

MADISON
COUNTY
UTILITIES
WATER PURCHASED
ADJUSTMENT

PURCHASED WATER ADJUSTMENT FOR WATER DISTRICTS AND WATER ASSOCIATIONS (807 KAR 5:068)			
Name of Utility	Madison County Utilities District		
Date	June 2, 2022		
Address	PO Box 670		
City, State, Zip	Richmond, KY	40476-0670	
Telephone Number	859-624-1735		
Email Address	bmoberly@madisoncountyutilities.com		
<p>1.a. Name of all wholesale suppliers and the base (current) rate and changed rate of each. In the event the water purchased is billed by the supplier on a rate that is not a flat rate schedule, the entire rate schedule must be shown. Attach additional sheets if necessary.</p>			
Supplier(s)	Base Rate	Changed Rate	
Richmond Utilities	\$2.53725/100 Cu. Ft.	\$2.72272/100 Cu. Ft.	
KY River Authority	\$0.238/100 Cu. Ft.	\$0.238/100 Cu. Ft.	
Total	\$2.77525/100 Cu. Ft.	\$2.96072/100 Cu. Ft.	
<p>1.b. A copy of the supplier's notice of the changed rate showing the effective date of the increase is attached as Exhibit</p>			
<p>2. Twelve-month period upon which the purchased water adjustment is based. (This twelve-month period must end within 90 days of this filing).</p>			
From	April 1, 2021	through	April 1, 2022
	(month and year)		(month and year)
<p>3. Statement of water purchases. Where water is purchased from more than one supplier, purchases from each supplier must be shown separately. If water is purchased through a declining block rate schedule, purchases for each month must be shown. Attach an additional sheet if necessary.</p>			

Supplier(s)	Gallons Purchased during 12 month period
Richmond Utilities	101,694,400 CF
TOTAL PURCHASES	101,694,400 CF
4. Total gallons sold for the 12 month period	79,465,029 CF
5. Increased water cost	\$188,612.60
<p>The increased water cost is the cost difference between purchases at base (current rate) and purchases at new rate. The calculation and all supporting documents used to determine the change in purchased water costs sufficient to determine the accuracy of the calculation is attached as Exhibit</p>	
6. Purchased water adjustment factor	\$0.24
<p>The purchased water adjustment factor is obtained by dividing the increased cost of water by the total gallons sold.</p> <p>Note: The purchased water adjustment factor is added to each thousand gallons sold. If the minimum usage is 2,000 gallons then the purchased water adjustment factor would be added to the minimum bill twice.</p>	
7. A schedule listing the current and proposed rates is attached as Exhibit	
8. A copy of the resolution or other document of the utility's governing body authorizing the proposed rates is attached as Exhibit	
9. Proposed effective date	July 1 2022
Signature of Utility Officer	
Title	

List OF Exhibits

Exhibit #1 – Suppliers Notice

Exhibit #2- Gallons Purchased / Sold (04/01/2021 to 03/02/2022)

Exhibit #3- Calculations

Exhibit #4 -Proposed Bill Rates

Exhibit #5 - Resolution

Exhibit #1 – Suppliers Notice

Richmond Utilities

300 Hallie Irvine St.
PO BOX 700 – Richmond, KY 40476-0700
(859) 623-2323 – Office
(859) 624-0805 – Fax

May 25, 2022

Madison County Utility District
Attn: Jim Carr, Chairman
PO BOX 670
Richmond, KY 40476-0670

Dear MCUD Board

NOTICE

Richmond Utilities (“RU”) has filed a proposed rate schedule which will increase the rate for water service provided as follows:

	<u>Current Rate</u>	<u>Proposed Rate</u>	<u>% Difference</u>
Kirksville Water Association	\$2.53725/100 Cu Ft	\$2.72272/100 Cu Ft	7.31% Increase
Madison County Utility District	\$2.53725/100 Cu Ft	\$2.72272/100 Cu Ft	7.31% Increase

The proposed effective date is July 1, 2022, usage on or after this date.

The rates contained in this notice are the rates proposed by RU. However, the Public Service Commission may order rates to be charged that differ from the proposed rates contained in this notice.

Any corporation, association, or person with a substantial interest in the matter may, by written request, within thirty (30) days after publication or mailing of this notice of the proposed rate changes request to intervene. Intervention may be granted beyond the thirty (30) day period for good cause shown.

Any person who has been granted intervention by the Public Service Commission may obtain copies of the rate application and any other filings made by RU by contacting Scott Althausser at the offices of RU, 300 Hallie Irvine Street in Richmond, Kentucky: telephone 859-623-2323.

Any person may examine the rate application and other filings made by RU by visiting the offices of RU at 300 Hallie Irvine Street or by contacting the Public Service Commission at 211 Sower Boulevard in Frankfort, Kentucky; telephone 502-564-3940.

Sincerely,

Scott Althausser
General Manager

Cc: Greg Puckett, Counsel

Richmond Utilities

PO BOX 700
Richmond, KY 40475
859-623-2323

May 25, 2022

NOTICE - May 25, 2022

Richmond Utilities is providing notice that on May 25, 2022, it filed with the Public Service Commission to increase the wholesale rate it charges Kirksville Water Association and Madison County Utility District effective for water service on and after July 1, 2022.

	<u>Current Rate</u>	<u>New Rate</u>	<u>\$ Change</u>	<u>% Change</u>
Kirksville Water Association	\$2.53725 per 100 cubic feet	\$2.72272 per 100 cubic feet	\$0.18547 Increase	7.31% Increase
Madison County Utility District	\$2.53725 per 100 cubic feet	\$2.72272 per 100 cubic feet	\$0.18547 Increase	7.31% Increase
Kentucky River Authority Fee	\$0.23800 per 100 cubic feet	\$0.23800 per 100 cubic feet	No change	

Water flowing through the meter(s) before the effective date will be charged at the current rates while water flowing through the meter(s) on and after the effective date will be charged at the new rates.

In accordance with Public Service Commission procedures, the effective date of the new rates cannot be prior to the expiration of a 30-day notice given to the Commission, Kirksville Water Association and Madison County Utility District.

This filing may be examined at the offices of Richmond Utilities located at 300 Hallie Irvine Street in Richmond, Kentucky.

This filing may also be examined at the offices of the Public Service Commission located at 211 Sower Boulevard in Frankfort, Kentucky, Monday – Friday from 8:00 am – 4:30 pm or on the PSC website at <http://psc.ky.gov>.

Comments regarding this filing may be submitted by mail to the Public Service Commission, Post Office Box 615, Frankfort KY 40602; or through its website at <http://psc.ky.gov>.

The new rates are the rates proposed by Richmond Utilities in its filing but the Public Service Commission may order rates that differ from the proposed rates.

Intervention may be requested by submitting a timely written request for intervention by mail to the Public Service Commission, Post Office Box 615, Frankfort, KY 40602. The request for intervention must establish the grounds for the request including the status and interest of the party.

If the Public Service Commission does not receive a written request for intervention within thirty (30) days of the providing of this notice, the Public Service Commission may take final action on the filing.

Technical Memorandum



RU No. 1

Richmond Utilities

To: Scott Althausen
General Manager

Water Utility Cost of Service - Wholesale
May 2022

Background

Salt River Engineering was contracted by Richmond Utilities to perform a cost of service study for the municipal water utility. The utility provides water service to direct and wholesale customers in Richmond, Kentucky. Additionally, RU serves a small number of residential and commercial customers in areas contiguous to Richmond's incorporated boundary. Wholesale customers, Kirksville Water Association and Madison County Utility District, purchase approximately 35 percent of the total water produced by RU in Fiscal Year 2021 (3,386,660 100 cubic feet). RU's direct customers purchase approximately 41 percent and the remainder is non-revenue water.

The last rate study performed for the water utility was in 2006. Since then, the only increases to the direct and wholesale rates have been annual Consumer Price Index adjustments. The PSC did not allow a CPI index adjustment to KWA and MCUD rates in 2021. The current wholesale rate is \$2.53725 per 100 cubic feet, last adjusted by the CPI (1.8%) in July 2020.

The current rate study (COSS) included cost allocations with the goal of creating true, cost-based rates for each customer class. Revenue requirements were calculated using the utility basis, in preparation for a possible defense before the PSC.

Master meters serving KWA and MCUD exist around the periphery of RU's water distribution system. Treated water comes from the RU treatment plant and side storage via parallel transmission mains. Smaller transmission mains, distribution and service lines make up the RU distribution system, which, in turn conveys water to all the wholesale master meters. RU offers their direct customers public fire protection, as does KWA and MCUD.

Method

There are several methods for performing a cost of service study for a water utility. The method used for RU's utility is developed and promoted by American Water Works Association in their seminar, "Financial Management: Cost of Service Ratemaking." The process includes functionalizing the rate base and test year expenses, then applying various assignments to separate the costs into costs centers such as, commodity, capacity, customer and fire protection. The costs are then allocated using factors prescribed in the AWWA method. The factors allow for the different ways the customer classes use the system, the operation and maintenance costs they cause and the degree of customer service they require.

Rate Base

The existing (test year) and pro forma rate base was functionalized, assigned to the proper cost center and then allocated to the customer class(es) who created the need for the capital expenditure. The allocation of the capital items in the rate base provides defensible allocation *factors* for use in allocating depreciation and other expenses. Additionally, the rate base serves as the basis for any return component.

Distribution System

The portion (or percentage) of a Seller's distribution system used in the conveyance of potable water to the Buyer's master meters is often a source of contention in rate cases. AWWA provides a method of estimating the combined pipe capacity that is necessary for serving direct customers' minimum service, for allowance for peak flows throughout the day, and for fire protection. The direct customers' minimum service portion is not relevant to sales for resale and is withheld from the wholesale customers' share of the expenses. The portion allowed for peak flows (capacity) is to be paid by all customers, direct and wholesale. Finally, the fire protection portion, in the case of KWA and MCUD, is applicable to wholesale as the fire flows of both utilities must pass through RU's distribution system. AWWA's distribution system analysis solves for these three percentages and the resultant equation is used to allocate many of the O&M expenses.

Operation and Maintenance Expenses

Calculating O&M expenses for the utility basis method includes functionalizing the test year expenses, then applying known and measurable (pro forma) changes for the forward year. The utility basis is required for PSC-regulated utilities and therefore, any rate case involving a regulated utility. Calculating revenue requirements using the utility basis puts the Seller at a disadvantage in that only known and measurable changes to test year expenses are allowed. The Kentucky PSC is very strict, allowing only contractual or other equally verifiable adjustments to test year expenses. As a result, the rates calculated in this way are always lagging actual expenses. Even though using the utility basis to calculate revenue requirements is disadvantageous to RU, the method was chosen because of the possibility of RU having to defend the proposed wholesale rates at the PSC. Additionally, in anticipation of PSC's adjustments for excess non-revenue water (or, water loss), chemical and power expenses assigned to wholesale customers were reduced by a percentage equal to the percentage of water loss greater than 15 percent.

Capital Expenses

Capital costs comprise a substantial portion of revenue requirements. Calculating capital costs according to the utility basis is quite different than the cash needs method. The utility basis typically allows for interest expenses, annual depreciation and return on rate base. While principal on existing debt is generally not allowed, interest for existing and committed future debt is an eligible expense. Though "depreciation" is a nebulous and mysterious concept (especially for non-accountants), the utility basis uses the annual depreciation of the rate base as a real expense. The presumption is that the utility replaces capital assets when they reach the end of their useful life and the depreciation expense allowance provides the funds for the replacements. Annual depreciation is allocated in a similar manner as the rate base. Additionally, the utility basis provides for the utility to earn a return on the capital investment. For for-profit utilities, the calculation of a return on rate base (or return on equity) is a long and complicated process. For a municipal

utility, SRE typically asks for a small return on rate base of non-Owner customers which is comprised of the cost of money (KIA Fund F interest rate plus service fee, in this case) and a risk premium if there is a possibility of the customer reducing or eliminating the volume of water purchased from the municipality.

Findings and Recommendations

Generally speaking, the wholesale customers use the RU treatment and distribution system much as the direct customers. The wholesale master meters surround the system and they pull fire flows through the distribution and transmission lines. Though they pay a small fraction of the expenses related to customer accounts and metering, most of the customer costs are not applicable to KWA and MCUD. As non-Owner customers, KWA and MCUD do pay a small return on rate base—a cost city residents are not charged. As one would expect, the recommended wholesale volumetric rate is quite close to the calculated residential rate (\$2.75 and \$2.68 per 100 cubic feet, respectively). The cost associated with the PSC reduction for excess water loss was moved from wholesale to direct customers as an unavoidable subsidy.

Proforma expenses and the return on rate base allocated to wholesale customers resulted in a \$3,263,775 revenue requirement needed from KWA and MCUD. The revenue requirement includes the \$113,739 expense reduction for excess non-revenue water. The revenue requirement results in a 7.31 percent increase from the revenue generated from KWA and MCUD in Fiscal Year 2021 (\$3,041,534). As stated earlier, the PSC did not allow RU to apply the CPI to wholesale rates in 2021. The 2021 CPI was 1.2 percent; the 2022 CPI is 4.7 percent. Successive applications of the indices would have resulted in a wholesale revenue requirement of \$3,222,700, just over 1.25 percent different from the revenue requirement calculated in the COSS. It should be noted that the revenue requirement does not include the Kentucky River Authority withdrawal fee passed through to every customer of RU.

Wholesale Revenue Fiscal Year 2021 (test year)	\$3,041,534
Old Rate per 100 cubic feet	\$2.53725
Wholesale Revenue Requirement from COSS	\$3,263,775
Increase Required from Wholesale Customers	7.31%
New Wholesale Rate per 100 cubic feet (<i>requirement/volume</i>)	\$2.7227

Exhibit #2- Gallons Purchased / Sold
(04/01/2021 to 03/02/2022)

Madison County Utilities

Time Period	Cubic Feet Water Purchased	Cubic Feet Water Sold	Dollar Amt of Water Sales
4/1/2021 - 5/1/2021	7,589,000	5,890,184	\$367,801.51
5/1/2021 - 6/1/2021	9,355,500	7,676,337	\$459,835.12
6/1/2021 - 7/1/2021	8,413,500	8,060,896	\$478,460.96
7/1/2021 - 8/1/2021	9,492,700	6,592,601	\$404,206.61
8/1/2021 - 9/1/2021	9,564,600	7,741,251	\$461,966.17
9/1/2021 - 10/1/2021	8,592,000	6,654,338	\$406,159.37
10/1/2021 - 11/2/2021	7,158,900	5,715,234	\$361,163.34
11/2/2021 - 12/1/2021	8,059,600	6,808,892	\$413,813.50
12/1/2021 - 1/3/2022	8,441,800	5,848,270	\$367,501.93
1/3/2022 - 2/1/2022	8,431,100	6,706,338	\$410,565.30
2/1/2022 - 3/2/2022	8,049,400	5,435,042	\$389,344.83
3/2/2022 - 4/1/2022	8,546,300	6,335,646	\$437,968.95

Totals: 101,694,400 79,465,029 \$4,958,787.59

Exhibit #3- Calculations

Exhibit #3

MCUD Calculations

5. Increased Water Cost:

$$\$2.77525/100 \text{ cu ft to } \$2.96072/100 \text{ cu ft} = \$0.18547$$

$$101,694,400 \times \$0.18547 / 100 \text{ cu ft} = \mathbf{\$188,612.60}$$

6. Purchase Water Adjustment Factor:

$$\$188,612.60 / 79,465,029 (100 \text{ cu ft}) = \$0.2374 \text{ } (\mathbf{\$0.24 \text{ per } 100 \text{ cu ft}})$$

Exhibit #4 -Proposed Bill Rates

Exhibit 4

MCUD Water Rates

		<u>Existing</u>	<u>Proposed</u>	
First	280 cubic feet	\$19.23	\$19.91	Minimum Bill
Next	720 cubic feet	\$6.12	\$6.36	per 100 cubic feet
Next	3,000 cubic feet	\$5.88	\$6.12	per 100 cubic feet
Next	8,000 cubic feet	\$5.66	\$5.90	per 100 cubic feet
Next	88,000 cubic feet	\$5.45	\$5.69	per 100 cubic feet
Over	100,000 cubic feet	\$5.10	\$5.34	per 100 cubic feet

Exhibit #5 - Resolution


RESOLUTION FOR PASS THRU RATE INCREASE

Madison County Utilities District

WHEREAS Madison County Utilities District proposes to raise their water rates to offset an increase in their wholesale purchase rates from Richmond Utilities.

NOW THEREFORE BE IT RESOLVED by the Commissioners of Madison County Utilities District that Jim Carr, Chairman, is authorized to execute and submit an application to the Kentucky Public Service Commission to raise the Madison County Utilities District's Water Rates by \$0.24 per 100 cubic feet.

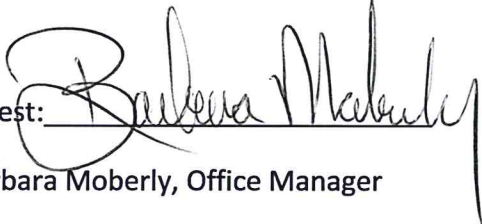
Adopted this 26th day of May, 2022



Jim Carr, Chairman

Madison County Utilities District

Attest:



Barbara Moberly, Office Manager

DATE BILL ISSUED: 06/29/2022

MADISON COUNTY UTILITIES DISTRICT
 PO BOX 670
 RICHMOND KY 40476-0670
 (859) 624-1735
 info@madisoncountyutilities.com

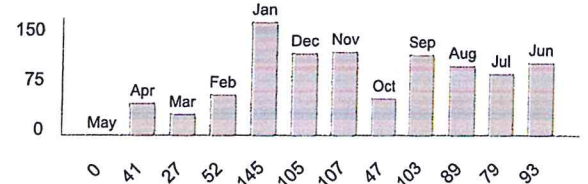
SERVICE ADDRESS: [REDACTED]	
ACCOUNT NUMBER	[REDACTED]
TOTAL AMOUNT DUE ON OR BEFORE 07/15/2022	\$19.81
TOTAL DUE IF PAID AFTER 07/15/2022	\$21.73
CUT OFF DATE	07/26/2022



[REDACTED] 1
 [REDACTED]
 [REDACTED]



CONSUMPTION FOR THE PAST 12 MONTHS



READING TYPE:

TYPE OF SERVICE	METER READ DATES		METER READINGS		USAGE (CUBIC FT)	AMOUNT
	PREVIOUS	CURRENT	PREVIOUS	CURRENT		
Balance Forward: 05/31/2022						19.81
Payment Check						-19.81
Water	05/18/2022	06/13/2022	13246	13246		19.23
School Tax						0.58

MESSAGES

IMPORTANT MESSAGES

OFFICE WILL BE CLOSED July 4TH, 2022

BOIL WATER AND EMERGENCY NOTIFICATIONS WILL BE SENT BY EMAIL AND TEXT PLEASE CONTACT OUR OFFICE TO UPDATE ALL CONTACT INFORMATION

Notice is hereby given that Madison County Utilities District has filed an application with the Public Service Commission (PSC) to adjust its water rates as a result of an increase from its supplier, Richmond Utilities. The proposed effective date is July 1, 2022. The proposed changes are as follows:

	Monthly Schedule	Current Rates	Proposed Rates	\$ Increase	% Increase
First	280 cubic feet	\$19.23	\$19.91	0.68 (Minimum Bill)	3.5
Next	720 cubic feet	\$6.12	\$6.36	0.24 (per 100 cubic feet)	3.9
Next	3,000 cubic feet	\$5.88	\$6.12	0.24 (per 100 cubic feet)	4.1
Next	8,000 cubic feet	\$5.66	\$5.90	0.24 (per 100 cubic feet)	4.2
Next	88,000 cubic feet	\$5.45	\$5.69	0.24 (per 100 cubic feet)	4.4
Over	100,000 cubic feet	\$5.70	\$5.34	0.24 (per 100 cubic feet)	4.7

The average bill for a customer using 500 cubic feet of water each month would increase 1.21% from \$32.69 to \$33.90 for an increase of \$1.21 in the average customer's monthly bill. Any person may examine this application at the district's office located at 297 Michelle Drive, Richmond, Kentucky Monday through Friday 8:00am to 4:30pm; Telephone (859) 624-1735. Any person may examine this application at the PSC located at 211 Sower Boulevard, Frankfort, Kentucky or on the PSC website at <http://psc.ky.gov> telephone (502) 564-3940

8

PLEASE DETACH BOTTOM PORTION AND RETURN WITH YOUR PAYMENT

1

PLEASE CHECK BOX IF CORRECTIONS ARE INDICATED ON REVERSE SIDE

SERVICE ADDRESS: [REDACTED]	
CUSTOMER NAME: [REDACTED]	
ACCOUNT NUMBER	[REDACTED]
TOTAL AMOUNT DUE ON OR BEFORE 07/15/2022	\$19.81
TOTAL DUE IF PAID AFTER 07/15/2022	\$21.73

MAKE CHECKS PAYABLE TO:

MADISON COUNTY UTILITIES DISTRICT
 PO BOX 670
 RICHMOND KY 40476-0670



1180430001

071522

00001981

00002173

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