

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF WESTERN LEWIS-)	
RECTORVILLE WATER AND GAS DISTRICT)	CASE NO.
FOR RATE ADJUSTMENT FOR SMALL)	2018-00321
UTILITIES PURSUANT TO 807 KAR 5:076)	

NOTICE OF FILING OF STAFF REPORT

Notice is hereby given that, in accordance with the Commission's Order of October 3, 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 October 3, 2018 Order, Western Lewis-Rectorville Water and Gas 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 JAN 07 2019

cc: Parties of Record

STAFF REPORT
ON
WESTERN LEWIS-RECTORVILLE WATER AND GAS DISTRICT
CASE NO. 2018-00321

Western Lewis-Rectorville Water and Gas District (Western Lewis-Rectorville District), a water district organized pursuant to KRS Chapter 74, provides water service to approximately 2,505 residential and commercial customers residing in Lewis and Mason counties, Kentucky.¹ On August 24, 2018, Western Lewis-Rectorville District filed an application (Application) requesting to adjust its monthly water service rates pursuant to the procedures set forth in 807 KAR 5:076. To ensure the orderly review of the Application, the Commission established a procedural schedule by Order dated October 3, 2018.

To comply with the requirements of 807 KAR 5:076, Section 9,² Western Lewis-Rectorville 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, 2017. Using its pro forma test-year operations, Western Lewis-Rectorville District determined that it could justify a revenue increase of \$433,769, or 53 percent, as shown in the table below.³

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

² “The 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.”

³ Application, ARF FORM 1 ATTACHMENT RR-DC – SEPTEMBER 2011, Revenue Requirement Calculation-Debt Service Coverage Method.

Pro Forma Operating Expenses	\$ 1,085,486
Plus: Average Annual Debt Principal and Interest Payments	210,326
Debt Coverage Requirement	<u>0</u>
Total Revenue Requirement	1,295,812
Less: Other Operating Revenue	(48,366)
Non- Operating Revenue	<u>(486)</u>
Revenue Required from Rates	1,246,960
Less: Normalized Revenues from Water Sales	<u>(813,191)</u>
Required Revenue Increase/(Decrease)	<u>\$ 433,769</u>
Percentage Increase	<u>53.34%</u>

However, Western Lewis-Rectorville District is not seeking the full increase that it could justify, stating that its customers would be unable to afford a rate increase of that magnitude. In the alternative, Western Lewis-Rectorville District is limiting its increase to 35.08 percent, which when the requested rates are applied to Commission Staff's (Staff) test-year billing analysis produces \$1,168,085 in revenues from water sales for an increase of \$303,379, as shown in the table below. The rates requested by Western Lewis-Rectorville District would increase the monthly bill of a typical residential customer using 5,000 gallons per month by \$13.97, from \$39.85 to \$53.82, or approximately 35.06 percent.

	Bills	Gallons	Current Water Rates		Revenue	Proposed Water Rates		Revenue
First 1,000	27,503	23,786,000	\$ 16.65	Min. Bill	\$ 457,925	\$ 22.50	Min. Bill	\$ 618,818
Next 4,000		49,030,000	\$ 5.80	per 1,000 Gal	284,374	\$ 7.83	per 1,000 Gal	383,905
Over 5,000		28,075,000	\$ 4.36	per 1,000 Gal	<u>122,407</u>	\$ 5.89	per 1,000 Gal	<u>165,362</u>
Totals		100,891,000			<u>\$ 864,706</u>			<u>\$1,168,085</u>
Revenue Water Sales - Proposed Rates								\$1,168,085
Less: Revenue Water Sales - Current Rates								<u>(864,706)</u>
Requested Revenue Increase								<u>\$ 303,379</u>
Percentage Increase								<u>35.08%</u>

To determine the reasonableness of the rates requested by Western Lewis-Rectorville District, Staff performed a limited financial review of Western Lewis-Rectorville 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. Mark Frost reviewed the calculation of Western Lewis-Rectorville District's Overall Revenue Requirement. Eddie Beavers reviewed Western Lewis-Rectorville 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 Western Lewis-Rectorville District's Overall Revenue Requirement to be \$1,165,063. A revenue increase of \$211,230, or 24.43 percent, is necessary to generate the Overall Revenue Requirement.

2. Water Service Rates. Western Lewis-Rectorville District proposed to increase its water service rates by approximately 35.08 percent across the board above current rates. Western Lewis-Rectorville District has not performed a cost-of-service study (COSS). The Commission has previously found that an across-the-board increase is an appropriate and equitable method of cost allocation in the absence of a COSS. Staff finds that an across-the-board increase to all rate classes is the appropriate means to allocate the increased revenue requirement. The rates set forth in the Attachment to this

report are based upon the revenue requirement as calculated by Staff and will produce sufficient revenues from water sales to recover the \$1,075,936 Revenue Requirement from rates determined by Staff, an approximate 24.43 percent increase. These rates will increase a typical residential customer using 5,000 gallons monthly water bill from \$39.85 to \$49.60, an increase of \$9.75, or approximately 24.47 percent.

3. Depreciable Lives. In this report, Staff finds that an adjustment is warranted to the depreciable lives that Western Lewis-Rectorville District assigned to all of its depreciable utility plant accounts. Any depreciable lives approved by the Commission in this preceding for ratemaking purposes should be used by Western Lewis-Rectorville District for all future accounting and reporting purposes. No adjustment to accumulated depreciation or retained earnings should be made to account for the retroactive cumulative effect of this change in accounting estimate.

4. Allocation and Assignment of Costs Between the Divisions. In Case No. 2014-00266, Staff found that “WLWD did not make proper assignment and allocation of many transactions between its Water and Gas Division.”⁴ Western Lewis-Rectorville District was using an operating revenue factor to allocate its shared costs between the two divisions. Upon its review of the supporting financial records, in Case No. 2017-00074,⁵ Staff also discovered that Western Lewis-Rectorville District continued to use an operating revenue factor to allocate costs between its water and gas divisions.

⁴ Case No. 2014-00266, *Application of Western Lewis-Rectorville Water & Gas District for Rate Adjustment for Small Utilities Pursuant to 807 KAR 5:076*, (Ky. PSC Nov. 07, 2014) at 3–4.

⁵ Case No. 2017-00074, *Application of Western Lewis-Rectorville Water and Gas District for Rate Adjustment for Small Utilities Pursuant to 807 KAR 5:076*, (Ky. PSC Oct. 18, 2017).

In both of the cited rate case proceedings Staff used a customer allocation factor to correct and to properly assign or allocate costs to the appropriate division. In both proceedings, Staff also recommended that Western Lewis-Rectorville District be required to revise its accounting procedures and internal controls so that proper assignment and allocations of revenues and expenses are recorded in the original books of entry in all future reporting periods.

Staff commends Western Lewis-Rectorville District for following Staff's recommendations to use the customer allocation factor to allocate the shared costs between the divisions and for performing an employee time study to correctly allocate and assign labor related costs to each division. In this proceeding, Staff is proposing to correct the allocations of revenues, purchased power, and chemicals. Staff is using the actual operating revenues that were recorded by each division in the general ledger. Purchased power and chemical expenses are being directly assigned to the water division.

5. Billing Analysis Irregularities. The billing analysis generated by Western Lewis-Rectorville District produced normalized revenues from water sales that are \$69,574 greater than the actual test-year amount of \$799,611. Using a revised water usage report generated by Western Lewis-Rectorville District's billing software; Staff completed its billing analysis that produces annual revenues from water sales of \$864,706, which is \$65,095 above the reported amount.

Western Lewis-Rectorville District was unable to explain why the usage reports that it generated would produce excess revenues of this magnitude. One explanation provided by Western Lewis-Rectorville District is that its Automated Meter Reading (AMR)

system truncates the monthly gallons purchased by each ratepayer. An example would be if a ratepayer, who used 2,600 gallons in any given month, was billed for 2,000 gallons. According to Western Lewis-Rectorville District, the unbilled 600 gallons would roll over into the next month. Western Lewis-Rectorville District did not substantiate its contention that the unbilled gallons would ever be billed and collected.

Western Lewis-Rectorville District was authorized to install the AMR system in Case No. 2016-00111.⁶ Because Western Lewis-Rectorville District's AMR system was partially funded with a grant administered through Rural Development (RD), an agency of the United States Department of Agriculture, the application was subject to the provisions of KRS 278.023. KRS 278.023 does not grant the Commission the discretion to modify or reject any portion of the agreement between RD and Western Lewis-Rectorville District, and therefore, the Commission was unable to review the construction using the same standards that it applies to normal applications for construction under KRS 278.020.

Given Western Lewis-Rectorville District's admitted shortfalls with its AMR system and the lack of Commission review of the installation of the AMR system, Staff recommends the Commission initiate an investigation to review Western Lewis-Rectorville District's AMR system. The investigation should review the accuracy of the AMR meters regarding the tracking of ratepayer usage and ultimately the gallons actually billed to Western Lewis-Rectorville District's ratepayers. The Commission investigation

⁶ Case No. 2016-00111, *Application of Western Lewis-Rectorville Water District for a Certificate of Public Convenience and Necessity to Construct and Finance Water System Improvements* (Ky. PSC March 31, 2016).

should ensure that Western Lewis-Rectorville District is collecting the correct amount that is used and billed.

Pro Forma Operating Statement

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

	Test Year Operations	Reallocation Adjustments	Reallocated Operations	Pro Forma Adjustments	Adj. Ref.	Pro Forma Operations
Operating Revenues:						
Revenues from Water Sales:	\$ 813,191	\$ (13,580)	\$ 799,611	\$ 65,095	(A)	\$ 864,706
Other Operating Revenues	48,366	1,366	49,732			49,732
Total Gas Operating Revenues	861,557	(12,214)	849,343	65,095		914,438
Operating Expenses:						
Operation and Maintenance Expenses:						
Salaries & Wages - Employees	231,474		231,474	(22,964)	(B)	208,510
Salaries & Wages - Commissioners	23,307		23,307			23,307
Emp. Pensions & Benefits	69,696		69,696	18,462	(C)	88,158
Purchased Water	71,163		71,163	(8,022)	(D)	63,141
Purchased Power	42,212	9,405	51,617	(5,875)	(D)	45,742
Chemicals and Water Testing	12,233	2,725	14,958	(1,703)	(D)	13,255
Materials and Supplies	110,557		110,557	(11,250)	(E)	99,307
Contractual Services	52,970		52,970			52,970
Rental Equipment	207		207			207
Insurance	92,578		92,578	(49,318)	(F)	43,260
Miscellaneous	19,449		19,449			19,449
Total Operation & Maint Exp.	725,846	12,130	737,976	(80,670)		657,306
Depreciation and Amortization	339,305		339,305	(92,235)	(G)	247,070
Taxes Other Than Income Tax	20,335		20,335	(4,384)	(H)	15,951
Total Gas Operating Expenses	1,085,486	12,130	1,097,616	(177,289)		920,327
Net Operating Income	(223,929)	(24,344)	(248,273)	242,384		(5,889)
Other Income & Deductions:						
Nonutility Income	39,395		39,395			39,395
Net Income Available for Debt Service	\$ (184,534)	\$ (24,344)	\$ (208,878)	\$ 242,384		\$ 33,506

(A) Billing Analysis Adjustment. Western Lewis-Rectorville District provided a billing analysis showing the gallons of water billed to retail and commercial customers in the test year. Upon review of Western Lewis-Rectorville District's billing analysis Staff found that Western Lewis-Rectorville District incorrectly multiplied the minimum bill rate by the gallons rather than the number of test-year bills. Correcting for this error resulted in normalized revenues being \$69,574 greater than the actual test-year revenues from water sales of \$799,611.

Western Lewis-Rectorville District informed Staff that Western Lewis-Rectorville District's analysis was based on a Water Usage Breakdown report (Usage Report) for the Period December 2017 through November 2017 that was in 1,000-Gallon usage increments. Staff requested that Western Lewis-Rectorville District provide a revised customer Usage Report that would be based on 100-Gallon usage increments. Using the revised Usage Report, Staff completed its billing analysis that produces annual revenues from water sales of \$864,706, for a pro forma increase of \$65,095.

Western Lewis-Rectorville District was unable to explain why its or Staff's billing analyses that use the computer-generated Usage Reports would produce revenue in excess of those actually collected and recorded in its test-year general ledger.

(B) Employee Salaries and Wages. Western Lewis-Rectorville District reported a test-year employee salaries and wages expense of \$231,474. Staff determined Western Lewis-Rectorville District's test-year employee salaries and wages expense should be decreased by \$22,964⁷ as explained below.

Vacant Employee Position. Western Lewis-Rectorville District included in its test-year employee salaries and wages expense the \$3,820 partial salary paid to a maintenance worker whose position was vacant before the end of the test period. According to Western Lewis-Rectorville District, it has no current intentions of filling this vacant employee position, and for this reason, an adjustment to eliminate the partial salary would meet the ratemaking criteria of being known and measurable. Staff is reducing the employee salaries and wages expense by \$3,458.

⁷ (\$3,458) (Vacant Position) - \$8,256 (Employee Vacation Payout) -\$11,250 (Capitalized Wages) = (\$22,964).

Lump Sum Vacation Pay. In the test year, Western Lewis-Rectorville District paid to its employees \$9,119 for their unused vacation. Western Lewis-Rectorville District pays its full-time employees a lump-sum payment for any vacation time not used by the end of the calendar year. It is the Commission's historic practice to exclude, for ratemaking purposes, these type of employee payments. Accordingly, Staff is reducing employee salaries and wages expense by \$8,256⁸ to eliminate the vacation payout allocated to the gas division.

Capital Wages. Western Lewis-Rectorville District reported collecting 20 customer tap-on fees in the test year for a total Contribution In Aid of Construction of \$22,500. While Western Lewis-Rectorville District correctly recorded the tap-on fees in Account No. 215.2 – Donated Capital, a sub-account of unappropriated retained earnings, Staff found that an adjustment was necessary to remove the associated capital costs from operation and maintenance expense. Employee salaries and the wage expense, and materials and the supplies expense are being reduced equally for adjustments of \$11,250. Additionally, the depreciation expense is being increased by \$529⁹ to capitalize the costs funded by the tap-on fees.

(C) Employee Pensions and Benefits. Western Lewis-Rectorville District reported a test-year employee pension and benefits expense of \$69,696. Staff determined Western Lewis-Rectorville District's test-year employee pensions and benefits expense should be increased by \$18,462¹⁰ as explained below.

⁸ $(\$9,119) \text{ (Employee Vacation Payout)} \times 90.53\% \text{ (Allocation Factor – Water)} = (\$8,256)$.

⁹ $\$22,500 \div 42.5 \text{ (years)} = \529 .

¹⁰ $\$47,942 \text{ (County Employment Retirement System (CERS))} + \$40,216 \text{ (Employee Health Insurance)} = \$88,158 - \$69,696 \text{ (Test-year employee pensions and benefits)} = \$18,462$.

Employee Health Insurance. Western Lewis-Rectorville District currently pays 100 percent of the monthly premiums for its eligible full-time employees. Staff notes that in recent Orders, the Commission has made ratemaking adjustments to reduce the cost of employee benefit packages paid by some utilities when certain aspects of those benefit packages were found to be unreasonable based on a review of total salaries and fringe benefits. The Commission is placing greater emphasis on evaluating employees' total compensation packages, including both salary and benefits programs, for market and geographic competitiveness to ensure the development of a fair, just, and reasonable rate. It has found that in most cases, 100 percent of employer-funded health care does not meet those criteria.

As shown below, Staff annualized the most recent monthly premiums paid on behalf of eligible full-time employees who were receiving health benefits at the time of Staff's report resulting in an annual expense for the water division of \$40,216. Additionally, consistent with recent orders in which the Commission has reduced benefit expenses for utilities that pay 100 percent of an employee's health insurance coverage, Staff reduced Western Lewis-Rectorville District's single health insurance premiums by 21 percent, the national average employee contribution rate.¹¹

¹¹ Bureau of Labor Statistics, Healthcare Benefits, March 2017, Table 10, private industry workers. (<https://www.bls.gov/ncs/ebs/benefits/2017/ownership/private/table10a.pdf>)

Monthly Emp. Health Ins. Premium	\$ 4,686
Multiplied by 12 Months	<u>12</u>
Pro Form Emp. Health Ins. - Single Coverage	56,232
Multiplied by: Utility Contribution	<u>79.00%</u>
Utility Emp. Health Ins. Expense	44,423
Multiplied by: Allocation Factor - Water	<u>90.53%</u>
Healt Ins Premium	<u>\$ 40,216</u>

County Employee Retirement System (CERS). Western Lewis-Rectorville District reported a test-year employee pension expense of \$32,352. Western Lewis-Rectorville District provides pension benefits and post-retirement health care benefits to its employees by participating in the CERS. As a participating member, Western Lewis-Rectorville District is required to contribute a percentage of its employee wages to CERS. In the fiscal year, beginning July 1, 2018, the CERS contribution rate was 31.56 percent.¹² The CERS pension expense Western Lewis-Rectorville District reported in the test year conformed to the requirements of the General Accounting Standards Board Pronouncement No. 68 (GASB 68).

In Case No. 2016-00163,¹³ the Commission discussed in great detail the reporting requirements of GASB 68 and how those requirements would impact a utility's income statement and balance sheet. In that proceeding, the Commission found the annual pension expense should be equal to the amount of a district's contributions to CERS, which historically have been "fairly constant." Based on the above, Staff determined that

¹² <https://kyret.ky.gov/Employers/Pages/Contribution-Rates.aspx>

¹³ Case No. 2016-00163, *Alternative Rate Adjustment filing of Marion County Water District* (Ky. PSC Nov. 10, 2016).

Western Lewis-Rectorville District's test-year CERS employer contributions for the water division would be \$47,942.¹⁴

(D) Purchased Water. Western Lewis-Rectorville District reported a test-year purchased water expense of \$71,163, a purchased power expense of \$51,617, and a chemical expense of \$14,948. Staff determined Western Lewis-Rectorville District's test-year purchased water expense should be decreased by \$8,022, the purchased power expense should be decreased by \$5,875, and the chemical expense should be decreased by \$1,703, as explained below.

Changes to Wholesale Purchase Water Rate. According to the letter dated December 7, 2018, the greater Fleming County Regional Water Commission (Fleming County Commission) will increase its wholesale water rate from \$1.86 per 1,000 gallons to \$2.00 per 1,000 gallons beginning on February 1, 2019. Staff opines that an adjustment to reflect the increase in the wholesale water rate would meet the ratemaking criteria of being known and measurable. Accordingly, Staff is increasing the test-year purchased water expense by \$3,223 to account for Fleming County Commission's wholesale rate increase. The pro forma purchased water expense of \$70,479, as calculated in the table below, is being used by Staff in the computation of the excess line loss.

¹⁴ \$151,906 (Pro Forma Full-Time Water Salaries) x 31.56% (July 1, 2018 CERS Employer Rate) = \$47,942.

Test-Year Gallons	23,020,000
Multiplied by: PWA per Gallon rate	<u>\$ 0.00200</u>
Pro Forma Purchased Water Expense - Fleming County Commission	46,040
Add: Test-Year Cost	<u>(42,817)</u>
Pro Forma with PWA	<u>\$ 3,223</u>
Purchases Fleming County Commission	\$ 46,040
Add: Purchases city of Maysville	<u>24,439</u>
Total Purchased Water	<u>\$ 70,479</u>

Excess Water Loss. Section 6(3) of 807 KAR 5:066¹⁵ limits water loss to 15 percent for ratemaking purposes unless an alternative level is found reasonable by the Commission. Western Lewis-Rectorville District is no longer using the filters in its treatment plant, and therefore will no longer be treating water to backwash its filters. Further, Western Lewis-Rectorville District could not explain the methodology that was used to estimate its claimed system flushing. Staff believes that some level of system flushing is appropriate, but using an estimate without a basis is arbitrary and does not meet the ratemaking criteria of known and measurable. In the below table, Staff determined Western Lewis-Rectorville District's test-year water loss was 26.38 percent or 11.38 percent above the allowable limit.

¹⁵ 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.

	Actual	Staff Adjustment	Adjusted
Water Produced	113,110,000	(8,400,000)	104,710,000
Water Purchased	32,676,000		32,676,000
Test-Year Water Produced/Purchased	145,786,000	(8,400,000)	137,386,000
Less: Volume Sold During the Test Year	(100,481,000)	(410,000)	(100,891,000)
Utility/Water Treatment Plant	(8,400,000)	8,400,000	0
System Flushing	(13,250,000)	13,250,000	0
Fire Department	(250,000)		(250,000)
Water Loss	23,405,000	12,840,000	36,245,000
Divide by: Water Produced/Purchased	145,786,000		137,386,000
Percent Lost	16.05%		26.38%
Allowable Water Loss	-15.00%		-15.00%
Excess Water Loss Percentage	1.05%		11.38%

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

	Chemicals	Purchased Power	Purchased Water
Pro Forma Subject to Water Loss Adjustment	(14,958)	\$ (51,617)	\$ (70,479)
Times: Water Loss in Excess of 15 Percent	11.38%	11.38%	11.38%
Pro Forma Water Loss Adjustments	\$ (1,703)	\$ (5,875)	\$ (8,022)

(E) Insurance. Western Lewis-Rectorville District reported a test-year insurance expense of \$92,578. Using the current insurance premiums for general liability, worker's compensation, and property, Staff calculates an insurance expense of \$43,260 for the water division, a decrease of \$49,318.

General Liability Premium - 2018	22,667	
Multiplied by: Allocation Factor - Water	<u>81.78%</u>	\$ 18,537
Worker's Compensation	10,341	
Multiplied by: Allocation Factor - Water	<u>90.53%</u>	9,362
Property Premium - 2018	18,783	
Multiplied by: Allocation Factor - Water	<u>81.78%</u>	<u>15,361</u>
Pro Forma Insurance		43,260
Less: Test-year Ins. Other Expense		<u>(92,578)</u>
Pro Forma Adjustment		<u>\$(49,318)</u>

(F) Depreciation. Western Lewis-Rectorville District reported a test-year depreciation expense of \$339,305. Submitted with the Application was a depreciation schedule that directly corresponded to the amount of the depreciation expense that was reported in the 2017 Annual Report.

In reviewing the reasonableness of the depreciation lives used by water utilities, 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 a utility plant.

Upon its review of the reasonableness of the depreciable lives of each asset category in Western Lewis-Rectorville District's depreciation schedule, Staff determined that all of Western Lewis-Rectorville District's asset categories are outside of the ranges in the NARUC Study. The depreciation lives used by Staff represents the midpoint of the NARUC range for each asset category. As shown in the table below, using the NARUC depreciation lives results in a depreciation expense reduction of \$92,235.

	Original Cost UPIS	Dep. Life	Accumulated Depreciation 2016	Depreciation Expense 2017	Accumulated Depreciation 2017	NARUC Depreciation Lives			Staff	
						Floor	Celling	Mid Point	Depreciation Expense	Pro Form Adjustment
Structures and Improvements	465,619	36.60	3,312	12,723	16,035	35.00	40.00	37.50	12,417	\$ (306)
Wells & Springs	94,304	25.00	29,801	3,632	33,433	25.00	35.00	30.00	3,143	(489)
Pumping Equipment	9,793	20.00	8,665	149	8,814	20.00	20.00	20.00	0	(149)
Distribution Reservoirs & Standpipes	1,045,463	30.00	450,506	34,849	485,355	30.00	60.00	45.00	23,233	(11,616)
Transmission & Distribution Mains	10,537,119	43.57	3,500,927	241,826	3,742,753	50.00	75.00	62.50	168,594	(73,232)
Meter	197,560	10.00	97,889	19,756	117,645	35.00	50.00	42.50	4,648	(15,108)
Office Equipment	62,727	10.00	3,437	6,273	9,710	20.00	25.00	22.50	2,788	(3,485)
Transportation Equipment	31,363	5.00	12,545	6,273	18,818	7.00	7.00	7.00	4,480	(1,793)
Other Tanible Plant	134,139	10.00	32,104	13,414	45,518	5.00	5.00	5.00	26,828	13,414
Power Operated Equipment	4,056	10.00	3,650	406	4,056	5.00	5.00	5.00	406	0
	<u>232,285.00</u>		<u>51,736.00</u>	<u>339,301</u>	<u>4,482,137</u>				<u>246,537</u>	<u>(92,764)</u>
Tap-on Fees										529
Pro Forma Adjustment										\$ (92,235)

(G) Payroll Taxes (FICA). Western Lewis-Rectorville District reported a test-year FICA expense of \$20,335. Using the pro forma employee salaries and wages expense for the water division of \$208,500 and the current FICA rate of 7.65 percent, Staff calculated a pro forma FICA expense of \$15,951. Accordingly, Staff is reducing FICA expense by \$4,384.¹⁶

Overall Revenue Requirement and Required Revenue Increase

The Commission has historically applied the 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) the depreciation expense, a non-cash item, to provide working capital;¹⁷ (3) the average annual principal and interest

¹⁶ \$208,500 (Pro Forma Employee Salaries and Wages Exp.) x 7.65% (FICA Rate) = \$15,951 - \$20,335 (Recorded Payroll Tax) = (\$4,384).

¹⁷ 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).

payments on all long-term debts; and (4) working capital that is in addition to the depreciation expense.

A comparison of Western Lewis-Rectorville District's and Staff's calculations of the Overall Revenue Requirement and Required Revenue Increase using the DSC method is shown below.

	District	Staff
Pro Forma Operating Expenses	\$ 1,085,486	\$ 920,327
Plus: Average Annual Debt Principal and Interest Payments	210,326	203,947
Debt Coverage Requirement	0	40,789
Total Revenue Requirement	1,295,812	1,165,063
Less: Other Operating Revenue	(48,366)	(49,732)
Non- Operating Revenue	(486)	(39,395)
Revenue Required from Rates	1,246,960	1,075,936
Less: Normalized Revenues from Water Sales	(813,191)	(864,706)
Required Revenue Increase/(Decrease)	\$ 433,769	\$ 211,230
Percentage Increase	53.34%	24.43%

Average Annual Principal and Interest Payments. In calculating its revenue requirement, Western Lewis-Rectorville District used an average annual debt service of \$210,326 and did not claim a 1.2X coverage as required by its lenders. Using Western Lewis-Rectorville District's bond and loan amortization schedules, Staff calculated a three-year average debt service of \$203,947, as shown in the table below. Staff also used a coverage of 1.2X or \$40,789.

	Debt Service FmHA/ RD	Debt Service KIA	Total Debt Service
2018	\$ 162,719	\$ 41,818	\$ 204,537
2019	162,167	41,818	203,985
2020	161,502	41,818	203,320
3-Year Average			\$ 203,947

Signatures:



Prepared by: Mark Frost
Financial Analyst
Revenue Requirements Branch
Division of Financial Analysis



Prepared by: Eddie Beavers
Rate Analyst
Rate Design Branch
Division of Financial Analysis

ATTACHMENT

ATTACHMENT TO AN ORDER OF THE KENTUCKY PUBLIC SERVICE
COMMISSION IN CASE NO. 2018-00321 DATED **JAN 07 2019**

RATES INCLUDE ALLOWANCE FOR INCREASE IN PURCHASED WATER
EXPENSE PREVIOUSLY DISCUSSED IN STAFF'S REPORT

5/8 x 3/4-Inch Meter

			<u>Monthly Rates</u>	
First	1,000	Gallons	\$ 20.72	Minimum Bill
Next	4,000	Gallons	7.22	per 1,000 Gallons
All Over	5,000	Gallons	5.43	per 1,000 Gallons

*Lyn Rhonemus
Jeffrey D Newman CPA LLC
522 E. Main Street
West Union, OHIO 45693

*Western Lewis-Rectorville Water and Gas District
8044 KY 3161
Maysville, KY 41056-9344