COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF LETCHER COUNTY WATER AND SEWER DISTRICT FOR ALTERNATIVE RATE ADJUSTMENT	)))	CASE NO. 2017-00211

NOTICE OF FILING OF COMMISSION STAFF REPORT

Notice is hereby given that, in accordance with the Commission's Order of July 27, 2017, the attached report containing the findings of Commission Staff regarding the Applicant's proposed rate adjustment has been filed in the record of the above-styled proceeding. Pursuant to the Commission's July 27, 2017 Order, Letcher County Water District is required to file written comments regarding the findings of Commission Staff no later than 14 days from the date of this report.

Gwen R. Pinson

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

DATED OCT 17 2017

cc: Parties of Record

STAFF REPORT

ON

LETCHER COUNTY WATER AND SEWER DISTRICT

CASE NO. 2017-00211

Letcher County Water and Sewer District ("Letcher County") is a water utility district organized pursuant to KRS Chapter 74 that owns and operates a Water Division and a Sewer Division that are regulated by the Commission. The Water Division owns and operates a water treatment facility and distribution system that provides retail water service to approximately 2,894 customers that reside in Letcher County, Kentucky.[1] The Sewer Division owns and operates a sewer collection system that it uses to collect wastewater from approximately 19 customers.[2]

On July 6, 2017, Letcher County tendered an application ("Application") to the Commission requesting to increase its water service rates pursuant to 807 KAR 5:076. Letcher County's Application was deemed filed on July 6, 2017. To ensure the orderly review of the Application, the Commission established a procedural schedule by Order dated July 27, 2017.

As required by 807 KAR 5:076, Letcher County 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, 2015. Letcher County presented financial exhibits in its Application demonstrating a rate that

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[1] *Annual Report of Letcher County Water and Sewer District (Water Division) to the Public Service Commission for the Calendar Year Ended December 31, 2015* ("*Water Annual Report*") at 12 and 53.

[2] *Annual Report of Letcher County Water and Sewer District (Sewer Division) to the Public Service Commission for the Calendar Year Ended December 31, 2015* ("*Sewer Annual Report*") at 25.

increases annual water sales revenues by $575,791, a 53.37 percent increase to test-year water sales revenues in the amount of $1,078,787.

Although a 53.37 percent rate increase was justified, Letcher County did not request rates that would generate such additional annual revenues. Instead, it requested rates that would increase annual revenues by $271,662, a 25.00 percent increase. The monthly bill of an average customer would increase by $7.75, from $31.00 to $38.75, or 25.00 percent.[3] Letcher County did not explain why it requested the lower amount. Letcher County presented financial exhibits in its Application that show how Letcher County calculated the amount it could have requested. The exhibits are summarized below in condensed form.

Pro Forma Operating Expenses	$ 1,639,357
Plus: Average Annual Debt Payments	165,787
Additional Working Capital	29,063
Overall Revenue Requirement	1,834,207
Less: Other Operating Revenue	(178,789)
Interest Income	(840)
Revenue Required From Rates	1,654,577
Less: Pro Forma Present Rate Revenues	(1,078,787)
Required Revenue Increase	$ 575,791
Percent Increase	53.37%

To determine the reasonableness of the rates requested by Letcher County, Staff performed a limited financial review of Letcher County'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

[3] An average customer purchases 3,500 gallons of water per month.

operations were identified, and adjustments were made when their effects were deemed to be material. Insignificant and immaterial discrepancies were not necessarily pursued or addressed.

Staff's findings are summarized in this report. David Foster reviewed the calculation of Letcher County's Overall Revenue Requirements. Sam Reid reviewed Letcher County'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 Letcher County's Overall Revenue Requirement is $1,782,599 and that a $585,813 revenue increase, or 54.89 percent, to pro forma present rate revenues is necessary to generate the Overall Revenue Requirement.

2. Water Service Rates. Letcher County proposes to increase its current water service rates by approximately 25 percent evenly across the board. Letcher County 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 is the appropriate means to allocate the increased revenue requirement. The rates set forth in Attachment A of this report are based upon the revenue requirement as calculated by Staff and will produce sufficient revenues from water sales to recover the $1,653,100 Revenue Requirement determined by Staff, an approximate 54.89 percent increase. These rates will increase an average customer's monthly water bill using 3,500 gallons from $31.00 to $48.02, an increase of $17.02 or approximately 54.91 percent.

3. Leak Adjustment Rate. Letcher County provides individual customers that experience a leak event an adjustment to the customer's bill. The formula for calculating a customer's bill following a leak event is the sum of two components. First the customer's 12-month average usage is applied to the utility's general service rates. Next, the usage in excess of the 12-month average is charged at the Leak Adjustment Rate. The combined charges determine the customer's bill. The current Leak Adjustment Rate, as set out in the utility's current tariff on file with the Commission, is \$2.90 per 1,000 gallons. Letcher County's initial monthly service rates were approved by Order in case No. 2002-00282, dated August 22, 2002.[4] The Leak Adjustment rate of \$2.90 per 1,000 gallons, was established separately in Letcher County's initial tariff filing effective March 9, 2006.[5]

Staff finds that the leak adjustment rate is a non-recurring charge and subject to 807 KAR 5:006 Section 9(1):

> A utility may make special nonrecurring charges to recover customer-specific costs incurred that would otherwise result in monetary loss to the utility or increased rates to other customers to whom no benefits accrue from the service provided or action taken.

Letcher County purchases water from four different suppliers, and the wholesale rate charged by all four suppliers is \$3.00 per 1,000 gallons. Letcher County's current Leak Adjustment rate of \$2.90 is less than the wholesale rate charged to Letcher County,

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[4] Case No. 2002-00282, *Application of Letcher County Water and Sewer District, Letcher County, Kentucky, (1) for a Certificate of Public Convenience and Necessity authorizing construction of major additions and improvements to its water system; (2) seeking approval of proposed water service rates and charges; and (3) seeking approval of the issuance of certain securities, Pursuant to the provisions of KRS 278.023 and 807 KAR 5:069* (Ky. PSC Aug. 22, 2002).

[5] TFS 2006-00196 (Ky. PSC filed Feb. 7, 2006); The tariff was accepted for filing by the Commission by letter dated May 2, 2006.

and no revision to the Leak Adjustment Rate was proposed in the Application. Staff finds that Letcher County's current Leak Adjustment Rate is insufficient and should be revised, and further finds that a leak adjustment rate of $4.43 per 1,000 gallons[6] will comply with the requirements of KAR 5:006 Section 9(1). Staff notes that Letcher County's water loss percentage exceeds the threshold of 15 percent as set in 807 KAR 5:066 Section 6(3). The requirements of that administrative regulation have been applied to the revenue requirement determined by Staff in this report, and the 15 percent threshold is not applicable to non-recurring charges such as the Leak Adjustment Rate.

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LEAK ADJUSTMENT RATE CALCULATION

Gallons Purchased (Section J of this report)			191,089,667
Less Gallons Sold (Application Billing Analysis plus 60 new customers)			(116,399,800
Non-revenue water Gallons			74,689,867
Non-revenue water Percentage			39.086%
COST PER 1,000 GALLONS SOLD			
Utility Must Purchase 39.086% more than 1,000 gallons	1,390.86		
Wholesale rate per 1,000	x $3.00		
	$ 4.17	Cost per 1,000	
Purchase power cost (2015 Annual Report)	$ 30,520.11		
Divide by Gallons Sold	116,399,800		
	$ 0.26	Cost per 1,000	
Total cost per 1,000 gallons	$ 4.43		

Pro Forma Operating Statement

Letcher County's Pro Forma Operating Statement for the test year ended December 31, 2015, as determined by Staff, appears below.

	Test Year	Adjustment	(Ref)	Pro Forma
Operating Revenues				
Sales of Water	$1,208,942	$ (130,155)	(A)	
		7,861	(B)	
		20,160	(C)	
		(39,521)	(D)	$1,067,287
Misc. Service Revenue	17,658	81,822	(E)	
		29,179	(F)	128,659
Other Water Revenues	46,325	(46,325)	(G)	-
Total Operating Revenue	1,272,925	(76,979)		1,195,946
Operating Expenses				
Operation and Maintenance Expenses				
Salaries and Wages - Employees	216,960	(16,492)	(H)	200,468
Employee Pensions and Benefits	50,489	(6,363)	(I)	44,126
Purchased Water	573,269	(28,618)	(J)	544,651
Purchased Power	30,520	(1,524)	(J)	28,997
Materials and Supplies	83,154	(16,492)	(H)	66,662
Contractual Services	106,568			106,568
Water Testing	4,738			4,738
Rents	2,916			2,916
Transportation Expenses	17,085			17,085
Insurance	20,685			20,685
Miscellaneous Expenses	16,114			16,114
Total Operation and Maintenance Expenses	1,122,499	(69,489)		1,053,010
Depreciation Expense	703,727	(198,406)	(K)	505,321
Amortization Expense	15,910	(3,978)	(K)	11,933
Taxes Other Than Income	13,390			13,390
Total Operating Expenses	1,855,527	(271,873)		1,583,654
Net Operating Income	(582,602)	194,894		(387,708)
Interest Income	840			840
Income Available to Service Debt	$ (581,762)	$ 194,894		$ (386,868)

(A) Water Sales Revenue. In the Application, Letcher County proposed adjustments to Water Service Revenues to remove nonrecurring charge revenues from water sales. During the test year, Letcher County realized revenues from nonrecurring charges in the amount of $130,155. Letcher County improperly reported this revenue with Water Sales Revenues in its 2015 Annual Report. The Uniform System of Accounts ("USoA") requires that this revenue be reported as Miscellaneous Service Revenues.[7] Included in this amount was $15,349 which represented customer deposits for new water service. Customer deposits represent a liability to be repaid to the customer upon discontinuation of water service and, as such, should be excluded from pro forma operating revenue. Staff agrees with Letcher County's adjustment and removed these revenues from Water Sales.

(B) Billing Analysis Adjustment. Letcher County's Application stated test-year Pro Forma revenues from water sales to be $1,078,786.67. Letcher County included in its Application a billing analysis, which was based on actual customer water usage and derived from Letcher County's electronic billing software. Staff has reviewed Letcher County's billing analysis and finds that the $1,086,648 water sales revenues determined by the billing analysis provided in the Application is a more accurate representation of normalized test-year revenue from water sales than the amount used by Letcher County in the Application; therefore, staff increased test-year water sales revenue by $7,861.

(C) New Customers. Letcher County's Application states the current number of customers to be 2,953. Letcher County's Annual Report for the 2015 test year states year-end customers to be 2,894. Staff increased test-year revenues by $20,160 to account for customer growth between the date of the annual report and the date of the

[7] USoA for Class A&B Water Districts and Associations, pages 92 and 93.

Application.[8] Staff annualized the usage for these additional customers based on Letcher County's typical residential customer usage.

(D) Leak Adjustment Revenues. Letcher County tracks customer account billing adjustments for billing errors, leak-adjustment fees, misread meters and equipment failures financially in Letcher County's billing program; however, the billing program does not allow for corresponding usage adjustments. The test-year billing analysis provided in the Application does not reflect the adjustments made to customers' bills that were made after the bills were issued. Staff reduced test-year water sales revenues stated in the test- year billing analysis by $39,521 to reflect credits to customer accounts that received leak adjustments.

(E) Miscellaneous Service Revenues. As discussed in reference Item (A), Letcher County removed nonrecurring revenues that had been improperly reported in Water Sales Revenue. After removing customer deposits for water service, the total amount Letcher County reclassified to Miscellaneous Service Revenues in its Application was $114,806.

During the test year, Letcher County collected water tap-on fees in the amount of $32,984. Letcher County included this amount in its Miscellaneous Service Revenues adjustment of $114,806. The USoA requires that receipts for tap-on fees be reported as Proceeds from Capital Contributions, a revenue account that is closed directly to Donated Capital, a Retained Earnings subsidiary account, without being reported in a district's income that is available to service debt.[9] To comply with the requirements of the USoA,

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[8] Using a calculation based on 60 customers using an average of 3,000 gallons per month at the current rates results in a monthly bill of $28.00 per customer (60*12)*$28.00 = $20,160.00.

[9] USoA at 86–87.

Staff removed the test-year tap fees from Miscellaneous Revenues. The total increase to test-year Miscellaneous Service Revenues is $81,822.[10]

(F) Leak Adjustment Rate. During the test year, Letcher County, in accordance with its filed tariff, provided its customers who experienced a leak event an adjustment to their bills. Staff finds that 6,586,790 gallons of water were charged at the utility's Leak Adjustment Rate. Staff has determined the Leak Adjustment Rate should be $4.43 per 1,000 gallons as discussed previously in this report. By applying the revised Leak Adjustment Rate, the increase to Miscellaneous Service Revenues is $29,179.

(G) Contributions in Aid of Construction. During the test year, Letcher County Fiscal Court received contributions in the amount of $46,325 from the Kentucky Division of Abandoned Mine Lands ("AML") and coal severance funds on behalf of Letcher County to fund various construction projects. Letcher County reported these contributions as Other Water Revenues on its Income Statement. Proper accounting requires that they be reported as Contributions in Aid of Construction. Following proper accounting practices, Staff removed these contributions from test-year Other Water Revenues.

(H) Capitalization of Test-Year Meter Installations. As noted in Item (E), during the test year Letcher County collected $32,984 to install new 5/8-inch x 3/4-inch meter connections. These installations incur costs that include wages, wage overheads, transportation, equipment, and materials and supplies. The USoA requires that these

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Nonrecurring Revenues Reclassified from Water Sales	$	114,806
Less: Tap Fees Reported During the Test Year		(32,984)
Net Increase	$	81,822

costs be capitalized as Utility Plant in Service and depreciated over their estimated useful lives.[11] Letcher County incorrectly reported these costs as test-year expenses. To correct this accounting error in pro forma operations, Staff removed the amount collected for these connections from test-year expenses and included a provision for their recovery in pro forma depreciation expense. Ideally, Staff would have reduced each of the expense accounts that contain installation costs by a portion of the capitalized costs, but, for simplicity, Staff decreased wages expense and materials and supplies expense by $16,492 each, or half of the total estimated cost. In Case No. 2015-00331, the Commission accepted Staff's finding that expenses for new tap installations be decreased by half.[12] Using this abbreviated method does not have a material effect on the results of Staff's analysis of Letcher County's operations.

(I) Employee Contribution for Health Insurance. Letcher County currently pays 100 percent of the monthly premiums for health insurance for its employees. Letcher County also pays 100 percent of life insurance premiums for all of its employees. Staff notes that in its recent Orders the Commission has made ratemaking adjustments to reduce the cost of employee benefit packages paid by some utilities on behalf of their employees to levels that are more commensurate with those of other businesses. For example, in Case No. 2016-00325, the Commission found that North Mercer Water District ("North Mercer") paid, on behalf of its employees, 100 percent of the cost of family health insurance plans, family dental insurance plans, single dental insurance plans, and

[11] USoA, Accounting Instruction 19 and 33.

[12] Case No. 2015-00331, Commission Staff Report on McKinney Water District (filed Oct. 20, 2015) at 6.

100 percent of each employee's life insurance premium.[13] In that proceeding, the Commission excluded from rates 32 percent of the cost of the family health insurance plans and it excluded from rates 60 percent of the cost of dental insurance plans. It did not reduce the amount of life insurance premiums.

Likewise, in Case No. 2017-00140, the Commission found that it was unreasonable for Breathitt County to provide 100 percent of the cost of health insurance coverage to employees and ordered that rate recovery by Breathitt County for the cost of family health insurance coverage be reduced by 32 percent and the rate recovery by Breathitt County for single health insurance coverage be reduced by 21 percent.[14] Following this practice of recent Commission Orders, Staff determined that Letcher County's test-year health insurance expense should be decreased by a total of $6,363, as explained below.

Letcher County has five employees who have single coverage health insurance policies. Staff annualized the most recent monthly premiums paid on behalf of the five full-time employees who were receiving health benefits at the time of Staff's review.

Current Premium for Full-time Employees	$ 2,525
Times: 12 Months	12
Annualized	$ 30,300

Consistent with recent orders where the Commission has reduced benefit expenses for utilities that pay 100 percent of an employee's health insurance coverage,

[13] *Electronic Application of North Mercer Water District for Rate Adjustment made Pursuant to 807 KAR 5:076* (Ky. PSC May 19, 2017) 2.

[14] *Electronic Application of Breathitt County Water District for an Alternative Rate Adjustment* (Ky. PSC Mar. 31, 2017).

Staff reduced Letcher County's single health insurance premiums by 21 percent, as shown below.

Policy Type	Annual Expense	Percentage Reduction	Adjustment
Single	$ 30,300	21%	$ 6,363
Total Decrease			$ 6,363

(J) Water Loss. In the Annual Report, Letcher County reported test-year water loss at 17.2833 percent,[15] or 2.2833 percent above the 15 percent allowed for ratemaking purposes pursuant to 807 KAR 5:006, Section 6(3). Staff finds that the test-year percentage reported by Letcher County is understated.

The water gallons purchased, as presented by Letcher County in its 2015 Annual Report, was 182,220,515. Upon reviewing Letcher County's records, Staff found that the reported Purchased Water expense of $573,269 does not reconcile with the gallons reported purchased. Upon discussions with Letcher County staff, it was determined that the employee responsible for producing the Monthly Water Use Reports, was no longer employed at the water district. As a result, they were unable to reconcile the discrepancy between the gallons reported to have been purchased and the amount expensed.

As stated earlier, Letcher County purchases water from four suppliers and each charges Letcher County $3.00 per 1,000 gallons. Based on the amount expensed by Letcher County, the gallons purchased during the test year should have been 191,089,667 gallons, as shown below:

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[15] Annual Report at 61 of 71.

Purchased Water Expense Reported	$	573,269
Divide by: $3 per thousand gallons purchase price		3
Total		191,089.67
Times: 1,000 Gallons		1,000
Total Gallons Purchased		191,089.67

Incorporating this correction in Letcher County's test-year water loss calculation as shown in the Annual Report increases the test-year water loss from 17.2833 percent to 19.9921 percent, which is 4.9921 percent above the amount allowed for ratemaking purposes as calculated below:

Water Purchased	191,089,667
Less: Water Sold During the Test Year	(116,399,800)
Water Used by District	(36,487,000)
Water Loss	38,202,867
Divide by: Total Purchased	191,089,667
Percent Lost	19.9921%
Less: Allowed for Ratemaking	-15.0000%
Excess Water Loss Percentage	4.9921%

Staff removed the expenses incurred by Letcher County during the test year to purchase and pump the amount of water loss that exceeded the 15 percent allowed:

	Purchased Water		Purchased Power	
Test-Year Subject to Water Loss Adjustment	$	573,269	$	30,520
Times: Water Loss in Excess of 15 Percent		-4.9921%		-4.9921%
Decrease	$	(28,618)	$	(1,524)

(K) Depreciation and Amortization. In its Application, Letcher County stated that the useful lives assigned to certain assets were outside of the life ranges found reasonable in the National Association of Regulatory Utility Commissioners' ('NARUC') publication titled Depreciation Practices for Small Utilities" ("NARUC Study").[16] For ratemaking purposes, Letcher County proposed to adjust the lives assigned to these assets to conform to the NARUC Study. Letcher County determined that Application of its proposed lives would decrease test-year depreciation expense by $198,406.

Generally, the Commission requires that a "large" utility perform a depreciation study to determine the appropriate depreciable lives to be assigned to each of its utility plant account groups. Detailed property records specific to historic plant additions, plant retirements, and salvage practices are required to complete a depreciation study. Generally, "small" water utilities, such as Letcher County, do not maintain property records with enough detail to properly complete a formal study. Even when adequate records are maintained, "small" utilities do not have the financial resources to fund a formal study. Therefore, to evaluate the reasonableness of the depreciation practices of small water utilities, the Commission has historically relied upon the NARUC Study published in 1979.[17]

The NARUC Study provides a range of average service lives that are assigned to water plant account groups by water utilities across the country that design, install, and maintain their systems in accordance with good engineering practices. It concludes that

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[16] Application, References Page 2, Reference Item E.

[17] Case No. 2012-00278, *Application of Graves County Water District for an Adjustment in Rates Pursuant to the Alternative Rate Filing Procedure for Small Utilities* (Ky. PSC Sept. 5, 2012).

the ranges are intended to be used as a guide by state regulatory commissions and other water utilities when developing the depreciable lives to be assigned to water plant account groups. For example, the NARUC Study found that transmission and distribution mains are depreciated between 50 and 75 years. Lives outside the NARUC ranges are acceptable when conditions warrant alternative lives.

When no evidence exists to support a specific life that is inside or outside the NARUC ranges, the Commission has used the mid-point of the NARUC ranges to depreciate utility plant. In Case No. 2013-00154, the Commission found that Henderson County Water District ("Henderson District") was depreciating the cost of some main using a 40-year life and others using a 50-year life. Even though the 50-year life is within the NARUC range, the Commission found that the depreciable life assigned to all of Henderson District's mains should be 62.5 years, the mid-point of the NARUC range, since no evidence was presented to support the 40-year or 50-year lives.[18]

Letcher County 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. After reviewing Letcher County's plant ledger, Staff agrees with Letcher County's decrease to depreciation expense of $198,406 and $3,978 of amortization expense.

[18] Case No. 2013-00154, *Application of Henderson County Water District for an Alternative Rate Filing* (Ky. PSC Nov. 14, 2013) at Appendix B.

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;[19] 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 Letcher County's and Staff's calculations of Letcher County's Overall Revenue Requirement and Required Revenue Increase using the DSC method is shown below.

[19] 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).

	Letcher County	Staff	(Ref.)
Pro Forma Operating Expenses	$ 1,639,357	$ 1,583,654	
Plus: Average Annual Debt Payments	165,787	165,787	(1)
Additional Working Capital	29,063	33,157	(2)
Overall Revenue Requirement	1,834,207	1,782,599	
Less: Other Operating Revenue	(178,789)	(128,659)	
Interest Income	(840)	(840)	
Revenue Required From Rates	1,654,577	1,653,100	
Less: Pro Forma Present Rate Revenues	(1,078,787)	(1,067,287)	
Required Revenue Increase	$ 575,791	$ 585,813	
Percent Increase	53.37%	54.89%	

(1) Average Annual Principal and Interest Payments. At the time of filing, Letcher County had three outstanding bond series payable to the United States Department of Agriculture Rural Development ("RD") and one loan payable to the Kentucky Infrastructure Authority ("KIA"). In its Application, Letcher County requested recovery of the three-year average annual principal and interest payments due in 2017, 2018, and 2019 in the amount of $165,787. Staff agrees that the $165,787 requested by Letcher County represents, in all material respects, the average annual debt payments that will be made in each year that the water rates approved by the Commission in this proceeding will remain 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. In addition to depreciation expense, Letcher County requested rate recovery of additional working capital in the amount of $29,063. Following the

Commission's historic practice, Staff calculated Letcher County's allowance for additional Working Capital, based on a DSC ratio of 1.20, to be $33,157, as shown below.[20] Staff included this amount in the calculation of Letcher County's Overall Revenue Requirement.

Average Annual Principal and Interest	$	165,787
Times: DSC Coverage Ratio		120%
Total Net Revenues Required		198,945
Less: Average Annual Principal and Interest Payments		(165,787)
Additional Working Capital	$	33,157

[20] Inclusion of the additional working capital in Letcher County's revenue requirement is not necessary for it to earn revenues that meet the minimum DSC ratio required by its lenders. As depreciation is a noncash item, it is excluded from the ratio calculation, which is actually a measure of cash flow. As shown below, Letcher County's minimum DSC ratio is met with or without the inclusion of additional working capital.

	With Additional Working Capital	Without Additional Working Capital
Overall Revenue Requirement	$ 1,782,599	$ 1,749,441
Less: Operating and Maintenance Expense	(1,053,010)	(1,053,010)
Taxes Other Than Income	(13,390)	(13,390)
Net Revenues	716,198	683,041
Divided by: Average Annual Debt Payments	165,787	165,787
DSC Ratio	432%	412%

<u>Signatures</u>

Prepared by: David P. Foster
Water and Sewer Revenue
Requirements Branch
Division of Financial Analysis

Prepared by: Sam Reid
Water and Sewer Rate Design Branch
Division of Financial Analysis

ATTACHMENT A

ATTACHMENT TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE COMMISSION IN CASE NO. 2017-00211 DATED OCT 1 7 2017

Monthly Water Rates

First	2,000 gallons	$34.07 Minimum Bill
Over	2,000 gallons	9.30 per 1,000 gallons

Leak Adjustment rate	4.43 per 1,000 gallons

*Letcher County Water and Sewer District
6 Broadway Street, Suite B
Whitesburg, KY 41858-7344

*Letcher County Water and Sewer District
6 Broadway Street, Suite B
Whitesburg, KY 41858-7344

*Mark Lewis
General Manager
Letcher County Water and Sewer District
6 Broadway Street, Suite B
Whitesburg, KY 41858-7344