

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF CRITTENDEN-LIVINGSTON)
COUNTY WATER DISTRICT FOR AN) CASE NO.
ALTERNATIVE RATE ADJUSTMENT) 2018-00414

NOTICE OF FILING OF COMMISSION STAFF REPORT

Notice is hereby given that, in accordance with the Commission's Order of January 11, 2019, 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 Order of January 11, 2019, Crittenden-Livingston District is required to file written comments regarding the findings of Staff no later than 14 days from the date of this report.



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

DATED APR 05 2019

cc: Parties of Record

STAFF REPORT
ON
CRITTENDEN-LIVINGSTON COUNTY WATER DISTRICT
CASE NO. 2018-00414

Crittenden-Livingston County Water District (Crittenden-Livingston District) is a water utility organized pursuant to KRS Chapter 74 that owns and operates a water distribution system through which it provides retail water service to approximately 3,607 customers that reside in Crittenden and Livingston counties, Kentucky.¹ On December 12, 2018, Crittenden-Livingston District filed an application (Application), pursuant to 807 KAR 5:076, requesting to increase its water service rates. To ensure the orderly review of the Application, the Commission established a procedural schedule by Order dated January 11, 2019.

To comply with the requirements of 807 KAR 5:076, Section 9, Crittenden-Livingston 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 the Application, the calendar year ended December 31, 2017.

Using its pro forma test-year operations, Crittenden-Livingston District determined that it could justify a revenue increase of \$598,817, or 31.68 percent, as shown in the table below.² Crittenden-Livingston requested to split its proposed rates into three phases, with the second phase to take effect one year after phase one, and the third

¹ *Annual Report of Crittenden-Livingston County Water District to the Public Service Commission for the Calendar Year Ended December 31, 2017 (Annual Report)* at 12 and 48.

² Application, Attachment 5.

phase to take effect one year after the second phase takes effect. The phase one rates requested by Crittenden-Livingston District would increase the monthly bill of a typical residential customer³ by \$4.22, from \$40.03 to \$44.25, or approximately 10.54 percent. The phase two rates requested by Crittenden-Livingston District would increase the monthly bill of a typical residential customer by \$4.22 from \$44.25 to \$48.47, or approximately, 9.54 percent. The phase three rates requested by Crittenden-Livingston District would increase the monthly bill of a typical residential customer by \$4.26, from \$48.47 to \$52.73, or approximately, 8.79 percent. This results in a total percentage increase of approximately 31.68 percent over three years.

Pro Forma Operating Expenses	\$ 1,983,838
Plus: Average Annual Principal and Interest Payments	1,063,825
Additional Working Capital	147,434
Amortization of Premium on Debt	<u>(34,154)</u>
Overall Revenue Requirement	3,160,943
Less: Other Operating Revenue	(63,898)
Nonutility Income	-
Interest Income	(1,681)
Proposed Wholesale Sales Revenue	<u>(606,064)</u>
Revenue Required from Retail Rates	2,489,300
Less: Revenue from Retail Sales at Present Rates	<u>(1,890,483)</u>
Required Retail Revenue Increase	<u>\$ 598,817</u>
Percentage Increase	<u>31.68%</u>

To determine the reasonableness of the rates requested by Crittenden-Livingston District, Staff performed a limited financial review of Crittenden-Livingston District's test-year operations. The scope of Staff's review was limited to determining whether

³ A typical residential customer purchases 3,000 gallons of water per month through a 5/8-inch x 3/4-inch meter.

operations reported for the test year were representative of normal operations. Known and measurable changes to test-year operations were identified and adjustments made when their effects were deemed material. Insignificant and immaterial discrepancies were not necessarily pursued or addressed.

This report summarizes Staff's findings. Ariel Miller and William Foley reviewed the calculation of Crittenden-Livingston District's Overall Revenue Requirement. Jason Green reviewed Crittenden-Livingston District's 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 that Crittenden-Livingston District's Overall Revenue Requirement is \$3,171,327 and that a \$608,746 revenue increase, or 32.20 percent, to pro forma present rate revenues is necessary to generate the Overall Revenue Requirement.

2. Water Service Rates. Crittenden-Livingston District proposed to increase its current retail water service rates by approximately 31.68 percent evenly across the board. Crittenden-Livingston 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. Crittenden-Livingston District proposed to increase its current wholesale water service rate by 29.5 percent and provided a COSS to support its proposed wholesale rate of \$3.34. While generally accepting this study, the Commission has made certain adjustments to more accurately reflect Crittenden-Livingston District's cost of providing

wholesale service. The rates set forth in Attachment C to this report are based upon the revenue requirement as calculated by Staff and will produce sufficient revenues from water sales to recover the \$3,171,327 Overall Revenue Requirement determined by Staff, an approximate 32.20 percent increase. Phase one rates will increase the monthly bill of a retail customer who uses 3,000 gallons of water per month from \$40.03 to \$44.26, an increase of \$4.23, or 10.57 percent. Phase two rates will increase the monthly bill of a retail customer who uses 3,000 gallons of water per month from the Phase one rate of \$44.26 to \$48.48, an increase of \$4.22, or 9.53 percent. Phase three rates will increase the monthly bill of a retail customer who uses 3,000 gallons of water per month from the Phase two rate of \$48.48 to \$52.92, an increase of \$4.44, or 9.16 percent.

PRO FORMA OPERATING STATEMENT

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

	Test Year	Adjustment (Ref.)	Pro Forma
Operating Revenues			
Sales of Water			
Residential & Commercial Sales	\$ 1,931,512	\$ (55,938) (A)	
		12,532 (B)	\$ 1,888,106
Sales from Bulk Loading Stations	2,377		2,377
Sales to Public Authorities	475,894	(475,894) (C)	0
Sales for Resale		475,894 (C)	475,894
Other Water Revenues		55,938 (A)	55,938
Misc. Service Revenues	7,960		7,960
Total Operating Revenues	2,417,743	12,532	2,430,275
Operating Expenses			
Operation and Maintenance Expenses			
Salaries and Wages - Employees	492,625		492,625
Salaries and Wages - Commissioners	6,600		6,600
Employee Pensions and Benefits	315,326	(140,120) (D)	
		(22,578) (E)	152,628
Purchased Water	535		535
Purchased Power for Pumping	137,752		137,752
Chemicals	124,799		124,799
Materials and Supplies	230,723		230,723
Contractual Services	50,460	3,163 (F)	53,623
Rent	0		0
Transportation Expense	15,919		15,919
Insurance	35,550		35,550
Regulatory Commission Expense	0		0
Bad Debt Expense	413		413
Miscellaneous Expense	32,541		32,541
Total Operation and Maintenance Expenses	1,443,243	(159,535)	1,283,708
Taxes Other Than Income	38,942		38,942
Depreciation Expense	665,746	(23,973) (G)	641,773
Total Operating Expenses	2,147,931	(183,508)	1,964,423
Total Utility Operating Income	269,812	196,040	465,852
Interest Income	1,681		1,681
Nonutility Income	98,518	(98,518) (H)	0
Income Available to Service Debt	\$ 370,011	\$ 97,522	\$ 467,533

(A) Other Water Revenue. In its Application, Crittenden-Livingston District reported that it had incorrectly allocated \$55,938 of Other Water Revenues into

Residential & Commercial Sales. Crittenden-Livingston District proposed to correct this reporting error by decreasing Residential & Commercial Sales and increasing Other Water Revenues. Staff agrees with the adjustment proposed by Crittenden-Livingston District. Accordingly, Staff decreased Residential & Commercial Sales and increased Other Water Revenues by \$55,938.

(B) Billing Analysis Adjustment. Crittenden-Livingston District provided a billing analysis showing the gallons of water billed to retail customers during the test year. Applying the water service rates that were in effect during the test year to the water sales shown in the billing analysis, Staff determined that a billing analysis adjustment that increases test-year revenues by \$12,532 is appropriate.

(C) Wholesale Water Sales. In its Application, Crittenden-Livingston District reported that the revenue from wholesale sales was reported as Sales to Public Authorities. The proposed adjustment moves the revenue to the appropriate category. Staff agrees with the adjustment proposed by Crittenden-Livingston District. Accordingly, Staff decreased Residential & Commercial Sales and increased Other Water Revenues by \$475,894.

(D) Retirement Expense Pursuant to GASB 68. Crittenden-Livingston District 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, Crittenden-Livingston 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 21.48 percent.⁴ The CERS pension expense Crittenden-Livingston

⁴ Kentucky Retirement Systems, Contribution Rates. (<https://kyret.ky.gov/Employers/Pages/Contribution-Rates.aspx>)

District reported in the test year conformed to the requirements of the Governmental Accounting Standards Board Statement No. 68 (GASB 68).

In its Application, Crittenden-Livingston District proposed to decrease its Employee Pensions and Benefits Expense by \$140,120 to reflect the increase in employer contribution rates paid to CERS and to remove the effects of the journal entry made to conform to the requirements of GASB 68.

In Case No. 2016-00163,⁵ Staff discussed in great detail how reporting requirements for GASB 68 would affect a utility's income statement and balance sheet. In that proceeding, Staff 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." Consistent with Staff's previous practice, Staff agrees with the adjustment proposed by Crittenden-Livingston District. Accordingly, Staff decreased Employee Pensions and Benefits Expense by \$140,120.

(E) Employee Pensions and Benefits. Crittenden-Livingston District reported test-year Employee Pensions and Benefits expense of \$315,326. Crittenden-Livingston District currently pays 100 percent of the cost for single coverage health and dental policies for its 12 employees, with any incremental cost for other than single coverage paid for by the employee. 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 benefits packages were found to be unreasonable. The Commission is placing greater emphasis on evaluating employees' total

⁵ Case No. 2016-00163, *Alternative Rate Adjustment Filing of Marion County Water District* (PSC Ky. Aug. 11, 2016) Staff Report on Marion County Water District at 10–27.

compensation packages, including both salary and benefits programs for market and geographic competitiveness, and to ensure the development of a fair, just, and reasonable rate. The Commission has found in most cases 100 percent of employer-funded health care does not meet those criteria. Factoring in for the preceding, Staff determined the net adjustment to Crittenden-Livingston District's test-year employee pensions and benefits expense based on those employees participating in its current monthly single coverage only premiums and the national average employee contribution rate for single health insurance⁶ and dental insurance,⁷ which results in a decrease of \$22,578 as shown in the calculation below.

⁶ Bureau of Labor Statistics, Healthcare Benefits, March 2018, Table 10, private industry workers. (<https://www.bls.gov/ncs/ebs/benefits/2018/ownership/private/table10a.pdf>)

⁷ Willis Benefits Benchmarking Survey, 2015 (https://www.willis.com/documents/publications/Services/Employee_Benefits/Willis_Survey_011216_R1.pdf)

Type of Premium	Current Monthly Premium	Times: Average Employee Contribution Rate	Monthly Premium Adjustment	Pro Forma Monthly Premium
Single Health Insurance ¹	\$ 4,606	21%	\$ (967)	\$ 3,639
Family Health Insurance ²	921			921
Dental Insurance	408	60%	(245)	163
Life Insurance	264			264
Total Pro Forma Monthly Premium Times: 12 Months				4,987 <u>12</u>
Total Annual Pro Forma Premium Less: Test Year				59,844 <u>(82,422)</u>
Adjustment				<u><u>\$(22,578)</u></u>

¹ \$460.62 x 10 Employees

² \$460.62 x 2 Employees

(F) Contractual Services – Water Testing. Crittenden-Livingston District is required by the Kentucky Division of Water to perform periodic water quality testing in order to maintain safe drinking water standards. Staff adjusted the amount Crittenden-Livingston District's water testing by \$3,163 as a result of the two adjustments described below.

Subsequent to the test year, Crittenden-Livingston District became aware of two additional water-testing requirements that were necessary to meet safe drinking water standards and required to be performed between the calendar years 2018 and 2020. The

total for the additional testing required is \$11,129. Staff amortized this amount over five years, resulting in a total additional expense of \$2,226.⁸

In addition, Crittenden-Livingston District received a notice on January 17, 2019, from its water-testing contractor, Microbac, that the price of all testing services would be increasing 7 percent as of January 1, 2019. As shown in the table below, Staff adjusted the total annualized testing expense by 7 percent, resulting in an additional testing expense of \$937.

Test Year Expense	\$ 11,167 ¹
Plus: Amortized Additional Testing	<u>2,226</u>
 Annualized Testing Expense	 13,393
Times: 7% Increase	<u>7%</u>
 Additional Testing Expense	 <u><u>\$ 937</u></u>

¹ Annual Report at 49, Contractual Services – Water Testing.

(G) Depreciation Expense. In its Application, Crittenden-Livingston District proposed to decrease its test-year Depreciation Expense of \$665,746 by \$23,973.⁹ This adjustment was the result of Crittenden-Livingston District’s proposal to adjust the lives assigned to certain assets that were outside of the life ranges in accordance with the

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	2018 to 2020 Additional Testing	\$ 11,129
	Divide by: 5 Years	<u>5</u>
	 Amortized Additional Testing	 <u><u>\$ 2,226</u></u>

⁹ Application, Attachment 5b.

National Association of Regulatory Utility Commissioners' (NARUC) publication titled Depreciation Practices for Small Utilities (NARUC Study), and to annualize Depreciation Expense for assets that were installed during the test year.

To evaluate the reasonableness of the depreciation practices of small water utilities, the Commission has historically relied upon the NARUC Study. Crittenden-Livingston District proposed to adjust the lives of assets that were outside of the NARUC ranges to the mid-point of the depreciable life ranges. In this proceeding, Staff found no evidence to support depreciable lives that vary significantly from the mid-point of the NARUC ranges and, after further review of Crittenden-Livingston District plant ledger, Staff agrees with Crittenden-Livingston District's decrease to depreciation expense of \$23,973.

(H) Nonutility Income – Grant Funds. During the test year, Crittenden-Livingston District received payments from a FEMA grant for expenses that were incurred in 2016. Crittenden-Livingston District proposed to remove the effect of these payments from test-year operations as it is an extraordinary item not routinely experienced by Crittenden-Livingston District. Staff agreed with Crittenden-Livingston District's treatment of these payments and reduced the pro forma Nonutility Income by \$98,518.

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;¹⁰ (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 Crittenden-Livingston District's and Staff's calculations of the Overall Revenue Requirement and the Required Revenue Increase using the DSC method is shown below.

	Crittenden- Livingston District	Staff	
Pro Forma Operating Expenses	\$ 1,983,838	\$1,964,423	
Plus: Average Annual Principal and Interest Payments	1,063,825	1,057,713	(1)
Additional Working Capital	147,434	149,192	(2)
Amortization of Premium on Debt	<u>(34,154)</u>	<u> </u>	
Overall Revenue Requirement	3,160,943	3,171,327	
Less: Other Operating Revenue	(63,898)	(63,898)	
Nonutility Income	-	-	
Interest Income	(1,681)	(1,681)	
Proposed Wholesale Sales Revenue	<u>(606,064)</u>	<u>(606,519)</u>	(3)
Revenue Required from Retail Rates	2,489,300	2,499,229	
Less: Revenue from Retail Sales at Present Rates	<u>(1,890,483)</u>	<u>(1,890,483)</u>	
Required Retail Revenue Increase	<u>\$ 598,817</u>	<u>\$ 608,746</u>	
Percentage Increase	<u>31.68%</u>	<u>32.20%</u>	

¹⁰ 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. At the time of Staff's review, Crittenden-Livingston District had three outstanding bonds payable to the United States Department of Agriculture Rural Development (RD), three notes payable to the Kentucky Infrastructure Authority (KIA), and two leases payable to the Kentucky Association of Counties (KACo). In its Application, Crittenden-Livingston District requested recovery of the average annual principal and interest payments on its indebtedness based on a five-year average of the annual principal and interest payments for the years 2018 through 2022. Included in its calculation, were two bond issuances that were refinanced into a 2018 KACo lease subsequent to the test period. To reflect this change, Staff recalculated Crittenden-Livingston District's principal and interest payments based on a five-year average for the years 2019 through 2023 as shown below.

Year	Annual Debt Payment
2019	\$ 1,052,793
2020	1,050,452
2021	1,042,642
2022	1,072,497
2023	<u>1,070,180</u>
Total	5,288,563
Divide by: 5 years	<u>5</u>
Average Annual Principal and Interest Payment	<u><u>\$ 1,057,713</u></u>

(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. Crittenden-Livingston District requested recovery of an allowance for

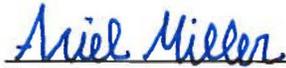
working capital that is equal to 120 percent of its average annual debt payments for its bonds payable to RD and three notes payable to KIA at the time of its Application.

RD requires that Crittenden-Livingston District charge rates that produce net revenues that are at least 120 percent of its average annual debt payments. Using the five-year average principal and interest payments that were recalculated by Staff in the above paragraph for its current bonds payable and notes payable to KIA, Crittenden-Livingston District’s revised additional working capital is \$149,192 as shown below.

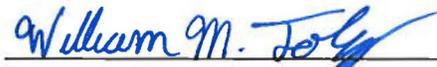
Average Annual Principal and Interest	\$ 745,958
Times: DSC Coverage Ratio	<u>120%</u>
Total Net Revenues Required	895,149
Less: Average Annual Principal and Interest Payments	<u>(745,958)</u>
Additional Working Capital	<u>\$ 149,192</u>

(3) Proposed Wholesale Sales Revenue. As explained in items (D) – (G) above, Staff adjusted Crittenden-Livingston’s expected operating expenses. These adjustments directly affected the COSS that was filed with Crittenden-Livingston’s Application. Using the pro forma operating expenses calculated above, Staff directly applied them to the COSS filed in Crittenden-Livingston’s Application. This resulted in a wholesale rate of \$3.34 per 1,000 gallons for its phase three rates; the rate proposed by Crittenden-Livingston District. The new phase-in rates generated from the revised COSS results in a new proposed wholesale sales revenue of \$606,519, an increase of \$455.

Signatures



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ATTACHMENT A

ATTACHMENT TO A STAFF REPORT OF THE KENTUCKY PUBLIC SERVICE
COMMISSION IN CASE NO. 2018-00414 DATED **APR 05 2019**

Monthly Water Rates

Phase 1

5/8-3/4-Inch Meter

First	1,000	Gallons	\$20.72	Minimum bill
Next	9,000	Gallons	11.77	per 1,000 Gallons
Next	10,000	Gallons	10.09	per 1,000 Gallons
Over	20,000	Gallons	7.95	per 1,000 Gallons

1-Inch Meter

First	5,000	Gallons	\$67.80	Minimum bill
Next	5,000	Gallons	11.77	per 1,000 Gallons
Next	10,000	Gallons	10.09	per 1,000 Gallons
Over	20,000	Gallons	7.95	per 1,000 Gallons

2-Inch Meter

First	15,000	Gallons	\$177.10	Minimum bill
Next	5,000	Gallons	10.09	per 1,000 Gallons
Over	20,000	Gallons	7.95	per 1,000 Gallons

Bulk Sales 7.95 per 1,000 Gallons

Wholesale Rate 2.83 per 1,000 Gallons

ATTACHMENT B

ATTACHMENT TO A STAFF REPORT OF THE KENTUCKY PUBLIC SERVICE
COMMISSION IN CASE NO. 2018-00414 DATED **APR 05 2019**

Monthly Water Rates

Phase 2

5/8-3/4-Inch Meter

First	1,000	Gallons	\$22.70	Minimum bill
Next	9,000	Gallons	12.89	per 1,000 Gallons
Next	10,000	Gallons	11.05	per 1,000 Gallons
Over	20,000	Gallons	8.71	per 1,000 Gallons

1-Inch Meter

First	5,000	Gallons	\$74.26	Minimum bill
Next	5,000	Gallons	12.89	per 1,000 Gallons
Next	10,000	Gallons	11.05	per 1,000 Gallons
Over	20,000	Gallons	8.71	per 1,000 Gallons

2-Inch Meter

First	15,000	Gallons	\$193.96	Minimum bill
Next	5,000	Gallons	11.05	per 1,000 Gallons
Over	20,000	Gallons	8.71	per 1,000 Gallons

Bulk Sales 8.73 per 1,000 Gallons

Wholesale Rate 3.08 per 1,000 Gallons

ATTACHMENT C

ATTACHMENT TO A STAFF REPORT OF THE KENTUCKY PUBLIC SERVICE
COMMISSION IN CASE NO. 2018-00414 DATED **APR 05 2019**

Monthly Water Rates

Phase 3

5/8-3/4-Inch Meter

First	1,000	Gallons	\$24.76	Minimum bill
Next	9,000	Gallons	14.08	per 1,000 Gallons
Next	10,000	Gallons	12.06	per 1,000 Gallons
Over	20,000	Gallons	9.52	per 1,000 Gallons

1-Inch Meter

First	5,000	Gallons	\$81.08	Minimum bill
Next	5,000	Gallons	14.08	per 1,000 Gallons
Next	10,000	Gallons	12.06	per 1,000 Gallons
Over	20,000	Gallons	9.52	per 1,000 Gallons

2-Inch Meter

First	15,000	Gallons	\$211.78	Minimum bill
Next	5,000	Gallons	14.08	per 1,000 Gallons
Over	20,000	Gallons	9.52	per 1,000 Gallons

Bulk Sales 9.52 per 1,000 Gallons

Wholesale Rate 3.34 per 1,000 Gallons

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