

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF CANNONSBURG WATER)	
DISTRICT FOR RATE ADJUSTMENT FOR)	CASE NO.
SMALL UTILITIES PURSUANT TO 807 KAR)	2018-00376
5:076)	

NOTICE OF FILING OF STAFF REPORT

Notice is hereby given that, in accordance with the Commission's Order of February 25, 2019, 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 February 25, 2019 Order, Cannonsburg 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
P.O. Box 615
Frankfort, KY 40602

DATED MAR 19 2019

cc: Parties of Record

STAFF REPORT
ON
CANNONSBURG WATER DISTRICT
CASE NO. 2018-00376

Cannonsburg Water District (Cannonsburg District), a water district organized pursuant to KRS Chapter 74, provides water service to approximately 3,947 residential, commercial, and industrial customers located in Boyd and Greenup counties, Kentucky.¹ On November 13, 2018, Cannonsburg District filed an application (Application) requesting to adjust its monthly water service rates pursuant to the procedures set forth in 807 KAR 5:076. To ensure the orderly review of the Application, the Commission established a procedural schedule by Order dated December 19, 2018. In its February 25, 2019 Order, the Commission amended the procedural schedule to permit Cannonsburg District additional time to submit documentation² required for Staff to complete its review and to formulate its findings.

To comply with the requirements of 807 KAR 5:076, Section 9,³ Cannonsburg District 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

¹ *Annual Report of Cannonsburg Water District to the Public Service Commission for the Calendar Year Ended December 31, 2017* (2017 Annual Report) at pp. 12 and 48 of 66.

² The fiscal court minutes authorizing Cannonsburg to pay compensation of \$6,000 per month to its commissioners and the actual amortization schedule for the Kentucky Infrastructure Authority loan that was authorized in Case No. 2018-00247, *Electronic Application of Cannonsburg Water District to Issue Securities Pursuant to KRS 278.300* (Ky. PSC Aug. 15, 2018).

³ “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.”

year ended December 31, 2017. Using the operating ratio method⁴ and its pro forma test-year operations, Cannonsburg District determined that it could justify a revenue increase of \$240,921, or 11.01 percent, as shown in the table below.⁵ The rates requested by Cannonsburg District would increase the monthly bill of a typical residential customer using 4,000 gallons per month by \$4.70, from \$42.68 to \$47.38, or approximately 11.01 percent.⁶

Pro Forma Operating Expenses	\$ 2,331,513
Divide by: Operating Ratio	<u>88%</u>
Subtotal	2,649,447
Add: Average Annual Interest Expense	<u>51,667</u>
Total Revenue Requirement	2,701,114
Less: Interest Income	(2,973)
Other Operating Revenue	(125,785)
Nonoperating Revenue	<u>(142,257)</u>
Revenue Required from Rates	2,430,099
Less: Normalized Revenues from Water Sales	<u>(2,189,178)</u>
Required Revenue Increase/(Decrease)	<u>\$ 240,921</u>
Percentage Increase	<u>11.01%</u>

To determine the reasonableness of the rates requested by Cannonsburg District, Commission Staff (Staff) performed a limited financial review of Cannonsburg District’s last-year operations. The scope of Staff’s review was limited to determining whether

⁴ Operating Ratio is defined as the ratio of expenses, including depreciation and taxes, to gross revenues. It is illustrated by the following equation:

$$\text{Operating Ratio} = \frac{\text{Operating Expenses} + \text{Depreciation} + \text{Taxes}}{\text{Gross Revenues}}$$

⁵ Application, Attachment 1, Customer Notice.

⁶ *Id.* at Attachment 4.

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.

Staff's findings are summarized in this report. Mark Frost and Travis Leach reviewed the calculation of Cannonsburg District's Overall Revenue Requirement. Eddie Beavers reviewed Cannonsburg District's reported revenues and rate design.

Summary of Findings

1. Overall Revenue Requirement and Required Revenue Increase. By applying the Operating Ratio Method, as generally accepted by the Commission, Staff found Cannonsburg District's Overall Revenue Requirement to be \$2,465,955. As shown below, a revenue increase of \$93,534, or 4.08 percent, is necessary to generate the Overall Revenue Requirement.

2. Water Service Rates. Cannonsburg District proposed to increase its water service rates by approximately 11.01 percent across the board above current rates except for Wholesale Sales and Private Fire Sprinkler Systems. Cannonsburg District has not performed a cost-of-service study (COSS). The Commission has previously found that an across-the-board increase is an appropriate and equitable method of cost allocation in the absence of a COSS. Staff finds that an across-the-board increase to all retail and wholesale rate classes is the appropriate means to allocate the increased revenue requirement. Cannonsburg District provides Fire Protection Services through Public Fire Hydrants, Public Fire Sprinkler Systems and Private Fire Sprinkler Systems. Cannonsburg District does not charge for public fire protection services. Cannonsburg

District does charge a monthly private fire sprinkler rate but did not request to revise these rates at this time. Cannonsburg District was unable to provide detailed information to Staff concerning the various customers and their services for Staff to make an adjustment to the fire protection rates. Staff recommends that Cannonsburg District consider evaluating and analyzing these rates to determine if they generate the revenue necessary to provide the cost of service for fire sprinkler services.

Cannonsburg District provides a Leak Adjustment Rate for customers who experience a leak during the year. Only one adjustment is allowed each year and Cannonsburg District's tariff sets out the procedures for a customer to take advantage of this rate. Staff recommends that the Commission increase this rate in the same manner that the retail water service rates have been increased.

The rates set forth in the Attachment to this report are based on the revenue requirement as calculated by Staff and will produce sufficient revenues from water sales to recover the \$93,534 Revenue Requirement from rates determined by Staff, an approximate 4.08 percent increase. These rates will increase a typical residential customer using 4,000 gallons monthly water bill from \$42.68 to \$44.41, an increase of \$1.73, or approximately 4.05 percent.

3. Depreciable Lives. Staff finds that an adjustment is warranted to the depreciable lives that Cannonsburg District assigned to all of its depreciable utility plant accounts. Any depreciable lives approved by the Commission in this proceeding for ratemaking purposes should be used by Cannonsburg District for all future accounting and reporting purposes. No adjustment to accumulated depreciation or retained earnings

should be made to account for the retroactive cumulative effect of this change in accounting estimate.

Pro Forma Operating Statement

Cannonsburg District's Pro Forma Operating Statement for the test year ended December 31, 2017, as determined by Staff, appears below.

	<u>Test Year Operations</u>	<u>Pro Forma Adjustments</u>	Adj. Ref	<u>Pro Forma Operations</u>
Operating Revenues:				
Revenue Water Sales:				
Revenue - Metered Water Sales	\$ 2,112,325	\$ 62,353	(A)	\$ 2,174,678
Bulk Loading Stations	18,412	(18,002)	(B)	410
Sales for Resale		116,272	(C)	116,272
	<u>2,130,737</u>	<u>160,623</u>		<u>2,291,360</u>
Total Revenue Water Sales				
Other Operating Revenues:				
Private Fire Protection		7,573	(C)	7,573
Forfeited Discounts		40,058	(C)	40,058
Misc. Service Revenues		12,525	(C)	12,525
Other Water Revenues	276,522	(258,590)	(C)	17,932
	<u>276,522</u>	<u>(198,434)</u>		<u>78,088</u>
Total Other Operating Revenues				
	<u>2,407,259</u>	<u>(37,811)</u>		<u>2,369,448</u>
Total Operating Revenues				
Operating Expenses:				
Operation & Maintenance:				
Salaries & Wages - Employees	433,630	(43,323)	(D)	390,307
Salaries & Wages - Commissioners		30,000	(E)	30,000
Employee Pension & Benefits	401,712	(107,536)	(F)	294,176
Purchased Water	1,130,288	(352,135)	(G)	778,153
Purchased Power	70,671	(21,718)	(G)	48,953
Materials & Supplies	123,157	(23,654)	(H)	99,503
Contractual Services - Other	27,265			27,265
Transportation	73,581			73,581
Insurance	50,227	(10,700)	(I)	39,527
Miscellaneous	101,404			101,404
	<u>2,411,935</u>	<u>(529,066)</u>		<u>1,882,869</u>
Total Operation & Maintenance				
Depreciation	151,146	36,187	(J)	187,333
Amortization	0	23,917	(J)	23,917
Payroll Taxes (FICA)	29,812	702	(K)	30,514
	<u>2,592,893</u>	<u>(468,260)</u>		<u>2,124,633</u>
Utility Operating Expenses				
	<u>(185,634)</u>	<u>430,449</u>		<u>244,815</u>
Net Utility Operating Income				
Other Income/(Deductions)				
Interest Income	3,491	(518)	(L)	2,973
Nonutility Income	45,883	(45,883)	(M)	0
	<u>\$ (136,260)</u>	<u>\$ 384,048</u>		<u>\$ 247,788</u>
Net Income Available for Debt Service				

(A) Billing Analysis Adjustment. Cannonsburg District reports a test-period level of revenue from metered water sales to residential, commercial, and industrial customers of \$2,112,325.⁷ The billing analysis provided by Cannonsburg District produces revenue from metered water sales of \$2,189,178,⁸ which is \$76,853 above the amount reported in the annual report. Cannonsburg District proposes to increase reported revenues from metered water sales by \$76,853.⁹

Staff compared Cannonsburg District's billing analysis to the monthly customer billing registers to determine the accuracy of the analysis. Upon review of Cannonsburg District's billing analysis, Staff determined that the total revenue reported for the 5/8-inch by 3/4-inch meter of \$1,720,007 did not include \$7,587 of revenue that was calculated for the water usage between 30,000 gallons and 50,000 gallons. Cannonsburg District also recorded in its general ledger test-year leak adjustments of \$22,087.

Correcting the billing analysis error of \$7,587 and including the test-year leak adjustments of \$22,087, Staff calculates a normalized revenue from water sales of \$2,174,678,¹⁰ which is \$62,353 greater than the reported test-year level of \$2,112,325. Accordingly, Staff is increasing Cannonsburg District's revenue from metered water sales by \$62,353.

⁷ *Annual Report of Cannonsburg Water District to the Public Service Commission for the Calendar Year Ended December 31, 2010* (hereinafter, *2010 Annual Report*) at 27.

⁸ Application, Attachment 5, Billing Analysis with 2017 Usage and Existing Rates.

⁹ *Id.* at Attachment 4, Schedule of Adjusted Operations.

¹⁰ \$2,189,178 (Cannonsburg District's Billing Analysis) + \$7,587 (Correction of Error) - \$22,087 (Leak Adjustments) = \$2,174,678.

(B) Bulk Loading Stations. Cannonsburg District reported test-year bulk loading station revenues of \$18,412. Upon review of Cannonsburg District’s general ledger and trial balance, Staff found that the bulk loading station revenues were actually \$410. Cannonsburg District could not explain why its accountant increased bulk sales revenue by \$18,002. Further, it would require sales of approximately 4,165,611 gallons to achieve a bulk sale revenue of \$18,412.¹¹ According to Cannonsburg District, only a few commercial customers use the bulk stations and that revenue of \$410, or sales of 92,760 gallons, is more in line with the amounts that have been historically sold at the stations. Staff is reducing bulk loading station revenues by \$18,002 to reflect the amount that was recorded in the test-year general ledger.

(C) Other Water Revenues. Cannonsburg District reported other test-year water revenues of \$276,522. According to Cannonsburg District, the amount reported in other water revenues “included several categories of revenue such as late fees, service revenue, wholesale, and retail sales.”¹² Cannonsburg District revised the revenue classifications by reducing other operating revenue by \$203,320 and moving the amounts to the correct revenue accounts as shown in the table below.

Other Water Revenues	\$ 276,522	\$ (203,320)	\$ 73,202
Sales for Resale	0	116,272	116,272
Private Fire Protection	0	7,573	7,573
Forfeited Discounts	0	40,058	40,058
Miscellaneous Service Revenues	0	12,525	12,525

¹¹ \$18,412 (Bulk Loading Station Sales – Application) ÷ \$0.00442 (Rate per 1,000 Gallons) = 4,165,611 Gallons.

¹² Application, Attachment 4.a, References, Adjustment b.

Staff finds that Cannonsburg District's revenue reclassification adjustments should be accepted but is modifying the reduction to other water revenues of (\$203,320). In reviewing the general ledger, Staff determined that this account included payments made by the Greenup County Fiscal Court (Greenup Fiscal Court) of \$3,070 for the installation of a hydrant and deposits in transit of \$52,002. The Greenup Fiscal Court payments should be recorded as a Contribution in Aid of Construction (CIAC) that should not be reported as revenue; likewise, the deposits in transit should not be recorded as revenue. Staff is increasing Cannonsburg District's proposal to decrease other water revenues of (\$203,320) by (\$55,072) for a total decrease of (\$258,392).

(D) Employee Salaries and Wages. Cannonsburg District proposed to increase its reported a test-year employee salaries and wages expense of \$433,630 by \$62,632¹³ to a pro forma level of \$496,262. Staff determined Cannonsburg District's test-year employee salaries and wages expense should be decreased by \$43,323¹⁴ as explained below.

New Employee Positions. Cannonsburg District's Board of Commissioners authorized the hiring of three new employees: two laborers to assist in leak detection and one office clerk.¹⁵ In the calendar year 2018, Cannonsburg District filled the three authorized positions. However, the two new laborers resigned and their positions are

¹³ (\$30,000) (Misclassified Commissioner Fees) + \$20,082 (Misclassified Employee Retirement Contributions) + \$81,120 (New Employees: two field and one office) – (\$8,570) (Capitalized Labor: Meter Installations) = \$62,632.

¹⁴ (\$34,753) (Current Staff and Wages) – (\$8,570) (Capitalized Labor: Meter Installations) = (\$43,323).

¹⁵ Application, Attachment 4a, References, Adjustment e.

currently vacant. Tim Webb, Cannonsburg District’s general manager, explained that he intends to fill the positions but the funds to pay the salaries are not currently available. Because of its current financial condition, Cannonsburg District has deferred filling the vacant laborer positions and cannot commit to a date certain for such action. For this reason, any adjustment to reflect filling the vacant laborer positions would fail to meet the ratemaking criteria of being known and measurable. Using Cannonsburg District’s current staff level of 11 full-time employees and the 2018 employee wages, Staff calculates a pro forma employee salaries and wages expense of \$413,162, which is \$34,753 below the reported expense level. Staff’s calculation of Cannonsburg District’s pro forma employee salaries and wage expense is below.

Employee Position	Payment Method	2018 Wages		2018 Hours		Pro Forma Salaries & Wages		
		Regular	Overtime	Regular	Overtime	Regular	Overtime	Total
Laborer	Hourly	\$ 19.08	\$ 28.62	2,080.00	0.00	\$ 39,686	\$ -	\$ 39,686
Office Manager	Hourly	\$ 19.87	\$ 29.81	2,080.00	4.00	41,330	119	41,449
Foreman	Hourly	\$ 19.59	\$ 29.39	2,080.00	174.00	40,747	5,114	45,861
Laborer	Hourly	\$ 19.08	\$ 28.62	2,080.00	213.50	39,686	6,110	45,796
Laborer	Hourly	\$ 14.94	\$ 22.41	2,080.00	108.50	31,075	2,431	33,506
Clerk/Secretary	Hourly	\$ 13.39	\$ 20.09	2,080.00	0.00	27,851	0	27,851
Manager	Salary (Monthly)	\$2,258.08	N/A	2,080.00	0.00	58,710	0	58,710
Laborer	Hourly	\$ 12.00	\$ 18.00	2,080.00	0.00	24,960	0	24,960
Laborer	Hourly	\$ 12.00	\$ 18.00	2,080.00	0.00	24,960	0	24,960
Secretary	Hourly	\$ 15.97	\$ 23.96	2,080.00	0.00	33,218	0	33,218
Office	Hourly	\$ 11.00	\$ 16.50	2,080.00	0.00	22,880	0	22,880
						<u>\$ 385,103</u>	<u>\$ 13,774</u>	<u>\$ 398,877</u>
Pro Forma Salaries & Wages - Employees								\$ 398,877
Less: Reported Salaries & Wages - Employees								(433,630)
Pro Forma Adjustment								<u>\$ (34,753)</u>

Misclassified Labor. Cannonsburg District discovered that in the test year it had incorrectly recorded Commissioner Fees of \$30,000 in employee salaries and wages expense and had misclassified the employee’s contribution into the County Employee Retirement System (CERS) of \$20,082 in the employee benefit expense

account.¹⁶ In calculating its pro forma employee salaries and wages expense, Staff used the current number of employees excluding Cannonsburg District's commissioners from the calculation. Further, pro forma wages and salaries expense reflects the gross employee wages, which includes the employees' contributions to CERS. Therefore, separate adjustments as proposed by Cannonsburg District are not required.

Capital Labor. Cannonsburg District explains that, during the test year, it installed sixteen 5/8-inch by 3/4-inch meters and one 1-inch meter.¹⁷ To capitalize the labor costs incurred to install the meters, Cannonsburg District proposes to decrease employee salaries and wages expense by \$8,570, which is 40 percent of the tap-on fees it collected.¹⁸ In reviewing Cannonsburg District's proposed adjustment, Staff finds that the proposed methodology is appropriate and has reduced pro forma salaries and wages expense by \$8,570. Additionally, the depreciation expense is being increased by \$202¹⁹ to capitalize the labor costs funded by the tap-on fees.

(E) Commissioner Fees. As discussed in the misclassified labor adjustment, the fees paid to the commissioners were misclassified in the account employee salaries and wages expense. To correct this reporting error, Cannonsburg District proposes to increase operating expenses by \$30,000, the amount that was paid in the test year. Cannonsburg District currently pays its five commissioners a monthly fee of \$500 each or \$6,000 annually.

¹⁶ Application, Attachment 4a, References, Adjustments c and d.

¹⁷ Application, Attachment 4a, References, Adjustment f.

¹⁸ *Id.*

¹⁹ \$8,570 (Capital Labor – Tap-on Fees) ÷ 42.5 (years) = \$202.

When a water district commissioner obtains the six instructional hours of water district management training as required by KAR 74.020(7)(a), a monthly fee of \$500 is allowed as long as the county judge/executive and the fiscal court approve the fee as required by KAR 74.020(6):

[S]alary shall be fixed by the county judges/executive with the approval of the fiscal court; in multicounty districts, it shall be fixed by the agreement between the county judges/executive with the approval of their fiscal courts.

Cannonsburg District provided the required authorization of the county judge/executive and fiscal court for the payment of a monthly fee of \$500 for commissioners attending the required training and the payment of a monthly fee of \$300 for commissioners choosing not to attend the training. For this reason, Staff accepts Cannonsburg District's proposed adjustment to increase pro forma operating expenses by \$30,000.

(F) Employee Pensions and Benefits. Cannonsburg District proposes to reduce employee pension and benefit expense by \$89,647 to reflect the actual payments that Cannonsburg District made to the CERS in the calendar year 2018.²⁰ Staff is reducing test-year employee pensions and benefits expense by \$107,536.²¹

Employee Insurance Benefits. Cannonsburg District currently provides health and dental insurance coverage to all of its eligible full-time employees. Staff notes that in recent Orders, the Commission has made ratemaking adjustments to reduce the cost of employee benefit packages paid by some utilities when certain aspects of those benefit packages were found to be unreasonable based on a review of total salaries and

²⁰ Application, Attachment 4a, References, Adjustment g.

²¹ \$125,886 (CERS) + \$168,290 (Employee Health and Dental Insurance) = \$294,176 - \$401,712 (Test-year employee pensions and benefits) = (\$107,536).

fringe benefits. The Commission is placing greater emphasis on evaluating employees' total compensation packages, including both salary and benefit programs, for market and geographic competitiveness to ensure the development of a fair, just, and reasonable rate. It has found that in most cases, 100 percent of employer-funded health care does not meet those criteria.

Cannonsburg District currently requires its employees to contribute 12 percent toward the cost of their health insurance premiums but does not require an employee contribution for dental insurance premiums. To comply with the Commission's current practice, Staff is reducing Cannonsburg District's pro forma employee benefit expense of \$194,256 by \$25,996²² for a net employee benefit expense of \$168,290. Staff's adjustment is based on the current employee health and dental insurance premiums, the test-year 12 percent employee contribution rate for health insurance coverage, and a 60 percent employee contribution rate for dental coverage.

Employee Health Insurance	\$ 188,724	x 12 % =	\$ (22,647)
Employee Dental Insurance	\$ 5,532	x 60 % =	<u>(3,319)</u>
Total Employee Insurance Adjustment			<u>\$ (25,966)</u>

While the Commission accepts the current employee healthcare contribution rate of 12 percent, it should be noted that it is far below the Bureau of Labor Statistics averages and as the Commission has previously stated, the further from the averages the percentage is the more likely an adjustment will be made. The Commission encourages

²²

Emp. Health Insurance	\$ 188,724	x 12 % =	\$ (22,647)
Emp. Dental Insurance	\$ 5,532	x 60 % =	<u>(3,319)</u>
Total Employee Insurance Adjustment			<u>\$ (25,966)</u>

Cannonsburg District to work towards increasing the employee contribution rate before its next rate case.

CERS. Cannonsburg District reported a test-year employee pension expense of \$189,573. Cannonsburg District provides pension benefits and post-retirement health care benefits to its employees by participating in the CERS. As a participating member, Cannonsburg District is required to contribute a percentage of its employee wages to CERS. In the fiscal year beginning July 1, 2018, the CERS contribution rate was 31.56 percent.²³ The CERS pension expense that Cannonsburg District reported in the test year conformed to the requirements of the General Accounting Standards Board Pronouncement No. 68 (GASB 68).

In Case No. 2016-00163,²⁴ 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 the annual pension expense should be equal to the amount of a district's contributions to CERS, which historically have been "fairly constant." Based on the above, Staff determined that Cannonsburg District's test-year CERS employer contributions would be \$125,886²⁵ for ratemaking purposes.

(G) Purchased Water. Cannonsburg District determined that its test-year water loss was 37.09 percent and noted that it is above the Commission's maximum allowable

²³ <https://kyret.ky.gov/Employers/Pages/Contribution-Rates.aspx>

²⁴ Case No. 2016-00163, *Alternative Rate Adjustment filing of Marion County Water District* (Ky. PSC Nov. 10, 2016).

²⁵ \$398,877 (Pro Forma Full-Time Water Salaries) x 31.56% (July 1, 2018 CERS Employer Rate) = \$125,886.

ratemaking limit of 15 percent.²⁶ Cannonsburg District proposes to reduce purchased water expense by \$249,736 and purchased power expense by \$16,615, to eliminate the cost of water that is in excess of the 15 percent limitation.²⁷

Section 6(3) of 807 KAR 5:066²⁸ limits water loss to 15 percent for ratemaking purposes unless the Commission finds an alternative level is reasonable. In the below table, Staff determined Cannonsburg District’s actual test-year water loss was 39.19 percent or 24.19 percent above the allowable limit.

Water Produced/Purchased	389,721,635
Water Sales - Staff's Billing Analysis	(206,899,216)
Water Sales - Sales for Resale	(25,476,400)
System Flushing	(4,230,000)
Fire Department	(175,000)
Other	<u>(193,000)</u>
Unaccounted for Water Loss - Gallons	<u><u>152,748,019</u></u>
Percentage of Unaccounted for Water Loss	39.19%
Less: Allowable Loss	<u>-15.00%</u>
Percentage Water Loss in Excess of 15 Percent	<u><u>24.19%</u></u>

²⁶ Application, Attachment 4a, References, Adjustment h.

²⁷ *Id.*

²⁸ 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.

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

Allowable Purchases	\$ 70,671.00	\$ 1,145,861.00
Multiplied by: Water Rate per 1,000 Gallons	-30.731%	-30.731%
	<hr/>	<hr/>
Pro Forma Purchased Water Expense	\$ (21,718)	\$ (352,135)
	<hr/> <hr/>	<hr/> <hr/>

(H) Materials and Supplies. Cannonsburg District reported a test-year materials and supplies expense of \$123,157. As discussed in the capital-labor adjustment, Cannonsburg District installed sixteen 5/8-inch by 3/4-inch meters and one 1-inch meter in the test year. To capitalize the costs of the meters and services, Cannonsburg District proposes to decrease materials and supplies expense by \$12,865, which is 60 percent of the tap-on fees that it collected in the test year.²⁹

Upon its review of the test-year invoices, Staff discovered that Cannonsburg District had recorded meter purchases of \$11,453 and equipment purchases of \$12,201, as shown in the table below.

Transaction Date	Vendor	Description	Amount
08/25/17	CI Thornburg	2"omni T2 100G AMR 1G Pulse17"	\$ 1,008
12/11/17	CI Thornburg	27 - 520M MXJ Single Port Transceiver	3,645
	CI Thornburg	16 - 5/8" x 3/4" iPERL	2,000
09/21/17	CI Thornburg	8 - 5/8" x 3/4" iPERL	1,000
09/08/17	CI Thornburg	2"omni T2 100G AMR 1G Pulse17"	1,400
10/09/17	CI Thornburg	2"omni T2 100G AMR 1G Pulse17"	1,400
08/09/17	CI Thornburg	8 - 5/8" x 3/4" iPERL	1,000
09/04/17	Triple B Construction	Installation 400 amp Transfer Switch	3,535
03/31/17	United Systems	Itron Digital Leak Detector	2,995
02/09/17	USA Bluebook	Portable Flow Meter	5,671
			<hr/>
Total Capital Expenditures			\$ 23,654
			<hr/> <hr/>

²⁹ Application, Attachment 4a, References, Adjustment f.

The cost of the meters and equipment is considered capital expenditures and, therefore, should be depreciated rather than recorded as an expense. Accordingly, Staff proposes to deny Cannonsburg District's proposed adjustment based on a 60 percent allocation of the collected tap-on fees and instead is reducing materials and supplies expense by \$23,654; the actual cost of the capital items. Additionally, the depreciation expense is being increased by \$1,017.³⁰

(I) Insurance. Cannonsburg District reported a test-year insurance expense of \$50,227. Using the current insurance premiums for general liability and worker's compensation, Staff calculates an insurance expense of \$39,527, for a decrease of \$10,700. The calculation of Staff's adjustment is below.

General Liability - KaCO All Lines Fund	\$ 27,659
Workers Compensation Fund - KaCO	<u>11,868</u>
Total Pro Forma Insurance	39,527
Less: Reported Expense	<u>(50,227)</u>
Pro Forma Adjustment	<u>\$ (10,700)</u>

(J) Depreciation. Cannonsburg District proposes to decrease test-year depreciation expense of \$151,146 by \$3,226 for a pro forma level of \$147,920. According to Cannonsburg District, "it has been the Commission's practice to require an adjustment to a water utility's depreciation expense when asset lives fall outside the ranges recommended by the NARUC in its publication titled "Depreciation Practices for Small

³⁰ \$11,453 (Meters) ÷ 20.0 (years) =	\$ 573
\$12,201 (Equipment) ÷ 27.5 (years) =	<u>+ 444</u>
Total Depreciation Adjustment	<u>\$ 1,017</u>

Utilities.”³¹ Cannonsburg District’s explains that its proposed depreciation adjustment brings its asset lives within or near the midpoint of the recommended ranges.³²

In reviewing the reasonableness of the depreciation lives used by water utilities, the Commission has historically relied upon the report published in 1979 by NARUC titled *Depreciation Practices for Small Water Utilities (NARUC Study)*. When no evidence exists to support a specific life that is inside or outside the NARUC Study ranges, the Commission has historically used the mid-point of the NARUC Study ranges to depreciate a utility plant.

Upon its review of the reasonableness of the depreciable lives of each asset category in Cannonsburg District’s depreciation schedule, Staff determined that all of Cannonsburg District’s asset categories are outside of the ranges contained in the NARUC Study. The depreciation lives used by Staff represents the midpoint of the NARUC Study range for each asset category.

In Case No. 2015-00181,³³ the Commission granted Cannonsburg District, a Certificate of Public Convenience and Necessity to construct a \$2,086,000 project and approved Cannonsburg District’s proposed plan of financing. Even though the project was broken down into three distinct contracts, Cannonsburg District’s accountant depreciated the entire \$2,086,000 million project as transmission and distribution mains. In reviewing the June 30, 2015 correction to the application, Staff determined that project

³¹ Application, Attachment 4a, References, Adjustment i.

³² *Id.*

³³ Case No. 2015-00181, *Application of the Cannonsburg Water District for a Certificate of Public Convenience and Necessity to Construct, Finance and Increase Rates Pursuant to KRS 278.023* (Ky. PSC July 8, 2015).

costs of \$376,626 should remain in transmission and distribution mains, \$1,350,624 should be allocated to meters, and the remaining \$358,750 is for sandblasting and painting a water tank (Tank Refurbishing). The calculation of Staff's allocations is below.

Vendor	Description	Bids	% of Total Bids ¹	Add: Allocation Overheads	Total Project Costs
Southern Ohio Trench	Waterline (Stream Crossing)	\$ 281,475	18.05%	\$ 95,151	\$ 376,626
Advanced Building Restoration	Tank (Sandblasting & Repainting)	268,080	17.20%	90,670	358,750
Cl Thomburg	Meter Replacement	1,009,292	64.75%	341,332	1,350,624
Totals		<u>\$ 1,558,847</u>	<u>100.00%</u>	<u>\$ 527,153</u>	<u>\$ 2,086,000</u>

The adjustments to depreciation expense to reflect the impact of Staff allocations are included in the Attachment B schedule.³⁴ The Tank Refurbishing is a nonrecurring expenditure that should be amortized rather than expensed. Staff is amortizing the Tank Refurbishing over 15 years, resulting in an increase to operating expenses of \$23,917.³⁵ Cannonsburg District requested Commission approval to enter into an Assistance Agreement with the Kentucky Infrastructure Authority (KIA) to borrow an amount not to exceed \$85,000.³⁶ The KIA loan was necessary to finance a project to provide clean drinking water to six households whose water supply had been contaminated by effluent from an abandoned oil well. The project has been completed at a total cost of \$57,271,

³⁴ Cannonsburg District submitted documentation that Sensus guarantees the iPERL meter is accurate for 20 years. Accordingly, Staff is depreciating the cost of the iPERL meters over a 20-year life.

³⁵ \$358,750 (Tank Refurbishing) ÷ 15 (Years) = \$23,917.

³⁶ Case No. 2018-00247, *Electronic Application of Cannonsburg Water District to Issue Securities Pursuant to KRS 278.300* (Ky. PSC Aug. 15, 2018).

which is \$27,729 below the approved estimate. The schedule in Attachment B includes depreciation for the completed project using the actual completed cost.

As calculated in the schedule in Attachment B, Staff is reducing the test-year depreciation expense by \$36,187.

(K) Payroll Taxes (FICA). Cannonsburg District reported a test-year payroll tax expense of \$29,812. Using the pro forma employee salaries and wages expense of \$398,877 and the current FICA rate of 7.65 percent, Staff calculated a pro forma FICA expense of \$30,514. Accordingly, Staff is increasing the payroll tax expense by \$702.³⁷

(L) Interest Income. A portion of the reported interest income was earned on Cannonsburg District's "Water Loss Surcharge Account." Interest earned on this account is restricted and, therefore, Cannonsburg District is reducing interest income by \$518. Staff accepts Cannonsburg District's adjustment.

(M) Nonutility Income. Cannonsburg District states that the nonutility income of \$45,883 consists of grants and tap-on fees that fund capitalized items.³⁸ Therefore, Cannonsburg District is reducing net operating income by \$45,883.³⁹ Staff proposes to accept Cannonsburg District's proposed adjustment because grants and tap-on fees should be recorded as Contributions In Aid of Construction, not income.

Overall Revenue Requirement and Required Revenue Increase

The Commission has historically used the Debt Service Coverage (DSC) methodology to calculate the revenue requirement for water districts and water

³⁷ \$987,877 (Pro Forma Employee Salaries and Wages Exp.) x 7.65% (FICA Rate) = \$30,514 - \$29,812 (Recorded Payroll Tax) = \$702.

³⁸ Application, Attachment 4a, References, Adjustment I.

³⁹ *Id.*

associations because an outstanding bond ordinance or loan agreement requires the water district or association to maintain a predetermined DSC level. In this instance, the DSC methodology fails to produce a revenue requirement sufficient to support Cannonsburg District's financial operations. Therefore, Staff proposes to use the operating ratio method to calculate Cannonsburg District's revenue requirement.⁴⁰

Using the operating ratio method, Staff determined that Cannonsburg District requires an Overall Revenue Requirement of \$2,465,955. As shown below, a revenue increase of \$93,534, or 4.08 percent, is required.

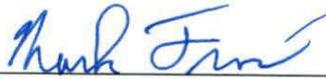
Pro Forma Operating Expenses	\$ 2,124,633
Divide by: Operating Ratio	<u>88%</u>
Subtotal	2,414,356
Add: Average Annual Interest Expense	<u>51,599</u>
Total Revenue Requirement	2,465,955
Less: Interest Income	(2,973)
Other Operating Revenue	<u>(78,088)</u>
Revenue Required from Rates	2,384,894
Less: Normalized Revenues from Water Sales	<u>(2,291,360)</u>
Required Revenue Increase/(Decrease)	<u>\$ 93,534</u>
Percentage Increase	<u>4.08%</u>

⁴⁰ The Commission used the operating ratio method in Cannonsburg District's last rate case, Case No. 2011-00217, *Application of Cannonsburg Water District for (1) Approval of Emergency Rate Relief and (2) Approval of the Increase in Nonrecurring Charges* (Ky. PSC June 4, 2012).

Signatures:



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ATTACHMENT A

ATTACHMENT TO A STAFF REPORT OF THE KENTUCKY PUBLIC SERVICE
COMMISSION IN CASE NO. 2018-00376 DATED **MAR 19 2019**

Monthly Rates

5/8 x 3/4-Inch Meter

First	2,000	Gallons	\$ 25.33	Minimum Bill
Next	3,000	Gallons	9.54	per 1,000 Gallons
Next	15,000	Gallons	8.77	per 1,000 Gallons
Next	30,000	Gallons	8.09	per 1,000 Gallons
Next	50,000	Gallons	7.72	per 1,000 Gallons
All Over	100,000	Gallons	6.77	per 1,000 Gallons

1-Inch Meter

First	5,000	Gallons	\$ 53.96	Minimum Bill
Next	15,000	Gallons	8.77	per 1,000 Gallons
Next	30,000	Gallons	8.09	per 1,000 Gallons
Next	50,000	Gallons	7.72	per 1,000 Gallons
All Over	100,000	Gallons	6.77	per 1,000 Gallons

2 & 3-Inch Meters

First	20,000	Gallons	\$ 185.42	Minimum Bill
Next	30,000	Gallons	8.09	per 1,000 Gallons
Next	50,000	Gallons	7.72	per 1,000 Gallons
All Over	100,000	Gallons	6.77	per 1,000 Gallons

6-Inch Meters

First	50,000	Gallons	\$ 428.03	Minimum Bill
Next	50,000	Gallons	9.54	per 1,000 Gallons
All Over	100,000	Gallons	6.77	per 1,000 Gallons

12-Inch Meters

First	100,000	Gallons	\$ 814.17	Minimum Bill
All Over	100,000	Gallons	6.77	per 1,000 Gallons

Leak Adjustment 4.56 per 1,000 Gallons

Wholesale Customers

City of Greenup	4.60	per 1,000 Gallons
Big Sandy Water District	4.60	per 1,000 Gallons

ATTACHMENT B

ATTACHMENT TO A STAFF REPORT OF THE KENTUCKY PUBLIC SERVICE COMMISSION
IN CASE NO. 2018-00376 DATED **MAR 19 2019**

CALCULATION OF STAFF'S PROPOSED PRO FORMA DEPRECIATION ADJUSTMENT

	Original Cost UPIS	Dep. Life	Depreciation Expense 2,017	Asset Reclassifications			NARUC Depreciation Lives			Staff	
				Original UPIS Bal.	Staff Reclassifications	Reclassified UPIS	Floor	Celling	Mid Point	Depreciation Expense	Pro Form Adjustment
Structures and Improvements	1,990	40.00	49	1,990		1,990	35.00	40.00	37.50	53	\$ 4
Structures and Improvements	32,828	30.00	1,094	32,828		32,828	35.00	40.00	37.50	875	(219)
Structures and Improvements	78,005	20.00	3,902	78,005		78,005	35.00	40.00	37.50	2,080	(1,822)
Structures and Improvements	643	10.00	5	643		643	35.00	40.00	37.50	17	12
Pumping Equipment - Structure	38,433	50.00	767	38,433		38,433	35.00	40.00	37.50	1,025	258
Pumping Equipment - Structure	61,805	15.00	2,949	61,805		61,805	35.00	40.00	37.50	1,648	(1,301)
Pumping Equipment	24,833	15.00	5,649	24,833		24,833	20.00	20.00	20.00	1,242	(4,407)
Pumping Equipment	42,041	10.00	3,994	42,041		42,041	20.00	20.00	20.00	2,102	(1,892)
Distribution Reservoirs & Standpipes	522,293	50.00	10,445	522,293		522,293	30.00	60.00	45.00	11,607	1,162
Distribution Reservoirs & Standpipes	66,286	44.00	1,507	66,286		66,286	30.00	60.00	45.00	1,473	(34)
Transmission & Distribution Mains	6,735,510	50.00	93,662	6,735,510	(1,709,374)	5,026,136	50.00	75.00	62.50	80,418	(13,244)
Meter/Services	233,299	15.00	12,937	233,299		233,299	35.00	50.00	42.50	5,489	(7,448)
Meter/Services -2017 Meter Installations	21,425	0.00	0	21,425		21,425	35.00	50.00	42.50	504	504
Meter/Services - AMR Meters	0	0.00	0	0	1,350,624	1,350,624	20.00	20.00	20.00	67,531	67,531
Office Furniture/Equipment	1,461	10.00	83	1,461		1,461	20.00	25.00	22.50	65	(18)
Office Furniture/Equipment	5,493	10.00	474	5,493		5,493	20.00	25.00	22.50	244	(230)
Hydrants	45,071	33.00	1,367	45,071		45,071	40.00	60.00	50.00	901	(466)
Computer Software	850	5.00	170	850		850	20.00	25.00	22.50	38	(132)
Land Improvements	6,350	20.00	318	6,350		6,350	35.00	40.00	37.50	169	(149)
Transportation Equipment	52,448	5.00	10,490	52,448		52,448	7.00	7.00	7.00	7,493	(2,997)
Operating Equip - Excavator	52,774	10.00	5,278	52,774		52,774	10.00	15.00	12.50	4,222	(1,056)
	<u>164,447</u>		<u>155,140</u>	<u>164,447</u>	<u>(358,750)</u>	<u>164,447</u>				<u>189,197</u>	<u>34,056</u>
Emergency Connection						57,000			62.50		912
Labor Meter Installations						8,570			42.50		202
Meters						11,453			20.00		573
Installation 400 amp Transfer Switch						3,535			27.50		129
Itron Digital Leak Detector						2,995			27.50		109
Portable Flow Meter						5,671			27.50		206
Pro Forma Adjustment											<u>\$ 36,187</u>

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