

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF LEDBETTER WATER
DISTRICT FOR AN ALTERNATIVE RATE
ADJUSTMENT

)
)
)
CASE NO.
2018-00117

NOTICE OF FILING OF STAFF REPORT

Notice is hereby given that, in accordance with the Commission's Order of April 16, 2018, 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 April 16, 2018 Order, Ledbetter 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 JUL 16 2018

cc: Parties of Record

STAFF REPORT
ON
LEDBETTER WATER DISTRICT
CASE NO. 2018-00117

Ledbetter Water District (Ledbetter District), a water district organized pursuant to KRS Chapter 74, provides water service to approximately 1,258 customers,¹ and sewer service to approximately 815 customers² residing in Livingston County, Kentucky.³ On April 2, 2018, Ledbetter District tendered its application (Application) to the Commission requesting to adjust its water and sewer rates pursuant to 807 KAR 5:076, and it was considered filed as of that date. To ensure the orderly review of the Application, the Commission established a procedural schedule by Order dated April 16, 2018.

To comply with the requirements of 807 KAR 5:076, Section 9,⁴ Ledbetter 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 year ended December 31, 2016.

Ledbetter District proposed to implement the water increase in two phases. The requested Phase 1 rates do not incorporate an across-the-board increase to its customer

¹ *Annual Report of Ledbetter Water District to the Public Service Commission for the Calendar Year Ended December 31, 2016* (2016 Water Annual Report) at 48.

² *Annual Report of Ledbetter Water Sewer District to the Public Service Commission for the Calendar Year Ended December 31, 2016* (2016 Sewer Annual Report) at 26.

³ 2016 Water Annual Report at 12.

⁴ 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.

charge, but rather an increase of 15.02 percent, 63.73 percent, 110.06 percent, 239.30 percent and 1537.94 percent for its 5/8 x 3/4 inch, 1-inch, 1 ½ inch, 2-inch, and 4-inch meters, respectively. For its volumetric rate in Phase 1, Ledbetter District proposed an across-the-board increase of 17.07 percent. For Phase 2, the proposed rates would be an average across-the-board increase of 8.82 percent for both the customer charge and volumetric charge. The resulting increase in volumetric rates for both phases compared to their current volumetric rate is 27.40 percent. For Phase 1, the monthly bill of a typical residential water customer using 4,000 gallons per month would increase by \$4.87, from \$29.31 to \$34.18, or 16.61 percent. Phase 2 rates would be effective one year after the effective dates of Phase 1 and would increase the average monthly bill from Phase 1 rates of \$34.18 to \$37.18, an increase of \$3.00, or 8.78 percent. Using its pro forma test-year operations, Ledbetter District determined that it could justify a revenue increase of \$116,432, or 27.27 percent.⁵

	Ledbetter Water Division
Operating Expenses	\$ 490,932
Divided by: Operating Ratio	<u>88%</u>
Overall Revenue Requirement	557,877
Less: Other Operating Revenue	(14,236)
Interest Income	<u>(249)</u>
Revenue Requirement - Water Rates	543,392
Less: Normalized Revenue from Water Service	<u>(426,960)</u>
Required Revenue Increase	<u>\$ 116,432</u>
Percentage Increase	<u>27.27%</u>

⁵ Application, Attachment 4.

For both metered and unmetered customers, Ledbetter District proposed that a cumulative 66.99 percent increase to sewer rates also be applied in two phases. For metered customers, Phase 1 rates would increase the monthly bill for a customer using 4,000 gallons per month by \$20.38, from \$50.95 to \$71.33, or 40.00 percent. Phase 2 rates would then increase the monthly bill from the Phase 1 average of \$71.33 to \$85.08, an increase of \$13.75, or 19.28 percent. For unmetered customers, Phase 1 rates would increase the monthly bill from \$63.82 to \$89.35, an increase of \$25.53 or 40.00 percent. Phase 2 rates, would in turn, increase the monthly bill for unmetered sewer customers from \$89.35 to \$106.58, an increase of \$17.23, or 19.28 percent. Using its pro forma test-year operations, Ledbetter District determined that it could justify a revenue increase of \$285,106, or 67.03 percent.⁶

	Ledbetter Sewer Division
Pro Forma Operating Expenses	\$ 463,704
Debt Coverage Requirement	205,731
Additional Working Capital	<u>41,146</u>
Overall Revenue Requirement	710,581
Less: Other Operating Revenue	
Interest Income	<u>(134)</u>
Revenue Required from Rates	710,447
Less: Normalized Revenues from Sewer Sales	<u>(425,340)</u>
Required Revenue Increase	<u>\$ 285,107</u>
Percentage Increase	<u>67.03%</u>

⁶ *Id.*

To determine the reasonableness of the rates requested by Ledbetter District, Staff performed a limited financial review of Ledbetter 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.

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

Summary of Findings

Water Division.

1. Overall Revenue Requirement and Required Revenue Increase. By applying the Operating Ratio Method, as generally accepted by the Commission, Staff found Ledbetter District's Overall Revenue Requirement for its water division to be \$510,629. A revenue increase of \$74,796, or 17.52 percent, is necessary to generate the Overall Revenue Requirement.

2. Water Service Rates. In the Application, Ledbetter District proposed to change their rate design to include charges for larger sized meters without a cost-of-service study (COSS). In response to a Staff field review request, Ledbetter District filed into the record an explanation of how the meter customer charge was calculated by their consultant, Allen Vilines, a Kentucky Rural Water Association Staff Member.⁷

⁷ Ledbetter Water's supplemental information to field review filed on Apr. 16, 2018.

Ledbetter District has not performed a COSS. Rather, Ledbetter District explained in the response to Staff's field review request the appropriate method Staff would use in conjunction with a filed COSS. Ledbetter District references their filed COSS with Case No. 2008-00498⁸ that set the current customer charge for all customers and applied this COSS to the instant case. This filed COSS was based on a 2006 Test Year. Ledbetter District's request to base the proposed rate design on this COSS and such outdated information should not be considered. The changes to the customer costs from a COSS based on a 2006 Test Year are not appropriate in the current request by Ledbetter District. Staff recommends the Commission not approve the request to set the meter customer charges using outdated information.

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. Staff has increased Ledbetter District's current customer charge and monthly water service rate across the board by 17.52 percent and allocated the \$74,796 revenue increase Staff found warranted evenly across the board.

Ledbetter District had requested to increase its water service rates in two phases. However, as Staff has calculated a lesser increase, Staff recommends to the Commission to increase the water service rates in one phase.

⁸ Case No. 2008-00498, *Application of Ledbetter Water District for Approval of an Increase in Rates for Water Service* (Ky. PSC May 5, 2008).

Shown in the Attachment to this report are the monthly customer charge and water service rates calculated by Staff. These rates will increase a typical residential customer's monthly bill from \$29.31 to \$34.46, an increase of \$5.15, or 17.57 percent.⁹

3. Audit Adjustments. Subsequent to the filing of its 2016 annual reports to the Public Service Commission, Ledbetter District's independent auditor completed and submitted the audited financial statements for the calendar year ended December 31, 2016. In its Application, Ledbetter District proposed to adjust the amounts reported on its 2016 Annual Reports for the water division by the amounts reported in its audited financial statements. Staff finds that the amounts reported in the audit report are the most accurate when calculating pro forma operations and has therefore included these adjustments in the pro forma statement as calculated by Staff.

Sewer Division.

1. Overall Revenue Requirement and Required Revenue Increase. By applying the Debt Service Coverage (DSC) Method, as generally accepted by the Commission, Staff found Ledbetter District's Overall Revenue Requirement for its sewer division to be \$668,704. A revenue increase of \$233,023, or 54.20 percent, is necessary to generate the Overall Revenue Requirement.

2. Sewer Service Rates. In its Application, Ledbetter District proposed to increase all of its monthly sewer service rates evenly across the board by approximately 66.99 percent. Ledbetter District has not performed a COSS. Ledbetter District proposes that this increase be phased-in using two steps with the first increase to occur at the time the Commission rules

⁹ Staff calculated the increase using the 4,000-gallon usage from Ledbetter Water's Customer Notice provided in the application.

on the requested increase. The second step will occur one year after the final order is issued in this proceeding. The Commission has found that a phased-in approach to a large rate increase is an appropriate way to manage gradualism in an effort to lessen rate shock.

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 and in the absence of a COSS. Finding no such evidence, in this case, Staff followed the method proposed by Ledbetter District and allocated the \$233,023 revenue increase Staff found warranted evenly across the board to Ledbetter District's current monthly sewer service rates.

Ledbetter District's provision of sewer service is to both metered customers and to unmetered customers. Ledbetter District based its unmetered customer's rate on a customer's average of 4,000 gallons of water usage, in their application. Staff concurs with Ledbetter District's usage of 4,000 gallons of water usage as proposed to calculate its unmetered customers' rate.

The monthly sewer service rates calculated by Staff are shown in the Attachment to this report. These rates will increase a typical residential customer's monthly bill in phase 1 from \$63.82 to \$81.12, an increase of \$17.30, or 27.11 percent and will increase a typical residential customer's monthly bill in phase 2 from \$81.12 to \$98.40, an increase of \$17.28 or 21.30 percent.¹⁰

3. Audit Adjustments. Subsequent to the filing of its 2016 annual reports to the Public Service Commission, Ledbetter District's independent auditor completed and

¹⁰ Staff utilized the Unmetered Customer's 4,000-gallon usage to calculate the percentage increase.

submitted the audited financial statements for the calendar year ended December 31, 2016. In its Application, Ledbetter District proposed to adjust the amounts reported on its 2016 Annual Reports for the sewer division by the amounts reported in its audited financial statements. Staff finds that the amounts reported in the audit report are the most accurate when calculating pro forma operations and has therefore included these adjustments in the pro forma statement as calculated by Staff.

Pro Forma Operating Statement

Water Division.

Ledbetter District's Pro Forma Operating Statement for their water division for the test year ended December 31, 2016, as determined by Staff, appears below:

Staff's Pro Forma Income Statement - Water Division

	2016 Annual Report	Audit Adjustments	Adjusted Operations	Pro Forma Adjustments	Adj. Ref.	Pro Forma Operations
Operating Revenues:						
Revenues from Water Sales:						
Metered Water Sales	\$ 412,231	\$ 20,663	\$ 432,894	\$ (5,934)	(A)	\$ 426,960
Other Water Revenues						
Misc Service Revenues	43,174	(32,781)	10,393	(5,612)	(B)	4,781
Other Water Revenues		3,843	3,843			3,843
Total Other Operating Revenues	43,174	(28,938)	14,236	(5,612)		8,624
Total Operating Revenues	455,405	(8,275)	447,130	(11,546)		435,584
Operating Expenses:						
Operation & Maintenance:						
Salaries & Wages - Employees	128,698	10	128,708	(4,800)	(C)	
				(15,979)	(D)	
				12,086	(E)	
				(2,975)	(F)	117,040
Salaries & Wages - Officers				4,800	(C)	4,800
Employee Pension and Benefits	46,146	4,986	51,132	(514)	(G)	
				(2,487)	(H)	48,131
Purchased Water	82,955		82,955	(1,705)	(I)	
				11,747	(J)	92,997
Purchased Power	22,973		22,973	(414)	(I)	22,559
Chemicals	41,523	(2,230)	39,293	(707)	(I)	38,586
Materials & Supplies	32,451	(3,225)	29,226	(2,975)	(F)	26,251
Contractual Services	46,695	(9,275)	37,420	(16,230)	(K)	21,190
Contractual Services - Other	1,906		1,906			1,906
Transportation	4,633	(97)	4,536			4,536
Insurance - Gen Liability	3,469	686	4,155			4,155
Insurance - Workers Comp	4,032	(2,860)	1,172			1,172
Bad Debt Expense	1,639		1,639			1,639
Miscellaneous	13,895	3,046	16,941	838	(L)	17,779
Total Operation & Maintenance	431,015	(8,959)	422,056	(19,314)		402,742
Depreciation	44,995		44,995	1,468	(M)	
				149	(F)	46,612
Utility Operating Expenses	476,010	(8,959)	467,051	(17,697)		449,354
Net Utility Operating Income	\$ (20,605)	\$ 684	\$ (19,921)	\$ 6,151		\$ (13,770)

(A) Billing Analysis Adjustment. Ledbetter District provided a billing analysis, which is based on the water usage and water sales revenue for the entire 12-month test year, with its application.

Staff has reviewed Ledbetter District’s billing analysis provided in the Application and finds that the water sales revenues determined by the billing analysis of \$426,960 for all customers is an accurate representation of normalized test-year revenue from water sales; therefore, staff has decreased water sales revenue by \$5,934.

(B) Other Operating Revenue. Ledbetter District incorrectly recorded the sewer division’s test-year non-utility income as if the water division earned it. After speaking with the office employees, it was determined that the sewer division’s exact portion of the test-year non-utility income was impossible to obtain. To best correct this reporting error, Staff decreased the test-year non-utility income by \$5,612, based on the percentage of sewer customers,¹¹ as calculated below.

Test Year Other Operating Revenue	\$	14,236
Times: Percentage of Sewer Customers		<u>39.42%</u>
Adjustment	\$	<u>5,612</u>

(C) Commissioner’s Salaries. Ledbetter District incorrectly recorded the salary paid to their four commissioners and one chairman as salaries paid to employees. To correct this reporting error, Staff decreased Employee Salaries and Wages by \$4,800 and reclassified this amount to Officer Salaries and Wages.

(D) Accrued Payroll. In the test year, Ledbetter District recorded a non-recurring expense in Employee Salaries and Wages of \$15,979. Staff determined subsequent to the

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Total Number of Water Customers	1,260	60.58%
Total Number of Sewer Customers	<u>820</u>	<u>39.42%</u>
Total Number of Customers	<u>2,080</u>	<u>100.00%</u>

field review that Ledbetter District expensed an existing accrued payroll liability in the test year. Accordingly, Staff removed this extraordinary item by decreasing Employee Salaries and Wages by \$15,979 in pro forma operations.

(E) Employee Salaries and Wages. Ledbetter District reported test-year Employee Salaries and Wages expense of \$128,708 for the water division. After the adjustments described in Items (C) and (D) above, the test-year Employee Salaries and Wages expense was \$107,929. During 2017, Ledbetter District hired one new full-time field employee. To reflect the current level of salaries and wages, Staff calculated an adjustment to increase Employee Salaries and Wages for the water division by \$12,086, as shown below.

<u>Employee Title</u>	<u>2018 Rate</u>	<u>2016 Hours</u>	<u>2016 Overtime Hours</u>	<u>Pro Forma Salaries & Wages</u>
General Manager	\$ 22.85	1,052	12	\$ 24,450
Office Manager	18.25	1,040	0	18,980
Office Employee 1	16.04	1,040	0	16,682
Field Employee 1	22.04	1,050	4	23,274
Field Employee 2	22.00	857	16	19,371
Field Employee 3	16.50	1,040	4	17,259
Total Pro Forma Wages				\$ 120,015
Less: Test Year Wages				<u>(107,929)</u>
Pro Forma Adjustment				<u>\$ 12,086</u>

(F) Tap Fees. In the test year, Ledbetter District collected water tap-on fees in the amount of \$5,950. While Ledbetter District correctly removed the tap-on fees from their test-year revenue, Staff found that an adjustment was necessary to remove associated expenses from the Employee Salaries and Wages and Materials and Supplies expense equally in the amount of \$2,975 each.

Additionally, in order to amortize correctly the removed expenses associated with the water tap-ons, Staff increased depreciation expense by \$149.¹²

(G) Employee Contribution for Dental Insurance. Ledbetter District reported \$51,132 and \$48,170 for test-year Employee Pension and Benefits expense for water and sewer operations, respectively. This amount included \$2,262 for the cost of providing dental benefits to all qualifying full-time employees.

Ledbetter District currently pays 100 percent of the monthly premiums for its employees', spouses', and dependents' dental benefits. 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 fringe benefits. The Commission is placing greater emphasis on evaluating the 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 the criteria. Factoring in for the preceding, and accounting for the other pro forma adjustments, Staff determined the net adjustment to Ledbetter District's total test-year dental insurance expense should be a

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Test Year Water Tap On Fees	\$ 5,950
Divide by: 40 Years	<u>40</u>
Adjustment	<u>\$ 149</u>

decrease of \$1,057,¹³ as explained below. Staff then allocated this decrease between Ledbetter District's water and sewer division using a percentage of payroll hours,¹⁴ resulting in a decrease in the water division's Employee Pension and Benefits expense of \$514.¹⁵

Annualized Premium Increase

Ledbetter District currently has three employees who have family-coverage dental insurance policies, which include coverage for spouses and dependents, and three employees, who have single-coverage policies. As shown below, Staff annualized the most recent monthly premiums paid on behalf of all full-time employees who were receiving health and dental benefits at the time of Staff's review.

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Annualized Premium Increase		\$	750
Benefit Reduction			<u>(1,807)</u>
Total Decrease		\$	<u><u>(1,057)</u></u>

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Total Water Payroll Hours	6,115	48.66%
Total Sewer Payroll Hours	<u>6,451</u>	<u>51.34%</u>
Total Payroll Hours	<u><u>12,566</u></u>	<u><u>100.00%</u></u>

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Total Decrease		\$	(1,057)
Times: Water Payroll Percentage			<u>48.66%</u>
Water Pro Forma Adjustment		\$	<u><u>(514)</u></u>

Current Monthly Dental Premium	\$ 251
Times: 12 Months	<u>12</u>
Annualized	3,012
Less: Test Year Premiums	<u>(2,262)</u>
Increase	<u>\$ 750</u>

Benefit Reduction

Consistent with recent orders in which the Commission has reduced benefit expenses for utilities that pay 100 percent of an employee’s dental insurance coverage, Staff reduced Ledbetter District’s dental premiums by 60 percent, consistent with the national average employee contribution rate, as shown below.

Annualized Premiums Subject to Adjustment	\$ 3,012
Times: Percentage Reduction	<u>60%</u>
Decrease	<u>\$ 1,807</u>

(H) CERS. Ledbetter 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, Ledbetter District is required to contribute a percentage of its employee wages to CERS. In the fiscal year, beginning July 1, 2016, the CERS contribution rate was 17.06 percent. The CERS pension expense Ledbetter District reported in the test year conformed to the requirements of the General Accounting Standards Board Pronouncement No. 68 (GASB 68).

In Case No. 2016-00163,¹⁶ the Commission discussed in great detail the reporting requirements of GASB 68 and how those requirements would impact a utility’s income statement and balance sheet. In that proceeding, the Commission found that the annual pension expense should be equal to the amount of a district’s contributions to CERS, which historically have been “fairly constant.” In the test year, Ledbetter District reported CERS contributions totaling \$58,256. In their Application, the district proposed an adjustment to employee pension and benefits expense of \$19,247 to account for the CERS employer contribution rate increasing to 28.05 percent beginning July 1, 2018. Upon inspection, Staff determined the actual CERS employer contribution rate starting July 1, 2018, would be 21.48 percent, with a pro forma CERS contribution amount of \$53,146. Accordingly, Staff reduced total Employee Pension and Benefits expense by \$5,110, as shown below:

Total Wages Pro Forma Wages	\$ 247,423
Times: 2018 CERS Contribution Rate	<u>21.48%</u>
Pro Forma CERS Contribution	53,146
Less: Test Year CERS	<u>(58,256)</u>
CERS Contribution Adjustment	<u><u>\$ (5,110)</u></u>

¹⁶ Case No. 2016-00163, *Alternative Rate Adjustment Filing of Marion County Water District* (Ky. PSC Nov. 10, 2016).

Staff then allocated this adjustment between Ledbetter District's water and sewer division based on the percentage of payroll hours, as discussed in Item (G) above, resulting in a reduction of the water division's employee pension and benefits expense of \$2,487.¹⁷

(I) Excess Water Loss. Ledbetter District reported test-year purchased water expense of \$94,702 (as adjusted in Item (J) below), purchased power expense of \$22,973, and purchased chemicals expense of \$39,293. Staff determined Ledbetter District's test-year purchased water expense should be decreased by \$1,705, purchased power expense decreased by \$414, and purchased chemicals expense decreased by \$707 as explained below.

807 KAR 5:066, Section 6(3),¹⁸ limits water loss to 15 percent for ratemaking purposes unless an alternative level is found reasonable by the Commission. In the below table, Staff determined Ledbetter District's test-year water loss was 27.67 percent or 12.67 percent above the 15 percent allowable limit. However, Ledbetter District's office manager informed Staff during the field review that the excessive water loss in 2016 resulted from a large leak that was found and repaired during the test-year, and that the resulting water loss for the calendar year ended in 2017 was significantly lower. In its 2017 water loss reports provided

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CERS Contribution Adjustment	\$	(5,110)
Times: Water Payroll Hour Percentage		<u>48.66%</u>
Water Pro Forma Adjustment	\$	<u>(2,487)</u>

¹⁸ 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.

to Staff at the field review, the district reported water loss of 16.8 percent or 1.8 percent above the 15 percent allowable limit. Staff believes that the level of water loss reported for 2017 more accurately represents the level of water loss that should be reported by Ledbetter District going forward. Accordingly, Staff used the reduced level of water loss reported in 2017 in its calculation of excess water loss for ratemaking purposes.

With the adjustments in the table below, Staff removed from Ledbetter District’s test-year operations the cost of purchasing, pumping, and treating the excess water loss.

Account	Test Year	Times: Excess Water Loss	Pro Forma Adjustment
Purchased Water	\$ 94,702	-1.8%	\$ (1,705)
Purchased Power	22,973	-1.8%	(414)
Chemicals	39,293	-1.8%	(707)

(J) Purchased Water. In the test year, Ledbetter District reported \$82,955 for water purchased from its supplier, Crittenden-Livingston County Water District (Crittenden-Livingston District). Ledbetter District is currently involved in a legal dispute with Crittenden-Livingston District regarding water purchases during certain months during the test year. For three months of 2016, Ledbetter District refused to pay the entire amount of the contracted minimum purchase amount of \$7,740, which represents 3,000,000 gallons per month, due to questions it had regarding the quality of water that it received in certain months. Staff believes that pursuant to the contract, had Ledbetter District paid the agreed upon amount, this would have resulted in an increase in water purchased of \$11,747 for the test period. The dispute with Crittenden-Livingston District is still pending as of the date of this report and Staff believes that the best treatment of the purchased water cost is to increase it to the agreed upon amount as set out in the contract. Therefore, Staff increased test-year

purchased water by \$11,747 to raise the level of purchased water to the contract minimum price for the three months in 2016 for which Ledbetter District only paid the amount it purchased.

(K) Legal Expenses. As explained in Item (J) above, Ledbetter District is currently in a legal dispute with Crittenden-Livingston District regarding purchased water it received during the test year. To date, Ledbetter District has incurred \$41,717 in legal expenses regarding this issue. Staff amortized the total amount of legal expenses incurred over five years and adjusted the amount incurred in the test year accordingly, resulting in a reduction of test-year legal expenses of \$16,230.¹⁹

(L) Payroll Taxes. As discussed in Water Division Item (E) and Sewer Division Item (D), Staff determined that Ledbetter District’s pro forma total employee wages would be \$247,423. Ledbetter District’s test-year FICA taxes will increase as a result of the increase in wages. As calculated below, Staff determined that the increase to test-year FICA taxes would be \$1,722.

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	2016 Legal Expenses	\$ 24,573
	2017 Legal Expenses	12,705
	2018 Legal Expenses	<u>4,439</u>
	Total Legal Expenses	41,717
	Divided by: 5 Years	<u>5</u>
	Pro Forma Amortized Legal Expenses	8,343
	Less: Test Year Legal Expenses	<u>(24,573)</u>
	Adjustment	<u><u>\$ (16,230)</u></u>

Total Wages Pro Forma Wages	\$ 247,423
Times: 7.65 Percent FICA Rate	<u>7.65%</u>
Total Pro Forma Payroll Taxes	18,928
Less: Test Year Payroll Taxes	<u>(17,206)</u>
Payroll Tax Adjustment	<u>\$ 1,722</u>

Staff then allocated the total increase to test-year FICA taxes according to the percentage of payroll hours, as discussed in Item (G) above, resulting in an increase to the water division's test-year FICA taxes of \$838.²⁰

(M) Depreciation. The Commission has historically relied upon the report published in 1979 by the National Association of Regulatory Utility Commissioners (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 ranges, the Commission has historically used the mid-point of the NARUC ranges to depreciate the utility plant. In following with the Commission's historical practice of using the mid-point of the NARUC ranges to calculate depreciation, Ledbetter District made an adjustment in its Application increasing their reported test-year depreciation expense of \$44,995 by \$1,468. Staff finds that Ledbetter District's calculation is correct and reasonable, and therefore, finds that it should be accepted for ratemaking purposes.

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Payroll Tax Adjustment	\$ 1,722
Times: Water Payroll Hour Percentage	<u>48.66%</u>
Water Pro Forma Adjustment	<u>\$ 838</u>

Sewer Division.

Ledbetter District's Pro Forma Operating Statement for their sewer division for the test year ended December 31, 2016, as determined by Staff, appears below:

Staff's Pro Forma Income Statement - Sewer Division						
	2016 Annual Report	Audit Adjustments	Adjusted Operations	Pro Forma Adjustments	Adj. Ref.	Pro Forma Operations
Operating Revenues:						
Sewer Service	\$ 414,843	\$ 5,429	\$ 420,272	\$ 9,663	(A)	\$ 429,935
Other Operating Revenues				5,612	(B)	5,612
Total Operating Revenues	414,843		420,272	15,275		435,547
Operating Expenses:						
Operation & Maintenance:						
Labor, Materials, Expenses	154,076	(38,930)	115,146	(4,800)	(C)	
				17,061	(D)	
				(500)	(E)	126,907
Purchased Power	42,161	2,530	44,691			44,691
Chemicals	10,470	(220)	10,250			10,250
Misc Supplies and Expenses	13,839	(5,660)	8,179	(500)	(E)	7,679
Maintenance:						
Collection Sewer System	2,233		2,233			2,233
Pumping System	34,702	(13,259)	21,443			21,443
Treatment and Disposal Plant	15,508		15,508			15,508
Administrative and General:						
Officer Salaries				4,800	(C)	4,800
Office Supplies and Other Expenses	16,001	(2,461)	13,540			13,540
Outside Services Employed	3,978		3,978			3,978
Employee Pension & Benefits		48,170	48,170	(543)	(F)	
				(2,623)	(G)	45,004
Transportation	8,781		8,781			8,781
Total Operation & Maintenance	301,749		291,919	12,895		304,814
Depreciation	112,988		112,988	(5,947)	(H)	
				25	(E)	107,066
Taxes Other Than Income	9,063		9,063	884	(I)	9,947
Utility Operating Expenses	423,800		413,970	7,857		421,827
Net Utility Operating Income	\$ (8,957)		\$ 6,302	\$ 7,418		\$ 13,720

(A) Billing Analysis Adjustment. Ledbetter District provided a billing analysis that based the sewer service revenue for the entire twelve (12) month test year with its application. However, in the billing analysis filed with the Application, Ledbetter District did

not account for the unmetered customer's revenue. Ledbetter District filed into the record information that accounted for the additional revenue from these six unmetered customers.²¹

Staff has reviewed Ledbetter District's billing analysis provided in the Application and finds that the sewer service revenues determined by the billing analysis of \$429,935 for all customers is an accurate representation of normalized test-year revenue from sewer service sales; therefore, Staff has increased sewer service revenue by \$9,663

(B) Other Operating Revenue. Ledbetter District incorrectly recorded the sewer division's test-year non-utility income as earned by the water division. To correct this reporting error, Staff increased the test-year non-utility income by \$5,612 using the number of customer allocation factor as explained in Water Division Item (B) above.

(C) Commissioner's Salaries. Ledbetter District incorrectly recorded the salary paid to their four commissioners and one chairman. To correct this reporting error, Staff decreased operation & maintenance labor and materials expense by \$4,800 and reclassified this amount to administrative and general officer salaries and wages.

(D) Salaries and Wages. Ledbetter District reported a test-year employee Salaries and Wages expense of \$115,146 for its employees. After the adjustment described in Sewer Division Item (C) above, the test-year employee Salaries and Wages expense was determined to be \$110,346. During 2017, Ledbetter District hired one new full-time field employee. To reflect the current level of salaries and wages, Staff made an adjustment to increase employee salaries and wages expense for the sewer division by \$17,061, as calculated below.

²¹ Ledbetter Water's supplemental response filed on Apr 27, 2018.

<u>Employee Title</u>	<u>2018 Rate</u>	<u>2016 Hours</u>	<u>2016 Overtime Hours</u>	<u>Pro Forma Salaries & Wages</u>
General Manager	\$ 22.85	1,040	12	\$ 24,175
Office Manager	18.25	1,040	0	18,980
Office Employee 1	16.04	1,040	0	16,682
Field Employee 1	22.04	1,030	4	22,833
Field Employee 2	22.00	1,225	16	27,478
Field Employee 3	16.50	1,040	4	17,259
Total Pro Forma Wages				\$ 127,407
Less: Test Year Wages				<u>(110,346)</u>
Pro Forma Adjustment				<u>\$ 17,061</u>

(E) Tap Fees. In the test year, Ledbetter District collected one sewer tap-on fee in the amount of \$1,000. While the district correctly removed the tap-on fee from test-year revenue, Staff found that an adjustment was necessary to remove associated expenses from the operation and maintenance labor and miscellaneous supplies expense in the amount of \$500 each.

Additionally, in order to amortize correctly the expenses associated with the tap-ons, Staff increased depreciation expense by \$25.²²

(F) Employee Contribution for Dental Insurance. As discussed in Water Division Item (G), Staff determined a net decrease in Employee Pension and Benefits expense of \$1,057 was necessary to reduce the dental insurance premiums paid for employees by the

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Test Year Sewer Tap On Fees	\$ 1,000
Divide by: 40 Years	<u>40</u>
Adjustment	<u>\$ 25</u>

district. Staff then allocated the decrease between Ledbetter District's water and sewer division based on the percentage of payroll hours, resulting in a decrease in the sewer division's Employee Pension and Benefits expense of \$543.²³

(G) CERS. As discussed in Water Division Item (H), Staff allocated the reduction in Ledbetter District's Employee Pension and Benefits expense based on the district's percentage of payroll hours. Accordingly, Staff reduced the sewer division's Employee Pension and Benefits expense by \$2,623.²⁴

(H) Depreciation. As discussed above, Ledbetter District proposed an adjustment decreasing their reported test-year depreciation of \$112,988 by \$1,785, in keeping with the Commission's historical practice of using NARUC mid-point. Upon inspection of the Application, Staff noted that two item class adjustments had been accounted for but left out of the final adjustment number. Accordingly, Staff has increased Ledbetter District's proposed adjustment by \$4,162, for a total decrease in sewer division depreciation of \$5,947.

(I) Payroll Taxes. As discussed in Water Division Item (L), Staff increased Ledbetter District's test-year FICA taxes by \$1,722 due to changes in test-year staffing. After

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Total Decrease	\$ (1,057)
Times: Sewer Payroll Percentage	<u>51.34%</u>
Sewer Pro Forma Adjustment	<u><u>\$ (543)</u></u>

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CERS Contribution Adjustment	\$ (5,110)
Times: Sewer Payroll Hour Percentage	<u>51.34%</u>
Sewer Pro Forma Adjustment	<u><u>\$ (2,623)</u></u>

allocating the total test-year FICA taxes increase based on a percentage of payroll hours, Staff increased Ledbetter District's sewer division test-year FICA taxes by \$884.²⁵

Overall Revenue Requirement and Required Revenue Increase

Water Division

By applying the operating ratio method, Staff determined Ledbetter District's overall revenue requirement for its water division to be \$510,629. As shown below, a revenue increase of \$74,796, or 17.52 percent, is necessary to generate the Overall Revenue Requirement.

25

Payroll Tax Adjustment	\$	1,722
Times: Sewer Payroll Hour Percentage		51.34%
 Sewer Pro Forma Adjustment	 \$	 884
		884

	Ledbetter Water Division	Staff
Operating Expenses	\$ 490,934	\$ 449,354
Divided by: Operating Ratio	88%	88%
Overall Revenue Requirement	557,880	510,629
Less: Other Operating Revenue	(14,236)	(8,624)
Interest Income	(249)	(249)
Revenue Requirement - Water Rates	543,395	501,756
Less: Normalized Revenue from Water Service	(426,960)	(426,960)
Required Revenue Increase	\$ 116,435	\$ 74,796
Percentage Increase	27.27%	17.52%

Sewer Division

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;²⁶ 3) the average annual principal and interest payments on all long-term debts, and 4) working capital that is in addition to depreciation expense.

²⁶ 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 Service 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)

A comparison of Ledbetter District's and Staff's calculations of the sewer division's Overall Revenue Requirement and Required Revenue Increase using the DSC method is shown below:

	Ledbetter Sewer Division	Staff
Pro Forma Operating Expenses	\$ 463,704	\$ 421,827
Debt Coverage Requirement	205,731	205,731
Additional Working Capital	41,146	41,146
Overall Revenue Requirement	710,581	668,704
Less: Other Operating Revenue		(5,612)
Interest Income	(134)	(134)
Revenue Required from Rates	710,447	662,958
Less: Normalized Revenues from Sewer Sales	(425,340)	(429,935)
Required Revenue Increase	\$ 285,107	\$ 233,023
Percentage Increase	67.03%	54.20%

(1) Average Annual Principal and Interest Payments. The sewer division has two outstanding long-term debts, one payable to the Kentucky Infrastructure Authority, and the other to the Kentucky Association of Counties Finance Corporation. In its Application, Ledbetter District requested recovery of the five-year average principal and interest payments due in calendar years 2018 through 2022. Staff agrees that the \$205,731 requested by Ledbetter District represents, in all material respects, the average annual debt payments that will be made in each year that the sewer rates approved by the Commission in this proceeding will be in effect.

(2) Additional Working Capital. The DSC method, as historically applied by the Commission, includes an allowance for additional working capital that is equal to the minimum net revenues required by a district's lenders that are above its average annual debt

payments. Ledbetter District calculated its additional working capital to be \$41,146. Staff agrees with Ledbetter District's calculation, therefore, Staff has included Ledbetter District's calculation in its revenue requirement.

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Signatures:



Prepared by: Travis Leach
Financial Analyst, Water and Sewer
Revenue Requirements Branch
Division of Financial Analysis



Prepared by: Ariel Miller
Financial Analyst, Water and Sewer
Revenue Requirements Branch
Division of Financial Analysis



Prepared by: Eddie Beavers
Rate Analyst, Water and Sewer
Rate Design Branch
Division of Financial Analysis

ATTACHMENT

ATTACHMENT TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE
COMMISSION IN CASE NO. 2018-00117 DATED **JUL 16 2018**

Staff Calculated
Monthly Water Rates

Customer Charge	\$7.74	Minimum Bill
First 25,000 Gallons	6.68	per 1,000 Gallons
Over 25,000 Gallons	4.52	per 1,000 Gallons

Staff Calculated
Monthly Sewer Rates

Phase 1

<u>All Customers</u>		
First 2,000 Gallons	\$32.04	Minimum Bill
Over 2,000 Gallons	16.36	per 1,000 Gallons
Unmetered Customers	81.12	per 1,000 Gallons

Phase 2

<u>All Customers</u>		
First 2,000 Gallons	\$38.87	Minimum Bill
Over 2,000 Gallons	19.85	per 1,000 Gallons
Over 2,000 Gallons	98.40	per 1,000 Gallons

*Ledbetter Water District
1483 US Highway 60W
P. O. Box 123
Ledbetter, KY 42058-0123

*Billy Downs
Manager
Ledbetter Water District
P. O. Box 123
Ledbetter, KY 42058