

Lyon County Water District

PO Box 489
Kuttawa, KY 42055
270-388-0271

January 30, 2024

Ms. Linda Bridwell
Executive Director
Public Service Commission
211 Sower Blvd
Frankfort, KY 40601

RE: Case No. 2023-00352
Lyon County Water District
Alternative Rate Filing Adjustment

Dear Ms. Bridwell:

Please find the accompanying attachment that is being filed in response to the Deficiency letter filed on January 2, 2024 in this matter. More specifically, the attachment is being submitted to meet the filing requirements of 807 KAR 5:076, Section 1(2), 807 KAR 5:076 Section 3(1), and 807 KAR 5:076 Section 9 to conform to the regulations.

Sincerely,

A handwritten signature in black ink, appearing to read "Mathew Blane". The signature is stylized and cursive.

Mathew Blane
Superintendent

Enclosures

Exhibit A

SCHEDULE OF ADJUSTED OPERATIONS

Lyon County Water District

Water Division

	<u>Annual Report</u>	<u>Pro Forma Adjustments</u>	<u>Ref.</u>	<u>Pro Forma</u>
<u>Operating Revenues</u>				
Metered Sales to Retail Customers	\$ 1,399,626	\$ 56,632	(A)	
		(25,080)	(B)	\$ 1,431,178
Other Water Revenues:				
Forfeited Discounts	-	16,979	(B)	16,979
Misc. Service Revenue	-	8,101	(B)	8,101
Other Water Revenue	-	-		-
Total Operating Revenues	1,399,626	56,632		1,456,258
<u>Operating Expenses</u>				
Operation and Maintenance				
Salaries and Wages - Employees	179,018	(5,595)	(C)	
		(6,105)	(D)	167,318
Salaries and Wages - Officers	18,000	(634)	(D)	17,366
Employee Pensions and Benefits	34,200	(14,711)	(E)	
		48,828	(F)	
		(2,405)	(D)	65,912
Purchased Water	431,242			431,242
Purchased Power				-
Chemicals				-
Materials and Supplies	83,857			83,857
Contractual Services	115,634	61,392	(G)	177,026
Insurance - General Liability & Other	24,978	(1,029)	(D)	23,949
Insurance - Workers Comp	4,246			4,246
Bad Debt				-
Miscellaneous Expenses	86,586			86,586
Total Operation and Mnt. Expenses	977,761	85,336		1,057,502
Depreciation Expense	314,285	(93,336)	(H)	220,949
Amortization	-	6,045	(G)	6,045
Taxes Other Than Income	2,236	14,771	(E)	
		(1,504)	(C)	
		(467)	(D)	15,036
Total Operating Expenses	1,294,282	10,845		1,299,532
Net Utility Operating Income	\$ 105,344	\$ 45,787		\$ 156,726

REVENUE REQUIREMENTS - WATER DIVISION

Pro Forma Operating Expenses	\$ 1,299,532
Plus: Avg. Annual Principal and Interest Payments	291,041
Additional Working Capital	58,208
Total Revenue Requirement	1,648,781
Less: Other Operating Revenue	(25,080)
Interest Income	(1,064)
Revenue Required From Water Sales	1,622,637
Less: Revenue from Sales at Present Rates	(1,431,178)
Required Revenue Increase	\$ 191,459
Percent Increase	13.38%

SCHEDULE OF ADJUSTED OPERATIONS
Lyon County Water District
Sewer Division

	<u>Test Year</u>	<u>Adjustments</u>	<u>Ref.</u>	<u>Pro Forma</u>
<u>Operating Revenues</u>				
Total Sewer Sales	\$ 23,463	878	(A)	\$ 24,341
Other Sewer Revenues				-
Forfeited Discounts				-
Total Operating Revenues	<u>23,463</u>	<u>878</u>		<u>24,341</u>
<u>Operating Expenses</u>				
Operation Expenses				
Management Fee				-
Collection - Labor, Materials and Expenses				-
Maintenance Expenses				
Maintenance of Collection Sewer System				-
Miscellaneous Supplies and Expenses				
Pumping System	27,139			27,139
Customer Account Expenses				
Forfeited Discounts				-
Flat Rate Inspections				-
Uncollectable Accounts				-
Administrative and General Expenses				
Salaries		6,739	(D)	6,739
Office Supplies and Other Expenses				-
Outside Services Employed				-
Insurance		1,029	(D)	1,029
Employee Pensions and Benefits		2,405	(D)	2,405
Transportation Expense				-
Miscellaneous General Expenses				-
Total Sewer Operation and Mnt. Expenses	<u>27,139</u>	<u>10,173</u>		<u>37,312</u>
Depreciation Expense	21,693	(5,165)	(H)	16,528
Taxes Other Than Income		467	(D)	467
Total Operating Expenses	<u>48,832</u>	<u>5,475</u>		<u>54,307</u>
Net Utility Operating Income	\$ (25,369)	\$ (4,597)		\$ (29,966)

REVENUE REQUIREMENTS - SEWER DIVISION

Pro Forma Operating Expenses	\$ 54,307
Divide: 88% Operating Ratio	0.88
Total Revenue Requirement	<u>61,712</u>
Less: Other Operating Revenue	-
Interest & Investment Income	-
Revenue Required From Sewer Sales	<u>61,712</u>
Less: Revenue from Sales at Present Rates	(24,341)
Required Revenue Increase	\$ 37,371
Percent Increase	153.53%

REFERENCES

- A. The Current Billing Analysis results in pro forma water sales revenue of \$1,431,178 and pro forma sewer sales revenue of \$24,341. This reflects a full year at the retail rates that were effective in 2022 and indicates an increase to water sales of \$56,632 and a reduction to sewer sales of \$878 are required.
- B. Other Water Revenues of \$25,080 were reclassified from Metered Sales to the proper accounts.
- C. Since 2022, there have been increases in wage rate and changes in personnel. These changes result in pro forma annual wage decreases of \$(5,595). Pro Forma Payroll Tax adjustments totaled \$1,504.
- D. Allocation adjustments totaling \$10,640 were removed from the Water Division and increased to the Sewer Division.
- E. An adjustment of \$14,711 to Employee Pensions and Benefits was made to reduce payroll taxes and reclassify them to the proper account, Taxes Other Than Income.
- F. An increase to Employee Pensions and Benefits of \$48,828 was necessary to reverse the journal entries made by Lyon County Water District's auditor for GASB 68 and 75.
- G. During 2023, United Systems contacted Lyon County Water District and informed its staff that upgrades would be necessary to continue utilizing their billing software. The cost to install the upgrade was \$30,224, with additional monthly fees of \$5,116. With a five year amortization of the installation costs and the annual fees, an increase to Contractual Services is necessary of \$61,392.
- H. The PSC requires adjustments to a water utility's depreciation expense when asset lives fall outside the ranges recommended by NARUC in its publication titled "Depreciation Practices for Small Utilities" and by Commission on Rural Water in its publication titled "Average Service Lifetimes, Major Systems Components – Wastewater Systems". Therefore, adjustments are included to bring asset lives to the midpoint of the recommended ranges resulting in a decrease in depreciation expense of \$93,336 for the water division and an decrease of \$5,165 for the sewer system, as shown in Table A.
- I. The annual debt service payments for the District's loans are shown in Table B. The five-year average of these payments is added in the revenue requirement calculation.
- J. The amount shown in Table B for coverage on long term debt is required by the Authority's loan documents. This is included in the revenue requirement as Additional Working Capital.

Table A
DEPRECIATION EXPENSE ADJUSTMENTS
Lyon County Water District

<u>Asset</u>	<u>Date in Service</u>	<u>Original Cost *</u>	<u>Reported Life</u>	<u>Depr. Exp.</u>	<u>Proforma Life</u>	<u>Depr. Exp.</u>	<u>Depreciation Expense Adjustment</u>
<u>WATER DIVISION</u>							
<u>General Plant</u>							
Structures & Improvements	various	110,579	varies	5,213	37.5	2,949	(2,264)
Communication & Computer Eqmt.	08/27/12	20,941	5	3,221	10.0	2,094	(1,127)
Office Furniture & Equipment	various	-	varies	-	22.5	-	-
Power Operated Equipment	various	18,598	varies	3,823	12.5	1,488	(2,335)
Tools, Shop, & Garage Equipment					17.5		
Tank Repairs & Painting					15.0		
<u>Source of Supply Plant</u>							
Collecting & Impounding Reservoirs					62.5		
Supply Mains					62.5		
<u>Pumping Plant</u>							
Structures & Improvements					37.5		
Telemetry					10.0		
Pumping Equipment					20.0		
<u>Transmission & Distribution Plant</u>							
Hydrants	various		varies		50.0	-	-
Transmission & Distribution Mains	various	11,297,042	varies	262,878	62.5	180,753	(82,125)
Meter Installations	various		varies		45.0	-	-
Meter Change-outs					15.0		
Pump Equipment					20.0		
Tank Fence	07/30/13	7,669	10	767	37.5	205	(562)
Services	various		varies		40.0	-	-
Reservoirs & Tanks	various	56,598	varies	3,773	45.0	1,258	(2,515)
Tank Painting & Repairs					15.0		
<u>Transportation Equipment</u>							
Entire Group	various	197,149	varies	30,571	7.0	28,164	(2,407)
<u>Water Treatment Plant</u>							
Structures and Improvements					62.5		
Water Treatment Equipment					27.5		
TOTALS - WATER SYSTEM		\$ 11,708,576		\$ 310,246		\$ 216,910	(93,336)

<u>SEWER DIVISION</u>							
<u>Sewer Lines</u>							
Collection Sewers - Force	various	867,725	40	21,693	52.5	16,528	-5,165
TOTALS - SEWER SYSTEM		867,725		21,693		16,528	(5,165)

* Includes only costs associated with assets that contributed to depreciation expense in the test year.

Table B
DEBT SERVICE SCHEDULE
Lyon County Water District
CY 2024 - 2028

<u>Water Division</u>	<u>CY 2024</u>		<u>CY 2025</u>		<u>CY 2026</u>		<u>CY 2027</u>		<u>CY 2028</u>		<u>TOTALS</u>
	<u>Principal</u>	<u>Interest</u>	<u>Principal</u>	<u>Interest</u>	<u>Principal</u>	<u>Interest</u>	<u>Principal</u>	<u>Interest</u>	<u>Principal</u>	<u>Interest</u>	
Regions - Series 2013C	\$ 50,000	\$ 31,327	55,000	28,945	55,000	26,924	60,000	25,095	60,000	23,115	\$ 415,406
USDA RD - Series 2016	51,500	30,277	53,000	29,297	54,500	28,347	56,000	27,397	57,500	26,447	414,265
KIA	91,743	33,839	93,587	31,754	95,456	29,648	97,387	27,490	99,344	25,287	625,535
											-
											-
											-
											-
Totals	\$193,243	\$ 95,443	\$201,587	\$ 89,996	\$204,956	\$ 84,919	\$213,387	\$ 79,982	\$216,844	\$ 74,849	\$ 1,455,206
Average Annual Principal & Interest - Water											\$ 291,041
Average Annual Debt Service Coverage											\$ 58,208

CURRENT BILLING ANALYSIS - CURRENT USAGE & EXISTING RATES
Lyon County Water District - Water Division

SUMMARY

	No. of Bills	Gallons Sold	Revenue	
5/8" X 3/4" Meters	35,689	100,729,500	\$ 1,504,495	
3/4" Meters	-	-	\$ -	
1" Meters	121	1,053,300	17,558	
1 1/2" Meters	90	1,351,160	24,272	
2" Meters	74	5,005,100	43,580	
Fire Hydrant	5	648,400	3,852	
Totals	35,979	108,787,460	\$ 1,593,756	
Less Billing Adjustments			\$ (162,579)	
Net Total			\$ 1,431,178	
Less PSC Annual Report			\$ (1,374,546)	
SAO Adjustment			\$ 56,632	-4.1%

5/8" x 3/4" METERS

	USAGE	BILLS	GALLONS	FIRST 2,000	NEXT 3,000	NEXT 5,000	NEXT 10,000	ALL OVER 20,000	TOTAL
FIRST	2,000	20,775	13,749,200	13,749,200	-	-	-	-	13,749,200
NEXT	3,000	10,886	35,043,800	21,772,000	13,271,800	-	-	-	35,043,800
NEXT	5,000	3,048	20,426,900	6,096,000	9,144,000	5,186,900	-	-	20,426,900
NEXT	10,000	700	9,453,800	1,400,000	2,100,000	3,500,000	2,453,800	-	9,453,800
ALL OVER	20,000	280	22,055,800	560,000	840,000	1,400,000	2,800,000	16,455,800	22,055,800
TOTAL		35,689	100,729,500	43,577,200	25,355,800	10,086,900	5,253,800	16,455,800	100,729,500

REVENUE BY RATE INCREMENT

	BILLS	GALLONS	RATE	REVENUE
FIRST	2,000	35,689	\$ 27.50	\$ 981,448
NEXT	3,000	25,355,800	\$ 11.74	297,677
NEXT	5,000	10,086,900	\$ 8.41	84,831
NEXT	10,000	5,253,800	\$ 7.08	37,197
ALL OVER	20,000	16,455,800	\$ 6.28	103,342
TOTAL	35,689	100,729,500		\$ 1,504,495

3/4" METERS

	USAGE	BILLS	GALLONS	FIRST 4,000	NEXT 1,000	NEXT 5,000	NEXT 10,000	ALL OVER 20,000	TOTAL
FIRST	4,000	0	-	-	-	-	-	-	-
NEXT	1,000	0	-	-	-	-	-	-	-
NEXT	5,000	0	-	-	-	-	-	-	-
NEXT	10,000	0	-	-	-	-	-	-	-
ALL OVER	20,000	0	-	-	-	-	-	-	-
TOTAL		-	-	-	-	-	-	-	-

REVENUE BY RATE INCREMENT

	BILLS	GALLONS	RATE	REVENUE
FIRST	4,000	-	\$ 26.54	\$ -
NEXT	1,000	-	\$ 6.11	-
NEXT	5,000	-	\$ 4.71	-
NEXT	10,000	-	\$ 3.31	-
ALL OVER	20,000	-	\$ 2.96	-

TOTAL - - \$ -

1" METERS

	USAGE	BILLS	GALLONS	FIRST 15,000	NEXT 5,000	ALL OVER 20,000	TOTAL
FIRST	15,000	98	432,800	432,800	-	-	432,800
NEXT	5,000	5	83,000	75,000	8,000	-	83,000
ALL OVER	20,000	18	537,500	270,000	90,000	177,500	537,500
		121	1,053,300	777,800	98,000	177,500	1,053,300

REVENUE BY RATE INCREMENT

	BILLS	GALLONS	RATE	REVENUE
FIRST	15,000	121	777,800 \$ 130.16	\$ 15,749
NEXT	5,000		98,000 \$ 7.08	694
ALL OVER	20,000		177,500 \$ 6.28	1,115
TOTAL	121	1,053,300		\$ 17,558

1 1/2" METERS

	USAGE	BILLS	GALLONS	FIRST 25,000	ALL OVER 25,000	TOTAL
FIRST	25,000	66	618,200	618,200	-	618,200
ALL OVER	25,000	24	732,960	600,000	132,960	732,960
		90	1,351,160	1,218,200	132,960	1,351,160

REVENUE BY RATE INCREMENT

	BILLS	GALLONS	RATE	REVENUE
FIRST	25,000	90	1,218,200 \$ 176.91	\$ 15,922
ALL OVER	25,000		132,960 \$ 6.28	8,350
TOTAL	90	1,351,160		\$ 24,272

2" METERS

	USAGE	BILLS	GALLONS	FIRST 45,000	ALL OVER 45,000	TOTAL
FIRST	45,000	47	602,700	602,700	-	602,700
ALL OVER	45,000	27	4,402,400	1,215,000	3,187,400	4,402,400
		74	5,005,100	1,817,700	3,187,400	5,005,100

REVENUE BY RATE INCREMENT

	BILLS	GALLONS	RATE	REVENUE
FIRST	45,000	74	\$ 318.42	\$ 23,563
ALL OVER	45,000		\$ 6.28	20,017
TOTAL	74	5,005,100	\$	43,580

FIRE HYDRANT

	USAGE	BILLS	GALLONS	FIRST 45,000	ALL OVER 45,000	TOTAL
FIRST	45,000	3	16,600	16,600	-	16,600
ALL OVER	45,000	2	631,800	90,000	541,800	631,800
		5	648,400	106,600	541,800	648,400

REVENUE BY RATE INCREMENT

	BILLS	GALLONS	RATE	REVENUE
FIRST	45,000	5	\$ 165.75	\$ 829
ALL OVER	45,000		\$ 5.58	3,023
TOTAL	5	648,400	\$	3,852

PROPOSED BILLING ANALYSIS - CURRENT USAGE & PROPOSED RATES
Lyon County Water District - Water Division

SUMMARY

	No. of Bills	Gallons Sold	Revenue
5/8" X 3/4" Meters	35,689	100,729,500	\$ 1,705,494
3/4" Meters	-	-	\$ -
1" Meters	121	1,053,300	19,908
1 1/2" Meters	90	1,351,160	18,999
2" Meters	74	5,005,100	49,410
Fire Hydrant	5	648,400	3,852
Totals	35,979	108,787,460	\$ 1,797,663
Less Billing Adjustments			\$ (162,579)
Net Total			\$ 1,635,084
Less Revenue Requirement			\$ (1,622,637)
Over/Under			\$ 12,447

5/8" x 3/4" METERS

	USAGE	BILLS	GALLONS	FIRST 2,000	NEXT 3,000	NEXT 5,000	NEXT 10,000	ALL OVER 20,000	TOTAL
FIRST	2,000	20,775	13,749,200	13,749,200	-	-	-	-	13,749,200
NEXT	3,000	10,886	35,043,800	21,772,000	13,271,800	-	-	-	35,043,800
NEXT	5,000	3,048	20,426,900	6,096,000	9,144,000	5,186,900	-	-	20,426,900
NEXT	10,000	700	9,453,800	1,400,000	2,100,000	3,500,000	2,453,800	-	9,453,800
ALL OVER	20,000	280	22,055,800	560,000	840,000	1,400,000	2,800,000	16,455,800	22,055,800
TOTAL		35,689	100,729,500	43,577,200	25,355,800	10,086,900	5,253,800	16,455,800	100,729,500

REVENUE BY RATE INCREMENT

	BILLS	GALLONS	RATE	REVENUE
FIRST	2,000	35,689	\$ 31.17	\$ 1,112,426
NEXT	3,000	25,355,800	\$ 13.31	337,486
NEXT	5,000	10,086,900	\$ 9.54	96,229
NEXT	10,000	5,253,800	\$ 8.03	42,188
ALL OVER	20,000	16,455,800	\$ 7.12	117,165
TOTAL	35,689	100,729,500		\$ 1,705,494

3/4" METERS

	USAGE	BILLS	GALLONS	FIRST 4,000	NEXT 1,000	NEXT 5,000	NEXT 10,000	ALL OVER 20,000	TOTAL
FIRST	4,000	0	-	-	-	-	-	-	-
NEXT	1,000	0	-	-	-	-	-	-	-
NEXT	5,000	0	-	-	-	-	-	-	-
NEXT	10,000	0	-	-	-	-	-	-	-
ALL OVER	20,000	0	-	-	-	-	-	-	-
TOTAL		-	-	-	-	-	-	-	-

REVENUE BY RATE INCREMENT

	BILLS	GALLONS	RATE	REVENUE
FIRST	4,000	-		\$ -
NEXT	1,000	-		-
NEXT	5,000	-		-
NEXT	10,000	-		-

ALL OVER	20,000	-	-	-
TOTAL	-	-	-	\$ -

1" METERS

	USAGE	BILLS	GALLONS	FIRST 15,000	NEXT 5,000	ALL OVER 20,000	TOTAL
FIRST	15,000	98	432,800	432,800	-	-	432,800
NEXT	5,000	5	83,000	75,000	8,000	-	83,000
ALL OVER	20,000	18	537,500	270,000	90,000	177,500	537,500
		121	1,053,300	777,800	98,000	177,500	1,053,300

REVENUE BY RATE INCREMENT

	BILLS	GALLONS	RATE	REVENUE
FIRST	15,000	121	777,800	\$ 147.58 \$ 17,857
NEXT	5,000		98,000	\$ 8.03 787
ALL OVER	20,000		177,500	\$ 7.12 1,264
TOTAL	121	1,053,300		\$ 19,908

1 1/2" METERS

	USAGE	BILLS	GALLONS	FIRST 25,000	ALL OVER 25,000	TOTAL
FIRST	25,000	66	618,200	618,200	-	618,200
ALL OVER	25,000	24	732,960	600,000	132,960	732,960
		90	1,351,160	1,218,200	132,960	1,351,160

REVENUE BY RATE INCREMENT

	BILLS	GALLONS	RATE	REVENUE
FIRST	25,000	90	1,218,200	\$ 200.58 \$ 18,052
ALL OVER	25,000		132,960	\$ 7.12 947
TOTAL	90	1,351,160		\$ 18,999

2" METERS

	USAGE	BILLS	GALLONS	FIRST 45,000	ALL OVER 45,000	TOTAL
FIRST	45,000	47	602,700	602,700	-	602,700
ALL OVER	45,000	27	4,402,400	1,215,000	3,187,400	4,402,400
		74	5,005,100	1,817,700	3,187,400	5,005,100

REVENUE BY RATE INCREMENT

	BILLS	GALLONS	RATE	REVENUE
FIRST	45,000	74	1,817,700	\$ 361.02 \$ 26,715
ALL OVER	45,000		3,187,400	\$ 7.12 22,694
TOTAL	74	5,005,100		\$ 49,410

FIRE HYDRANT

	USAGE	BILLS	GALLONS	FIRST 45,000	ALL OVER 45,000	TOTAL
FIRST	45,000	3	16,600	16,600	-	16,600
ALL OVER	45,000	2	631,800	90,000	541,800	631,800
		5	648,400	106,600	541,800	648,400

REVENUE BY RATE INCREMENT

	BILLS	GALLONS	RATE	REVENUE
FIRST	45,000	5	106,600	\$ 165.75 \$ 829
ALL OVER	45,000		541,800	\$ 5.58 3,023
TOTAL	5	648,400		\$ 3,852

CURRENT BILLING ANALYSIS - CURRENT USAGE & EXISTING RATES
Lyon County Water District - Sewer Division

SUMMARY

	No. of Bills	Gallons Sold	Revenue	
All Sewer Customers	818	3,217,300	\$ 24,341	
		Total	\$ 24,341	
		Less Billing Adjustments	\$ -	
		Net Total	\$ 24,341	
		Less PSC Annual Report	\$ (23,463)	
		SAO Adjustment	\$ 878	3.7%

All Sewer Customers

	USAGE	BILLS	GALLONS	FIRST 2,000	ALL OVER 2,000	TOTAL
FIRST	2,000	525	353,700	353,700	-	353,700
ALL OVER	2,000	293	2,863,600	586,000	2,277,600	2,863,600
		818	3,217,300	939,700	2,277,600	3,217,300

REVENUE BY RATE INCREMENT

	BILLS	GALLONS	RATE	REVENUE
FIRST	2,000	818	939,700 \$ 15.00	\$ 12,270
ALL OVER	2,000		2,277,600 5.30	12,071
TOTAL	818	3,217,300		\$ 24,341

PROPOSED BILLING ANALYSIS - CURRENT USAGE & PROPOSED RATES
Lyon County Water District - Sewer Division

SUMMARY

	No. of Bills	Gallons Sold	Revenue	
All Sewer Customers	818	3,217,300	\$ 61,736	
		Total	\$ 61,736	
		Less Billing Adjustments	\$ -	
		Net Total	\$ 61,736	
		Less Revenue Requirement	\$ (61,712)	
		Difference	\$ 24	0.0%

All Sewer Customers

	USAGE	BILLS	GALLONS	FIRST 2,000	ALL OVER 2,000	TOTAL
FIRST	2,000	525	353,700	353,700	-	353,700
ALL OVER	2,000	293	2,863,600	586,000	2,277,600	2,863,600
		818	3,217,300	939,700	2,277,600	3,217,300

REVENUE BY RATE INCREMENT

	BILLS	GALLONS	RATE	REVENUE
FIRST	2,000	818	\$ 38.05	\$ 31,125
ALL OVER	2,000	2,277,600	13.44	30,611
TOTAL	818	3,217,300		\$ 61,736