COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF SOUTHERN) WATER AND SEWER DISTRICT FOR AN) ALTERNATIVE RATE ADJUSTMENT) CASE NO. 2018-00230

NOTICE OF FILING OF COMMISSION STAFF REPORT

Notice is hereby given that, in accordance with the Commission's Order of July 20, 2018, the attached report containing the findings of Commission Staff ("Staff") regarding the Applicant's proposed rate adjustment has been filed in the record of the above-styled proceeding. Pursuant to the Commission's July 20, 2018 Order, Southern Water and Sewer District is required to file written comments regarding the findings of Commission Staff no later than 14 days from the date of this report.

R. Punso

Gwen R. Pinson Executive Director Public Service Commission P.O. Box 615 Frankfort, KY 40602

DATE OCT 2 4 2018

cc: Parties of Record

STAFF REPORT

ON SOUTHERN WATER AND SEWER DISTRICT

CASE NO. 2018-00230

Southern Water and Sewer District (Southern District) is a water utility district organized pursuant to KRS Chapter 74 that owns and operates a water distribution system through which it provides retail water service to approximately 5,456 customers residing in Floyd and Knott counties, Kentucky.¹ On July 3, 2018, Southern District tendered an application (Application) to the Commission requesting to increase its water service rates pursuant to 807 KAR 5:076. The Application was deemed filed as of July 12, 2018, after the filing deficiencies were cured. On July 25, 2018, the Attorney General filed a motion to intervene. By Order dated August 2, 2018, the Attorney General's motion was granted. To ensure the orderly review of the Application, the Commission established a procedural schedule by Order dated July 20, 2018.

Southern District based its requested rates on a historical test period that coincides with the reporting period shown in its most recent Annual Report on file with the Commission at the time it filed its Application the calendar year ended December 31, 2016, as required by 807 KAR 5:076, Section 9.

Southern District provided exhibits in its Application demonstrating that a 33.12 percent increase was reasonable, and requested an increase to its base monthly water rates in the amount of \$10.00 to the minimum bill of 2,000 gallons of usage, or 40.65 percent, and to increase any usage of 2,000 gallons by \$1.60, or 19.04 percent. The

¹ Annual Report of Southern Water & Sewer District to the Public Service Commission for the Calendar Year Ended December 31, 2017 ("Annual Report") at 12 and 48.

rates requested by Southern District would increase the monthly bill of a typical residential customer² by \$13.20, from \$41.40 to \$54.60, or approximately 31.88 percent. Southern District presented financial exhibits in the Application that demonstrated how it calculated the amount of increase it could have justified. The exhibits are summarized below in condensed form.

Pro Forma Operating Expenses	\$3,489,146
Plus: Average Annual Principal and Interest Payments	528,385
Additional Working Capital	105,677
The second	
Overall Revenue Requirement	4,123,208
Less: Other Operating Revenue	(145,847)
Interest Income	(2,432)
Nonutility Income	(143,033)
Revenue Required from Rates	3,831,896
Less: Pro Forma Present Rate Service Revenues	(2,878,486)
Required Revenue Increase	¢ 052.410
 A set of the construction of the	\$ 953,410
Percentage Increase	33.12%

To determine the reasonableness of the rates requested by Southern District, Staff performed a limited financial review of Southern District's 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 material. Insignificant and immaterial discrepancies were not necessarily pursued or addressed.

 $^{^{\}rm 2}$ A typical residential customer purchases 4,000 gallons of water per month through a 5/8-inch x 3/4-inch meter.

Staff's findings are summarized in this report. Ariel Miller reviewed the calculation of Southern District's Overall Revenue Requirement. Eddie Beavers reviewed Southern District's 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 that Southern District's Overall Revenue Requirement is \$4,201,262, and that a \$1,110,415 revenue increase, or 37.87 percent, to pro forma present rate revenues is necessary to generate the Overall Revenue Requirement.

2. <u>Water Service Rates</u>. 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. Southern District proposed to increase its retail rates with significantly different percentage increases. Southern District proposed to increase the First 2,000 Gallon step in its rate schedule by 40.65 percent and the Over 2,000 Gallon step in its rate schedule by 40.65 percent and the Over 2,000 Gallon step in its rate schedule by 40.65 percent and the Over 2,000 Gallon step in its rate schedule by 19.04 percent. Southern District did not provide an analysis or explanation as to why they chose to use the differing percentage increases to their rates, nor did they provide how this method was fair, just or reasonable to the customers. Southern District has not requested to increase its wholesale rates.

Staff has followed the Commission's accepted method in applying the increase to the rates and the rate schedule evenly across the board. Therefore, Staff has increased Southern District's current monthly retail water service rates across-the-board by 37.87

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percent and allocated the \$1,110,415 revenue increase Staff found warranted evenly across-the-board.

Staff has reviewed Southern District's tariff and found no contract for its three wholesale customers listed in their tariff as wholesale customers. As there is no wholesale contract on file with the Commission, Staff would recommend that the Commission direct Southern District to file the contracts they have with these wholesale customers. Additionally, Staff has increased the wholesale customers' rates in the same manner that the retail water service rates were increased

3. <u>Unauthorized Debt</u>. As discussed in more detail beginning on page 12 of this report, Southern District currently has outstanding loans that are payable to First Guaranty Bank (First Guaranty) for which Southern District did not obtain Commission approval as required by KRS 278.300. Southern District has the responsibility to ensure that it follows the Commission's statutes and regulations and that all statutory and regulatory approvals are obtained. Southern District should be aware that the Commission may initiate a separate proceeding to more thoroughly investigate the possible violations of Commission statutes and regulations. If a determination is made that there has been a willful violation of any provision of KRS Chapter 278 and 807 KAR Chapter 5, the members of the Board of Commissions may be held accountable.³

³ KRS 278.990(1). Any officer, agent, or employee of a utility, as defined in KRS 278.010, and any other person who willfully violates any of the provisions of this chapter or any regulation promulgated pursuant to this chapter, or fails to obey any order of the commission from which all rights of appeal have been exhausted, or who procures, aids, or abets a violation by any utility, shall be subject to either a civil penalty to be assessed by the commission not to exceed two thousand five hundred dollars (\$2,500) for each offense or a criminal penalty of imprisonment for not more than six (6) months, or both.

Pro Forma Operating Statement

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

Operating Revenues	Test Year	Adjustment	(Ref.)	Pro Forma
Operating Revenues Sales of Water	\$3,492,002	\$ (656,122) 54,073	(A) (B)	\$ 2,889,953
Sales for Resale	42,606	(213)	(B)	42,393
Other Water Revenues	145,847	(17,811)	(C)	128,036
Total Operating Revenues	3,680,455	(620,073)		3,060,382
Operating Expenses				
Operation and Maintenance Expenses				
Salaries and Wages - Employees	882,672			882,672
Salaries and Wages - Commissioners	23,500			23,500
Employee Pensions and Benefits	345,068			345,068
Purchased Water	450,826	(162,422)	(D)	
		67,835	(E)	
		(153,959)	(F)	202,280
Purchased Power for Pumping	450,099	(194,523)	(F)	255,576
Chemicals	85,893	(37,121)	(F)	48,772
Materials and Supplies	377,780	(18,000)	(C)	359,780
Contractual Services	112,969			112,969
Transportation Expense	118,891			118,891
Insurance	197,513			197,513
Advertising Expense	507			507
Bad Debt Expense	145,417			145,417
Miscellaneous Expense	35,693			35,693
Total Operation and Maintenance Expenses	3,226,828	(498,190)		2,728,638
Taxes Other Than Income	110,240	(8,826)	(G)	101,414
Depreciation	842,156	450	(C)	
		(10,855)	(H)	831,751
Amortization	2,460			2,460
Total Operating Expenses	4,181,684	(517,421)		3,664,263
Net Operating Income	(501,229)	(102,652)		(603,881)
Interest Income	2,432			2,432
Nonutility Income	143,033	(115,000)	(1)	28,033
Income Available to Service Debt	\$ (355,764)	\$ (217,652)		\$ (573,416)

(A) <u>Reduction in Water Sales</u>. During the test year, Southern District transferred its Sewer operations and a portion of their water customer base to the Prestonsburg City's Utility's Commission (PCUC) for financial considerations. Southern District provided a billing analysis that accounts for the lost revenues of (\$656,122) and the loss of 60,744,000 gallons sold to these 1,160 customers. Commission Staff finds that the billing analysis shows that these adjustments are reasonable and should be accepted by the Commission.

(B) <u>Billing Analysis Adjustment</u>. In the Application, Southern District provided a billing analysis that did not state specifically the number of bills for their retail or wholesale customers. In response to a deficiency letter, Southern District filed into the record an explanation describing the billing analysis calculations. To calculate the number of bills for the usage blocks, Southern District multiplied the number of customers in each usage block by 12. Southern District used the total from this calculation and multiplied it by the rate schedule usage for the First 2,000 gallons to derive the appropriate usage for each usage block for the First 2,000 gallons usage. Southern District then applied any additional usage to the Over 2,000 gallons usage block in their billing analysis. Southern District's consultant, Holly Nicholas, Kentucky Engineering Group, LLC, provided the explanation because she was responsible for the development of the billing analysis Southern District provided in their Application.⁴ Southern District replaced their billing software during the test year, which made the information for the full test year inaccessible. With the new billing software, Southern District should be placed on notice

⁴ Southern District response to field review filed on July 12, 2018.

that the Commission may expect that in future filings, Southern District should provide the information in its billing analysis in the appropriate manner.

Staff has reviewed Southern District's billing analysis and the adjustments provided in the Application and finds that the retail water sales revenues of \$2,889,953 and the wholesale water sales revenues of \$42,393, as determined by the adjusted billing analysis, is an accurate representation of normalized test-year revenue from water sales.⁵ Therefore, Staff has increased retail water sales revenue by \$54,073 and decreased sales for resale water revenues by \$(213).

(C) <u>Tap Fees</u>. During the test year, Southern District installed 24 new water connections to its distribution system. Southern District recorded \$17,811 for collections from customers for water taps in Other Water Revenues. Additionally, Southern District did not capitalize the expenses associated with setting these water taps. Staff removed \$17,811 from Other Water Revenues and removed \$18,000 from materials and supplies to reflect the costs of setting the taps. Staff then capitalized the amounts associated with setting the water taps in the amount of \$450 as calculated below.

5/8 Inch x 3/4 Inch Water Tap on Charge	\$ 750
Times: Number of Taps in 2016	 24
Total Water Tap on Charges	18,000
Divide by: 40 Years	 40
Adjustment	\$ 450

⁵ The billing analysis is based on a non-standard billing analysis due to the unavailability of the actual test-year billing data and the accuracy is representative of Southern Districts assumptions and estimates.

(D) <u>Reduced Purchased Water</u>. In its Application and as discussed in Item (A) above, Southern District reduced water sales due to the transfer of water assets and customers to PCUC. As a result, water that was purchased in order to serve these customers will also be reduced. Staff has reduced pro forma Purchased Water by \$162,422, as calculated below, for the total gallons of water purchased, adjusted for water loss as discussed in Item (F) below, to serve the customers in that area.

Gallons of Water Not Sold	60,744,000
Times: Water Loss Adjustment	 1.582178
Total Gallons of Water Purchased	96,107,820
Divide by:	 1,000
Gallons Purchased (omit 000's)	96,108
Times: 2016 Purchased Water Rate	\$ 1.69
Downward Adjustment	\$ 162,422

(E) <u>Wholesale Rate Increase</u>. On September 18, 2018, Southern District filed into the record a letter and notice for the city of Pikeville (Pikeville) regarding an increase to the wholesale water rate charged to Southern District. The notice indicated that Pikeville proposed to increase its rate for wholesale water service to Southern District from \$1.72 per 1,000 gallons to \$2.25 per 1,000 gallons. The rates were to be effective October 16, 2018. As of the date of this report, Southern District has not objected to the wholesale rate increase proposed by Pikeville. Staff has increased Southern District's purchased water expense by \$67,835 as calculated below, for water purchased from Pikeville in the test year.

Increase	\$ 67,835
Purchased Water Expense Less: Test Year	 287,978 (220,143)
Gallons Purchased in Test Year (in 000's) Times: New Purchased Water Rate	\$ 127,990 2.25

(F) Expenses Attributable to Water Loss. In its Annual Report, Southern District reported water loss of 42.85 percent.⁶ During Staff's review, it was determined that Southern District reported for its annual System flushing and Fire department use on its Water Statistics summary of the annual report in the amount of 60 million gallons each. Southern District was unable to provide sufficient flushing records or records of fire department use at the time of Staff's review. Staff has reduced the amounts reported for system flushing and fire department use to zero gallons, as no reasonable alternative level could be determined for these categories. As a result, Southern District's water loss has been increased to 58.22 percent⁷ for ratemaking purposes. Section 6(3) of 807 KAR 5:066 limits water loss to 15 percent for ratemaking purposes unless an alternative level

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Water Produced and Purchased	781,024,000
Less: Water Sales	(314,359,000)
Less: Water Treatment Plant Use	(11,940,000)
Less: Wastewater Plant Use	(30,000)
Total Line Loss	454,695,000
Divide by: Water Produced and Purchased	781,024,000
Water Loss Percentage	58.22%

⁶ Annual Report at 56.

is found reasonable by the Commission.⁸ As shown below, Staff calculated the cost to purchase, pump, and treat excess water loss to be \$385,603.

		Times: Excess Water	
		Loss	
	Test Year	Percentage	Decrease
Purchased Water	\$356,239	-43.22%	\$(153,959)
Purchased Power	450,099	-43.22%	(194, 523)
Chemicals	85,893	-43.22%	(37,121)

Accordingly, Staff removed the amounts attributable to excess water loss in pro forma operations.

(G) <u>Sales Tax</u>. In the test year, Southern District included in Taxes Other Than Income payments that were made for sales taxes collected on behalf the Commonwealth of Kentucky. The collection, and likewise remittance, of these taxes is not an expense or income to Southern District. Accordingly, Staff removed the payments made for Sales Tax from pro forma operations.

(H) <u>Depreciation</u>. In the test year, Southern District recorded depreciation on water assets that are to be transferred to PCUC as approved in Case No. 2017-00044.⁹

⁸ 807 KAR 5:066, Section 6(3), states: "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 ratemaking 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."

⁹ Case No. 2017-00044, Electronic Joint Application of Southern Water and Sewer District; Prestonsburg City's Utility Commission; and the City of Prestonsburg for an Order Approving the Transfer of Ownership of the Wastewater System and Certain Portions of the Water System of Southern Water and Sewer District (Ky. PSC May 2, 2017).

As of the date of this report, the water assets have not yet been transferred to PCUC. Until the transfer has occurred, Southern District and PCUC have mutually signed and agreed to an Operating and Maintenance Agreement (Agreement) that had an effective date of July 1, 2017. Pursuant to the Agreement, PCUC is principally responsible for maintaining the portion of Southern District's system that is to be transferred to PCUC. Additionally, PCUC will collect the water service revenues for the customers' meters that are being maintained by PCUC. Even though Southern District has not yet relinquished control of the assets to PCUC, pursuant to the Agreement, Southern District is neither collecting the revenue for these customers nor is it maintaining the assets in question, and therefore the depreciation for these assets should not be included in expenses for ratemaking purposes. Staff has removed from pro forma expenses the \$10,855 of depreciation recorded in the test year for these assets that had an original cost of \$542,732.¹⁰

(I) <u>Nonutility Income</u>. During the test year, Southern District received a payment from PCUC in the amount of \$115,000 that Southern District stated was an advance on the pending transfer of the water and wastewater assets to PCUC. This advance is a transaction that would not normally occur during the normal course of business, and therefore Staff has removed the amount received from PCUC from test year operations.

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

¹⁰ Case No. 2017-00044, Response to Commission Staff's Second Request for Information (Apr. 21, 2017) at 2.

recovery of: (1) Cash-related pro forma operating expenses; (2) recovery of depreciation expense, a non-cash item, to provide working capital;¹¹ (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 Southern District's and Staff's calculations of the Overall Revenue Requirement and Required Revenue Increase using the DSC method is shown below.

	Southern District	Staff	
Pro Forma Operating Expenses Plus: Average Annual Principal and Interest Payments Additional Working Capital	\$3,489,146 528,385 105,677	\$3,664,263 447,499 89,500	(1) (2)
Overall Revenue Requirement	4,123,208	4,201,262	
Less: Other Operating Revenue	(145,847)	(128,036)	
Interest Income	(2,432)	(2,432)	
Nonutility Income	(143,033)	(28,033)	
Revenue Required from Rates	3,831,896	4,042,761	
Less: Pro Forma Present Rate Service Revenues	(2,878,486)	(2,932,346)	
Required Revenue Increase	\$ 953,410	\$1,110,415	
Percentage Increase	33.12%	37.87%	

¹¹ 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).

Average Annual Principal and Interest Payments. At the time of filing, (1)Southern District had four outstanding bonds payable to the United States Department of Agriculture Rural Development (RD), four notes payable to the Kentucky Infrastructure Authority (KIA), and two loans payable to First Guaranty. KRS 278.300(1) states "no utility shall issue any securities or evidences of indebtedness, or assume any obligation or liability in respect to the securities or evidences of indebtedness of any other person until it has been authorized to do so by order of the commission." Accordingly, prima facie evidence exists that Southern District violated KRS 278.300(1). The Commission is compelled to pursue a separate action against Southern District to show cause and present evidence on its failure to adhere to the procedures of KRS 278.300(1). In instances in which it is shown that the proceeds of an unauthorized loan were used to pay for current operating expenses, the Commission has disallowed rate recovery, finding that such action would constitute retroactive ratemaking.¹² Staff has determined that Southern District used the proceeds from the First Guaranty loan to pay for current operating expenses, and therefore finds that Southern District should not be allowed rate recovery of the associated debt service.

In its Application, Southern District requested recovery of the average annual principal and interest payments on these loans, and the two notes that it is in the process of obtaining approval for from KIA, which it calculated to be \$528,385 based on a three-year average of the annual principal and interest payments for the years 2018 through 2020. Traditionally, Staff only makes adjustments to a utility's pro forma operations when

¹² See Case No. 8690, Application of Glengarry Utilities, Inc., Glengarry Sewage Treatment Plant, for an Adjustment of Rates Pursuant to the Alternative Procedure for Small Utilities (Ky. PSC July 8, 1983) at 7; and Case No. 9303, Application of Fordhaven, Inc., for an Adjustment of Rates Pursuant to the Alternative Procedure for Small Utilities (Ky. PSC Aug. 8, 1985) at 8.

those adjustments are determined to be known and measurable. As it is uncertain whether the two proposed notes payable to KIA will be approved and have not yet been reviewed by the Commission, Staff determined this proposed adjustment was not known and measurable. Staff recalculated this amount using the three-year average of the annual principal and interest payments for the years 2019 through 2021 but excluded the two loans payable to First Guaranty, and the two proposed notes payable to KIA that have not yet been approved. The recalculation of Southern District's debt service is shown below.

Year	Annual Debt Payment
2019	\$ 447,597
2020 2021	447,374 447,527
Total Divide by: 3 years	1,342,498 3
Average Annual Principal and Interest Payment	\$ 447,499

(2) <u>Additional Working Capital</u>. 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 addition to depreciation expense, Southern District requested recovery of an allowance for working capital that is equal to 120 percent of its average annual debt payments for its four bonds payable, current notes payable to KIA, two loans payable to First Guaranty, and the proposed notes payable to KIA, respectively.

Signatures

triel Miller

Prepared by: Ariel Miller Water and Sewer Branch Division of Financial Analysis

Prepared by: Travis Leach Water and Sewer Branch Division of Financial Analysis

Prepared by: Eddie Beavers Water and Sewer Branch Division of Financial Analysis

Prepared by: Elizabeth Stefanski Water and Sewer Branch Division of Financial Analysis

RD requires that Southern District charge rates that produce net revenues that are at least 120 percent of its average annual debt payments. Following the Commission's historic practice, Staff recalculated Southern District's allowance for additional working capital as shown below.

Average Annual Principal and Interest Times: DSC Coverage Ratio	\$ 447,499 120%
Total Net Revenues Required Less: Average Annual Principal and Interest Payments	 536,999 (447,499)
Additional Working Capital	\$ 89,500

ATTACHMENT

ATTACHMENT TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2018-00230 DATED OCT 2 4 2018

Staff Calculated Monthly Water Rates

First	2,000 Gallons	\$33.92	Minimum Bill
Over	2,000 Gallons	11.58	per 1,000 Gallons

Wholesale Customers		
City of Hindman	3.78	per 1,000 Gallons
Knott County Water District	3.86	per 1,000 Gallons
City of Wheelwright	3.75	per 1,000 Gallons

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