forma expense of \$111,648, \$14,327 greater than the test-year amount. South Hopkins currently pays 100 percent of the cost of each full-time employee's health, dental, vision, and life insurance benefits. South Hopkins's full-time employees have all opted for single health, dental, vision, and life insurance coverage.

In recent decisions, the Commission placed a greater emphasis on evaluating employees' total compensation packages, including both salary and benefits programs, for

⁷ Case No. 2016-00163, Alternative Rate Adjustment Filing of Marion County Water District (Ky. PSC Nov. 10, 2016).

⁸ \$88,414 (CERS - Pension) + \$15,264 (CERS - Health) = \$103,692.

market and geographic competitiveness to ensure the development of a fair, just and reasonable rate. It has found that, in most cases, 100 percent employer-funded health and dental care do not meet those criteria.

To comply with the Commission's current practice, Staff is reducing South Hopkins's pro forma employee benefit expense of \$116,648 by \$23,665⁹ based on a 21 percent employee contribution rate for single health insurance coverage¹⁰ and a 60 percent employee contribution rate for dental coverage.¹¹ Accordingly, the reported employee benefit expense of \$97,321 is being reduced by \$9,333.¹²

Commissioner Benefits. South Hopkins's Board of Commissioners consists of three members to whom South Hopkins provided single dental and vision insurance coverage during the test year at a total cost of \$1,278.

In Case No. 2003-00224¹³ the Commission found that the members of a Board of Commissioners should be treated as part-time employees, as they generally attend only one board meeting per month and are not required to work 40 hours per week. The Commission denied rate recovery of the costs associated with health insurance, life insurance, and dental

¹⁰ Bureau of Labor Statistics, Healthcare Benefits, March 2017, Table 10, private industry workers. (https://www.bls.gov/ncs/ebs/benefits/2017/ownership/private/table10a.pdf)

¹¹ The Willis Benchmarking Survey, 2015, at 62-63. (https://www.willis.com/Documents/publications/Services/Employee_Benefits/20151230_2015WillisBenchmarkingSurveyReport.pdf)

¹² \$87,983 (Pro Forma) - \$97,321 (Test-Year Expense) = \$9,333.

¹³ Case No. 2003-00224, Application of Northern Kentucky Water District for (A) and Adjustment of Rates; (B) a Certificate of Public Convenience and Necessary for Improvements to Water Facilities if Necessary; and (C) Issuance of Bonds (Ky. PSC June 14, 2004) at 11-12

insurance provided to members of the district's Board of Commissioners because the district did not provide those benefits to other part-time employees.

Pursuant to its employment policies, South Hopkins provides insurance benefits only to full-time employees. As the Commission considers each member of South Hopkins's Board of Commissioners as a part-time employee, Staff removed the cost of each member's dental and vision insurance from South Hopkins's test-year operations.

(E) <u>Purchased Water</u>. South Hopkins report test year purchased water expense of \$669,956 and purchased power expense of \$54,701. Staff determined South Hopkins's test-year purchased water expense should be decreased by \$9,583, and purchased power expense decreased by \$777, as explained below.

Changes to Wholesale Purchase Water Rate. The City of Madisonville increased its wholesale water rate sold to South Hopkins to \$4.39 on November 28, 2017. Staff is increasing test-year purchased water expense of \$669,956 by \$1,755 to account for the wholesale rate of 4.39 per thousand gallons. The pro forma purchased water expense of \$671,711 is being used by Staff in the calculation of the excess line loss.

Test-Year Gallons/1,000 Gallons		6,274,000
Multiplied by: PWA Rate (CN 2017-00387)	_\$_	0.00439
Pro Forma Purchased Water Expense		27,543
Less: Reported Purchases Madisonville		(25,788)
PWA Increase		1,755
Add: Test-Year Cost		669,956
Pro Forma with PWA	\$	671,711

Excess Water Loss. 807 KAR 5:066, Section 6(3),¹⁴ limits water loss to 15 percent for ratemaking purposes unless an alternative level is found reasonable by the Commission. In the below table, Staff determined South Hopkins's test-year water loss was 16.42 percent, or 1.42 percentage above the 15 percent allowable limit.

350,446,000
(287,474,793)
(5,358,000)
(66,000)
57,547,207
350,446,000
16.42%
-15.00%
1.42%

With the adjustments in the table below, Staff removes from South Hopkins's test-year operations the cost of purchasing, pumping, and treating the excess water loss.

	Pi	urchased	Purchased		
		Power		Water	
Pro Forma Subject to Water Loss Adjustment	\$	(54,701)	\$	(671,711)	
Times: Water Loss in Excess of 15 Percent	****	1.42%		1.42%	
Pro Forma Water Loss Adjustments	\$	(777)	\$	(9,538)	

¹⁴ Unaccounted-for water loss. Except 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.

(F) <u>Depreciation</u>. South Hopkins reported a test-year depreciation expense of \$86,456. Upon review of South Hopkins's plant schedule, Staff found prorated depreciation for the test-year additions based on when the assets were placed into service. Accordingly, Staff made a pro forma adjustment of \$4,385 to account for a full year of depreciation for the additions to plant accounts in the test-year.

		Depreciation						
Description	Amount	Lives	Te	st-Year	Pr	o Forma	Ad	justment
Pump Renovations	\$ 21,953	20.0	\$	823	\$	1,098	\$	275
Tank Renovations	121,307	30.0		1,685		4,044		2,359
Union Temple Line	1,407	40.0		7		35		28
Meters and Instalations	33,354	40.0		417		834		417
Iton Hand Helds	26,115	5.0		3,917		5,223		1,306
Totals	\$ 204,136		\$	6,849	\$	11,234	\$	4,385

(G) <u>FICA</u>. South Hopkins reported a test-year FICA expense of \$26,749. Staff applied the tax rate of 7.65 percent of salary to the pro forma employee salaries and wages expenses as well as commissioner salaries and wages totaling \$22,412. Accordingly, Staff made an adjustment reducing test year expenses by \$4,337.

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;¹⁵ 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's and Staff's calculation of the Overall Revenue Requirement and Required Revenue Increase using the DSC method is shown below:

	South	
	Hopkins	Staff
Pro Forma Operating Expenses	\$ 1,769,213	\$ 1,479,056
Plus: Average Annual Debt Principal and Interest Payments	89,640	87,997
Debt Coverage Requirement	13,225	17,599
Total Revenue Requirement	1,872,078	1,584,652
Less: Other Operating Revenue	(54,702)	(66,155)
Non- Operating Revenue		0
Interest Income	(2,477)	(2,477)
Revenue Required from Rates	1,814,899	1,516,020
Less: Normalized Revenues from Water Sales	(1,373,198)	(1,393,544)
Required Revenue Increase/(Decrease)	\$ 441,701	\$ 122,476
Percentage Increase	32.2%	8.8%

¹⁵ 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)

(1) Average Annual Principal and Interest Payments.

In calculating its revenue requirement, South Hopkins used an average annual debt service of \$89,640. Using South Hopkins's bond amortization schedule, Staff calculated a three-year average debt service of \$87,996, as shown below.

						Pr	incipal &
Year	nterest	Р	rincipal	_ P	rincipal		nterest
2018	\$ 36,475	\$	5,486	\$	45,499	\$	87,460
2019	37,710		5,471		45,499		88,680
2020	36,900		5,452		45,499		87,851
Totals	 111,085		16,409		136,497		263,991
3-Year Average	\$ 37,028	_\$	5,470	_\$	45,499	\$	87,997

(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. South Hopkins's additional working capital is calculated below:

Annual Debt Service Payments Multiplied by: DSC Coverage Ratio	\$	87,997 1.20
Required Net Revenues Less: Annual Debt Service	-	105,596 (87,997)
Allowance for Additional Working Capital	\$	17,599

Signatures:

Prepared by. Travis Leach

Financial Analyst, Water and Sewer Revenue Requirements Branch Division of Financial Analysis

Prepared by: Mark Frost

Financial Analyst, Water and Sewer Revenue Requirements Branch Division of Financial Analysis

Prepared by: Mary Beth Purvis

Mahager, Water and Sewer Rate Design Branch

Division of Financial Analysis

ATTACHMENT

ATTACHMENT TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2017-000420 DATED FEB 1 9 2018

Monthly Rates

5/8 x 3/4-Inch Meter				
First Next Next Next All Over	1,000 9,000 10,000 30,000 50,000	Gallons Gallons Gallons Gallons	\$ 11.74 6.26 5.82 5.38 4.55	Minimum Bill per 1,000 Gallons per 1,000 Gallons per 1,000 Gallons per 1,000 Gallons
1-Inch Meter				
First Next Next All Over	10,000 10,000 30,000 50,000	Gallons Gallons Gallons Gallons	\$ 68.06 5.82 5.38 4.55	Minimum Bill per 1,000 Gallons per 1,000 Gallons per 1,000 Gallons
2-Inch Meter				
First Next All Over	20,000 30,000 50,000	Gallons Gallons Gallons	\$ 126.30 5.38 4.55	Minimum Bill per 1,000 Gallons per 1,000 Gallons
3-Inch Meter				
First All Over	50,000 50,000	Gallons Gallons	\$ 287.64 4.55	Minimum Bill per 1,000 Gallons

*South Hopkins Water District 129 South Main Street P. O. Box 487 Dawson Springs, KY 42408

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