COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ELECTRONIC APPLICATION OF KENTUCKY-AMERICAN WATER COMPANY FOR AN ADJUSTMENT OF RATES, A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY FOR INSTALLATION OF ADVANCED METERING INFRASTRUCTURE, APPROVAL OF CERTAIN REGULATORY AND ACCOUNTING TREATMENTS, AND TARIFF REVISIONS	)	**CASE NO. 2023-00191**

DIRECT TESTIMONY

AND EXHIBITS

OF

GREG R. MEYER

ON BEHALF OF THE

OFFICE OF THE ATTORNEY GENERAL OF THE COMMONWEALTH OF KENTUCKY

AND

LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT

Brubaker &Associates, Inc.
16690 Swingley Ridge Road, Suite 140
Chesterfield, MO 63017

September 29, 2023

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DIRECT TESTIMONY OF GREG R. MEYER

I. QUALIFICATIONS AND SUMMARY

Q. Please state your name and business address.

A. Greg R. Meyer. My business address is 16690 Swingley Ridge Road, Suite 140, Chesterfield, Missouri 63017.

Q. What is your occupation and by whom are you employed?

A. I am a consultant in the field of public utility regulation and a Principal with the firm of Brubaker & Associates, Inc. ("BAI"), energy, economic, and regulatory consultants.

Q. Please describe your educational and professional experience.

A. I graduated from the University of Missouri in 1979 with a Bachelor of Science Degree in Business Administration, with a major in Accounting. Subsequent to graduation I was employed by the Missouri Public Service Commission. I was employed with the Commission from July 1, 1979 until May 31, 2008.

I began my employment at the Missouri Public Service Commission as a Junior Auditor. During my employment at the Commission, I was promoted to higher auditing classifications. My final position at the Commission was an Auditor V, which I held for approximately ten years.

As an Auditor V, I conducted audits and examinations of the accounts, books, records, and reports of jurisdictional utilities. I also aided in the planning of audits and investigations, including staffing decisions, and in the development of staff positions in which the Auditing Department was assigned. I served as Lead Auditor and/or Case Supervisor as assigned. I assisted in the technical training of other auditors, which included the preparation of auditors' workpapers, oral and written testimony.

During my career at the Missouri Public Service Commission, I presented testimony in numerous electric, gas, telephone, and water and sewer rate cases. In addition, I was involved in cases regarding service territory transfers. In the context of those cases listed above, I presented testimony on all conventional ratemaking principles related to a utility's revenue requirement. During the last three years of my employment with the Commission, I was involved in developing transmission policy for the Southwest Power Pool as a member of the Cost Allocation Working Group.

In June of 2008, I joined the firm of Brubaker & Associates, Inc. as a Consultant. Since joining the firm, I have presented testimony and/or testified in the state jurisdictions of Arkansas, Florida, Idaho, Illinois, Indiana, Iowa, Maryland, Missouri, Montana, New Mexico, Ohio, Utah, Washington, Wisconsin, and Wyoming. I have also appeared and presented testimony in Alberta and Nova Scotia, Canada. In addition, I have filed testimony at the Federal Energy Regulatory Commission ("FERC"). These cases involved addressing conventional ratemaking principles focusing on the utility's revenue requirement. The firm Brubaker & Associates, Inc. provides consulting services in the field of energy procurement and public utility regulation to many clients including industrial and institutional customers, some utilities, offices of attorneys general, and, on occasion, state regulatory agencies.

More specifically, we provide analysis of energy procurement options based on consideration of prices and reliability as related to the needs of the client; prepare rate, feasibility, economic, and cost of service studies relating to energy and utility services; prepare depreciation and feasibility studies relating to utility service; assist in contract negotiations for utility services, and provide technical support to legislative activities.

In addition to our main office in St. Louis, the firm also has branch offices in Corpus Christi, Texas; Detroit, Michigan; Louisville, Kentucky, and Phoenix, Arizona.

Q. On whose behalf are you appearing in this proceeding?

A. I am appearing on the behalf of the Office of the Attorney General of the Commonwealth of Kentucky ("OAG") and the Lexington-Fayette Urban County Government ("LFUCG").

II. CASE OVERVIEW

Q. What increase has Kentucky-American Water Company ("KAWC" or "Company") requested in this rate case?

A. KAWC has requested an approximate $26.1 million, or 22.7% (net of QIP revenues), increase in cost of service (revenue requirement).[1] KAWC filed the direct testimony of 16 witnesses.

Q. Based on your review of KAWC's rate case filing and testimony, do you believe that a $26.1 million increase in revenues is justified?

A. No. I believe KAWC's claimed revenue requirement is overstated. Mr. Baudino and I performed analyses of many of the aspects of KAWC's operations. Based on our review, we believe KAWC has overstated its requested revenue requirement by at least $12.9 million.

It should be noted that if I do not address a specific cost of service issue then that should not be interpreted as accepting KAWC's position. The OAG and LFUCG's final adjustments may differ based upon discovery, testimony, and further evidence presented throughout the course of this proceeding. Thus, both the OAG and LFUCG reserve the right to present additional arguments.

[1]Application at 3.

Table GRM-1

KAWC Revenue Requirement Adjustments and Deficiency
($000's)

Line	Issue	Witness	Amount
1	KAWC Claimed Revenue Deficiency		$26,100
2	Rate of Return	Baudino	(6,733)
3	Labor Adjustment	Meyer	(2,179)
4	Incentive Compensation Adjustment	Meyer	(374)
5	Non-Labor Employee Costs Adjustment	Meyer	TBD
6	Credit Card Fees Adjustment	Meyer	(349)
7	Revenue Adjustment	Meyer	(1,876)
8	Water Losses Adjustment	Meyer	(522)
9	Misc. Expense Adjustment	Meyer	(121)
10	Cash Working Capital Adjustment	Meyer	(703)
11	Total Adjustments		(12,857)
12	OAG/LFUCG Proposed Revenue Deficiency		$13,243

III. QUANTIFICATIONS OF MR. BAUDINO'S RATE OF RETURN

Q. What are the effects of Mr. Baudino's rate of return recommendations?

A. Mr. Baudino proposes a return in equity of 9.40% and a capital structure consisting of the following components:

- Short Term Debt: 0.96%
- Long-Term Debt: 48.66%

- Preferred Stock: 0.38%
- Common Equity: 50.00%

Based on these rate of return assumptions, KAWC's revenue requirement would be reduced by approximately $6.7 million.

Q. Can you provide a table that shows the effects of Mr. Baudino's rate of return recommendations?

A. Yes, Table GRM-2 shows the effects on KAWC's revenue requirement from Mr. Baudino's rate of return recommendations.

TABLE GRM-2

Cost of Capital - As Filed and As Recommended by Richard A. Baudino

Company Proposed Cost of Capital (KAWC Exhibit 37, Schedule J-1)

	Capital Amount	Capital Ratio	Component Costs	Wtd. Average Costs	Pre-Tax Wtd Avg. Cost of Capital
Short-Term Debt	$5,752,848	0.96%	3.818%	0.040%	0.040%
Long-Term Debt	275,967,193	46.21%	4.681%	2.160%	2.160%
Preferred Stock	2,245,236	0.38%	8.510%	0.030%	0.040%
Common Equity	313,228,976	52.45%	10.750%	5.640%	7.572%
Total Capital	$597,194,253	100.00%		7.870%	9.812%

Richard A. Baudino Proposed Cost of Capital

	Capital Amount	Capital Ratio	Component Costs	Wtd. Average Costs	Pre-Tax Wtd Avg. Cost of Capital
Short-Term Debt	$5,733,065	0.96%	3.818%	0.037%	0.037%
Long-Term Debt	290,594,724	48.66%	4.681%	2.278%	2.278%
Preferred Stock	2,245,236	0.38%	8.510%	0.032%	0.043%
Common Equity	298,621,229	50.00%	9.400%	4.700%	6.311%
Total Capital	$597,194,253	100.00%		7.047%	8.668%

Note: Pre-Tax Wtd. Average Cost of Capital calculated using KAWC's Gross Revenue Conversion Factor of 1.342559. See KAWC Exhibit 37A, page 2 of 2, line 32.

IV. LABOR ADJUSTMENT

Q. Have you reviewed the direct testimony of KAWC witness Mr. John Watkins as it relates to the labor adjustment?

A. Yes, I have.

Q. Do you have any concerns with the total labor costs included in KAWC's cost of service?

A. Yes, however, my first concern with the Company's overall test year for labor cost is that it includes significant cost related to unfilled positions. The labor costs totaling $617,983 for these unfilled positions should not be included in the Company's revenue requirement so long as the positions remain unfilled. These vacancies occurred during 2023, the majority aren't going to be posted as available until the fourth quarter of 2023, and a couple of the vacancies are currently under review.[2]

I analyzed the total labor costs from 2018 through 2022, the base period (September 30, 2023) and the proposed test year (January 31, 2025), both before and after removing salaries and wages of vacant positions. I prepared Table GRM-2 that shows the historic levels of labor costs.

[2]See KAWC's Response to OAG Data Request, 2-10. Please note the Company has filed a Petition for Confidential Protection concerning the individual salary/wage and associated non-labor employee costs of each vacant position, so I will only discuss the vacant position costs in the aggregate amount. The $617,983 is only the total direct labor costs of these vacancies.

Table GRM-3

Historic Levels of Total Labor Costs

Line	Year	Labor Costs
1	2018	$ 9,505,452
2	2019	$ 10,010,975
3	2020	$ 10,539,095
4	2021	$ 9,582,186
5	2022	$ 11,843,553
6	Proposed Base Year	$ 11,857,295
7	Proposed Test Year	$ 10,605,902
8	Proposed Test Year Net of Vacancies	$ 9,987,919

Sources:
KAW_APP_EX37G_063023 Page 3.
Vacancies: KAWC response to OAG Data Request 2-10

As can be seen from Table GRM-3 above, the test year level of labor costs have decreased from the level of payroll costs incurred in 2022 and the proposed base period.

Q. What are the different treatments of labor costs?

A. Labor costs can be classified as either an expense or capitalized with a construction project. As the name implies, labor expenses are labor costs necessary to run the day-to-day operations of KAWC. Capitalized payroll costs are the amount of payroll costs charged to a construction project that support the investments placed in service. Capitalized payroll costs are included in the total construction costs of an investment and are collected through depreciation expense.

Q. What are the historic percentages of capitalized payroll versus expense payroll?

A. I have prepared Table GRM-4 below that shows the historic percentages of capitalized payroll versus expensed payroll.

Table GRM-4

Historic Percentages of Capitalized/Expense Payroll Costs

Line	Year	Percent Capitalized	Percent Expensed
1	2018	39%	61%
2	2019	40%	60%
3	2020	42%	58%
4	2021	44%	56%
5	2022	45%	55%
6	Proposed Base Year	44%	56%
7	Proposed Test Year	26%	74%

Source:
KAWC Exhibit 37, Schedule G

As can be seen from Table GRM-4, the historic level of capitalized payroll costs have been in the range of 39%-45% and within the last three years (2020-2022) the range has tightened to 42%-45%. However, in the proposed test year the capitalized payroll costs plummeted to 26% of total payroll costs. Similarly, the historic level of expensed payroll costs have been in the range of 55%-61% and within the last three years, as well as the proposed base year, the range has been steady at 55%-58%. In the proposed test year, the expensed payroll percentage skyrocketed to 74%. I was unable to find any KAWC testimony that provided justification for this dramatic shift in payroll costs.

Q. Is it important to have the right relationship between capitalized payroll and expensed payroll?

A. Yes. It is very important to have the correct relationship between capitalized payroll and expensed payroll costs. In this instance, I contend that KAWC has significantly overstated expensed payroll.

Q. What effect would an overstatement of expensed payroll have on KAWC's ratepayers?

A. If KAWC significantly overstates its payroll costs, then KAWC's ratepayers would pay rates that include payroll costs that were not expensed in actual operations. Therefore, KAWC's ratepayers would be paying rates that were too high for expensed payroll. This would create enhanced profits for KAWC's shareholders. If expensed payroll costs were significantly overstated then capitalized costs would be understated. In that instance, the portion of capitalized payroll costs included in investments would be understated resulting in large plant in service balances subject to collection through future depreciation expense.

Q. Could you please provide an example to show how overstating payroll expenses would harm KAWC's ratepayers?

A. Certainly. Assume that total payroll in a rate case is $1,000,000, and the proposed capitalized portion is 25% and the expense portion is 75%. This would mean that the expenses included in KAWC's rates would be established to collect $750,000 of payroll expenses. Similarly, capitalized payroll of $250,000 would be included in future capital projects.

In the event that the actual amount of payroll expensed in the test year was 55% and the capitalized payroll amounted to 45%, which are very close to the historic amounts for KAWC, the actual payroll expensed during the year that rates were in effect would be $550,000 and capital payroll would be $450,000. In the year rates are in effect, KAWC's ratepayers would pay rates to collect $750,000 of expensed labor charges, but actual expensed labor costs would only be $550,000, thereby creating a windfall of $200,000 for KAWC's shareholders.

In a similar fashion, if rates were established to recognize $250,000 of capitalized payroll when in actuality, KAWC capitalized $450,000, then KAWC would now be allowed to collect the additional capitalized payroll ($200,000) through future collections of depreciation. Not only would KAWC's ratepayers suffer from paying rates that are too high for expensed payroll, but the ratepayers would also be required to pay higher depreciation expenses to recover the additional capitalized payroll costs. This would be a double win for KAWC's shareholders, but a double loss for the Company's ratepayers.

Q. What is your proposal for distributing total payroll expense in this rate case?

A. I propose to adopt a three-year average of the expensed/capitalized payroll ratio from 2020-2022. Using the three-year average results in expensed payroll of 56% and a capitalized payroll of 44%. This payroll distribution is very consistent with the historic actual payroll distributions that were highlighted in Table GRM-3.

Q. What effect does your proposed payroll distribution have on KAWC's revenue requirement?

A. My proposed payroll distribution decreases the amount of payroll expensed by approximately $1.83 million and this would also reduce KAWC's revenue requirement by the same amount. I have also proposed to remove the expense portion of the labor costs associated with vacant positions after correcting the expense portion in the amount of $0.35 million. My complete payroll adjustment removes approximately $2.18 million in expense. I have summarized my payroll adjustments in Table GRM-5.

TABLE GRM-5

Payroll Adjustment Summary

Line	Description	Amount
1	Total Test Year Payroll Costs	$ 10,605,902
2	Company Proposed Payroll Expense Portion ($)	$ 7,802,450
3	Company Proposed Payroll Expense Portion (%) [Line 2 ÷ Line 1]	73.57%
4	OAG/LFUCG Proposed Payroll Expense Portion (%)	56.31%
5	OAG/LFUCG Proposed Payroll Expense Portion ($) [Line 1 x Line 4]	$ 5,971,666
6	OAG/LFUCG Proposed Payroll Expense Adjustment for O&M % [Line 5 - Line 2]	$ (1,830,785)
7	Vacancy Cost to Be Removed - before application of O&M percentage	$ (617,983)
8	OAG/LFUCG Expense Portion of Vacancy Labor Costs Adjustment [Line 7 x Line 4]	$ (347,956)
9	Total OAG/LFUCG Labor Cost Adjustment [Line 6 + Line 8]	$ (2,178,741)

Q. Does your proposed adjustment also include overtime costs?

A. Yes. Since I was addressing total payroll costs, overtime is included in my adjustment.

V. INCENTIVE COMPENSATION

Q. Have you read the direct testimonies of Mr. Robert Mustich and Mr. William Lewis as it relates to incentive compensation?

A. Yes, I have.

Q. Is KAWC requesting full recovery of incentive compensation costs?

A. Yes.

Q. What level of incentive compensation was built into the Company's revenue requirement?

A. In response to the Staff's Data Request No. 1-33, KAWC indicated that they had included $712,961 in incentive compensation in the calculation of revenue requirement.

Q. Please describe the Company's incentive compensation plans.

A. In response to the Staff's Data Request No. 1-33, KAWC provided plan descriptions for each incentive plan offered to its employees. KAWC's parent company, American Water Works Company, Inc. ("American Water"),[3] offers an annual performance plan ("APP") and a long-term performance plan ("LTPP"). The APP has both a non-union and a union version.

Both the non-union and the union APPs are determined based on performance in five different strategic areas: Growth, Customer, Safety, Environmental Leadership, and People. Each strategic area has specified goals required to be met, along with a weighting of each area in the composition of the total payout of incentives.

The largest single component for both the non-union and union APPs is in the Growth strategic area, weighted at 50% of the total. The specified goal for the 2023 plan in the Growth area was to achieve an earnings per share target between $4.72 and $4.82. The plan documents then go on to note that, "[u]nder the 2023 APP, no awards will be issued if adjusted Earnings Per Share (EPS) is below 90% of the target."

The LTPP is broken down into three different awards:

- granting of restricted stock units ("RSUs") accounts for 30% of the award program,

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[3]Application at 2.

- granting of performance stock units ("PSUs") accounts for 35% based on total shareholder return ranking among peer companies, and
- granting of PSUs based on earnings per share growth accounts for 35% of the program.

Q. Do you agree with this proposed level of incentive compensation?

A. No. I am proposing to remove the 50% of the Company's APP that is driven by earnings per share. I am also proposing to remove the entirety of the Company's LTPP. Both the 50% of the APP driven by achieving earnings per share targets and the entirety of the LTPP are tied to metrics that primarily benefit shareholders and do not provide measurable benefits to ratepayers.

I must note here that my proposal is not to eliminate the programs or deprive the Company's employees of incentive compensation. I am merely proposing that the responsibility for funding be assigned to the beneficiaries of the programs. It is appropriate that shareholders, who are the beneficiaries, be asked to provide the funds to continue these portions of the incentive programs.

Q. Is your proposal in line with the Commission's Order in the Company's last base rate case, Docket No. 2018-00358?

A. Yes. In that Order the Commission noted that it "has consistently disallowed recovery of the cost of employee incentive compensation plans that are tied to financial measures because such plans benefit shareholders while ratepayers receive little benefit."[4]

[4]Case No. 2018-00358, *Electronic Application of Kentucky-American Water Company for an Adjustment of Rates* (PSC Ky. June 27, 2019), Order at 43.

Q. What is the value of your adjustment?

A. In its response to Staff's Data Request No. 1-33, KAWC indicated that the total forecasted test year incentive compensation was $712,961. Based on the breakdown of the incentives paid in the years 2018 through 2022, I estimate that removing 50% of the APP and 100% of the LTPP will reduce the Company's forecasted test year revenue requirement by $373,598. I request that the Company provide the breakdown so a more exact calculation may be performed.

VI. NON-LABOR EMPLOYEE-RELATED COSTS

Q. Based on your adjustments for labor cost and incentive compensation, are there any other expense items that would need adjustment?

A. Yes. There would need to be an adjustment related to payroll tax and potentially adjustments related to other salary related benefits, such as: pensions, 401(k) matching expense, and potentially some group insurance expenses among others.

Q. Have you quantified this adjustment?

A. No. The Company would need to provide this calculation or provide sufficiently detailed workpapers to calculate the non-labor employee cost adjustment.

VII. CREDIT CARD FEES

Q. Have you read the direct testimony of KAWC witness Mr. Jeffrey Newcomb as it relates to the payment of vendor electronic payment fees for the use of credit cards to pay utility bills?

A. Yes, I have. Mr. Newcomb recommends that KAWC waive the payment of vendor electronic payment fees for the use of credit cards to pay utility bills and socialize the cost by including these fees in KAWC's revenue requirement. KAWC has included \$349,284 in their revenue requirement related to credit card processing fees.[5]

Q. What is Mr. Newcomb's rationale for proposing to eliminate these vendor fees currently assessed to customers paying with a credit card?

A. Mr. Newcomb stated that, "[e]liminating the direct payment of the fee is expected to help more customers pay their bill on time, avoid late fees and potential disconnections, and improve timely collections."[6]

Q. Do you support Mr. Newcomb's recommendation to eliminate vendor fees for customers paying with credit cards?

A. No. While I agree that eliminating impediments to on-time bill payment would generally be a good thing, I do not believe that this request would significantly help to achieve that goal.

According to the Federal Reserve, almost all people with income over \$100,000 has a credit card, and most people with income over \$50,000 has a credit card, but at

[5]KAWC's Response to OAG Data Request, 1-35(a).
[6]See the Direct Testimony of Jeffrey Newcomb at page 13.

lower income levels having a credit card was less common.[7] Essentially, eliminating the vendor electronic payment fees is likely to create a subsidy for higher income individuals as they are most likely to have (and use) a credit card to garner increased points and rewards associated with various credit card loyalty programs, such as cash back and reduced costs for hotel stays and flights. These benefits are not generally available to lower income ratepayers who are less likely to have a credit card and who may be more likely to be behind on their utility bills.

Q. What is your proposal for treatment of vendor electronic payment fees and what effect does your proposal have on KAWC's revenue requirement?

A. I propose that these costs be removed from KAWC's revenue requirement. My recommendation would not preclude KAWC's ratepayers from paying their utility bill with a credit card as long as they continue to pay for 100% of the corresponding assessed fee. My adjustment to vendor fees would reduce KAWC's revenue requirement by $349,284.

VIII. RESIDENTIAL REVENUES

Q. Have you reviewed KAWC's annualized water revenues proposed in this rate case?

A. Yes, I have.

[7] https://www.federalreserve.gov/publications/2023-economic-well-being-of-us-households-in-2022-banking-credit.htm.

Q. Do you believe the revenues proposed by KAWC are reasonable?

A. No, I believe the Residential class revenues forecasted by KAWC witness Mr. Chuck Rea are understated.[8] By understating the revenues, the proposed deficiency (incremental revenue requirement) is unnecessarily inflated.

Q. Please describe why you believe the Residential revenues are understated.

A. I compared the revenues included in the current rate case to the last five years' revenues recorded by KAWC. Based on that review, I concluded that the revenues proposed by KAWC are understated, as I later explain.

Q. Please discuss the historic information you relied on to determine that the Residential class revenues are understated.

A. I first looked at the number of customers proposed by KAWC and compared them to the historical customer levels reported to the Kentucky Public Service Commission. In order to assess and determine the correct level of revenues in the test year, there must be a determination of the correct number of customers. To begin this assessment, Table GRM-6 shows the average level of customers from 2018-2022.

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[8]See KAWC Exhibit 37, Schedule M-3.

Table GRM-6

Average Number of Customers

Line	Year	Average Number of Customers
1	2018	119,360
2	2019	120,704
3	2020	122,008
4	2021	123,090
5	2022	124,036
6	Proposed Test Year	126,014

Sources:
Lines 1-5: KAWC Exhibit 37, Schedule I-4
Line 6: KAWC Exhibit 37, Schedule M-3. Calculated by dividing the sum of Customer Meter Billings ÷ 12

As can be seen from Table GRM-6 above, KAWC's customer levels reflect the Residential customer growth that has been seen in the recent past. I believe these levels are reasonable.

Q. Do you have concerns with the average usage per Residential customer that KAWC used for annualizing Residential revenues?

A. Yes, I do. Once the annual customer count is set, the next step is to determine the average annual usage, in order to set the test year revenue level. As it appears, KAWC's proposed usage per Residential customer is significantly understated. Table GRM-7 shows the historic usage per Residential customer by year, dating back to 2018.

TABLE GRM-7

Usage Per Customer

Line	Year	Usage (000 Gal)	Avg. Customers	Usage/ Customer (000 Gal)
1	2018 [1]	5,648,780	119,360	47.33
2	2019 [1]	5,931,753	120,704	49.14
3	2020 [1]	6,072,579	122,008	49.77
4	2021 [1]	5,874,579	123,090	47.73
5	2022 [1]	5,987,176	124,036	48.27
6	Company Test Year [2]	5,748,449	126,014	45.62

Sources:

[1] KAWC Exhibit 37, Schedule I-4.

[2] KAWC Exhibit 37, Schedule M-3. Avg. Customers calculated by dividing the sum of Customer Meter Billings ÷ 12.

As Table GRM-7 above shows, the estimated usage per customer proposed by KAWC is 45.62, which is significantly lower than the historical Residential average. The Company's proposed estimated usage per customer of 45.62 is at its lowest level dating back to 2018. Yet, the proposed Residential consumption (5,748,449 thousands of gallons, hereafter "MGal") suggested by KAWC has been exceeded every year from 2019 onwards. KAWC is essentially arguing that Residential customers are using less water per customer than they have over the past four years. Clearly, the usage per

Residential customer needs to be increased to reflect normal operations in order to arrive at the correct test year revenue levels.

Q. What level of usage per customer would you recommend?

A. I recommend a three-year average of usage per customer from 2020-2022. The three-year average from 2020-2022 is 48.59 MGal per customer.[9] This level of usage per customer increases KAWC's Residential usage by 374,447 MGal. Comparing the three-year average to the historical usage per customer shows that my proposal is more reasonable, compared to the usage level proposed by KAWC.

Q. Using KAWC's proposed level of customers and your three-year average usage per customer, what is your proposed adjustment to the Residential revenues?

A. Using those billing determinants, I propose to increase test year Residential revenues by $2.2 million.

Q. What effect does your proposed adjustment to the Residential revenues have on revenue requirement?

A. Since I have proposed an increase to Residential revenues, KAWC will also incur additional chemical, fuel, and power expenses related to this increased usage. Using KAWC's rate of $0.7482 per MGal for these costs, the resulting offset to the increase in Residential revenues is $280,143.[10] This results in a corresponding $1.8 million reduction in the Company's revenue requirement.

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[9] 48.59 = (49.77 + 47.73 + 48.27)/3. See Table GRM-7, lines 3-5.
[10] KAWC's Response to OAG Data Request, 1-91; $280,143 = 374,447 * $0.7482.

IX. UNACCOUNTED FOR WATER LOSS

Q. Have you read the direct testimony of KAWC witness Mr. William Lewis as it relates to unaccounted for water loss?

A. Yes, I have.

Q. What is unaccounted for water loss?

A. Unaccounted for Water ("UFW") is water that the Company purchases or pumps, treats, and distributes, but is lost through leaks or unauthorized usage in the distribution system.

Q. Please explain your concern with KAWC's UFW loss.

A. My concern is that the Company is not properly managing its UFW losses to the Commission's 15% standard and customers will be required to pay the additional costs for water that is never delivered.

Q. Please describe the Commission's standard for UFW loss.

A. In 807 KAR 5:066, Section 6(3), the Commission's standard is:

> For rate making 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.[11]

[11] https://apps.legislature.ky.gov/law/kar/titles/807/005/066/.

Q. Has KAWC met this 15% UFW loss standard?

A. No, it has not. The Company has failed to reduce its UFW losses to 15% for at least the last seven full calendar years. The Company has measured its water losses under two different standards, the Commission's UFW loss standard, and Non-Revenue Water ("NRW"). NRW is defined as the difference between the amount of water produced for sale to customers and the amount billed to customers.[12] The Commission has defined UFW loss as "the difference of the total amount of water produced and purchased and the sum of water sold, water used for fire protection purposes, and water used in treatment and distribution operations (e g., backwashing filters, line flushing)."[13]

KAWC witness Mr. William Lewis shows the water loss using the two different standards in a table beginning on page 36 of his direct testimony that I have recreated:

TABLE GRM-8

Recreation of Mr. Lewis' Table Detailing Historical Non-Revenue Water (NRW) and Unaccounted-For Water (UFW)

Year	NRW	UFW
2016	16.80%	15.69%
2017	19.80%	18.86%
2018	21.15%	19.95%
2019	22.79%	21.10%
2020	21.62%	20.47%
2021	22.08%	21.09%
2022	22.67%	21.59%

See pages 36 and 37 of Mr. Lewis' Direct Testimony

[12] See the Direct Testimony of Mr. William Lewis at page 36.

[13] See Case No. 2011-00217, *Application of Cannonsburg Water District for (1) Approval of Emergency Rate Relief and (2) Approval of the Increase in Nonrecurring Charges* (Ky. PSC Feb. 27, 2012), Order at 5, footnote 12; See Direct Testimony of Mr. William Lewis, page 36.

Q. Is the Company asking the Commission for a variance from the 15% water loss standard?

A. Yes. KAWC has asked the Commission to increase the Company's allowable UFW loss to a 20% standard.

Q. What rationale has the Company provided to justify this change?

A. Mr. Lewis cites two reasons. The first is KAWC's water loss control program which he notes includes "pressure management, accelerated infrastructure replacement, active leak detection, rapid response to breaks, and fire service and water loss audits."[14] The second reason is losses that occur on infrastructure dedicated to special connections.[15] Mr. Lewis has estimated that these connections represent 4% of the Company's distribution system.[16]

Q. Do you believe the Company has met "the burden of demonstrating that the alternative level is more reasonable than" the Commission's 15% UFW loss standard?

A. No. When asked by the OAG in a data request if the Company had a plan (or plans) to tackle the water losses from special connections, KAWC indicated that they had "not implemented a formal plan for addressing water loss for the 270 special connections," but had performed a small trial to determine "the potential water loss related to those special connections."[17] This assessment, provided in response to PSC Data Request

[14]See the Direct Testimony of William Lewis at page 38.
[15]See the Direct Testimony of William Lewis at pages 38-39.
[16]See the Direct Testimony of William Lewis at page 38.
[17]KAWC's Response to OAG's Data Request, 2-21.

No. 3-36, merely demonstrates that KAWC examined fire service losses at 24 addresses and estimated the lost water. In no way does this demonstrate that the special connections represent a significant contributor to the Company's persistent water loss problem. In fact, it would appear based on these two data request responses that the Company does not have a clear picture of the water loss issue and holding KAWC to a lesser 20% standard would be a grave disservice to KAWC's ratepayers.

Q. Are you proposing a revenue requirement adjustment related to UFW loss?

A. Yes. I am proposing that the Company's revenue requirement be reduced by $522,333.

Q. Please describe how you calculated this adjustment.

A. I began with the assumption that the Company has reflected only its requested 20% UFW loss in its revenue requirement. I then determined that the Company's proposed 20% UFW loss would represent 3,017,894,000 gallons.

To determine my 15% water loss, I increased the Company's proposed system delivery by my recommended additions to the residential sales, then multiplied the total by the 15% UFW factor, resulting in a total UFW loss of 2,319,587,550 gallons.

The difference is 698,306,450 gallons. Relying on the Company's response to OAG Data Request 1-91, the total chemical, fuel, and power expenses per 100 gallons came to 7.48 cents. Multiplying that rate by the incremental difference in losses led me to my reduction of $522,333 to KAWC's revenue requirement. I would point out that if the Company has not reflected its 20% proposed standard for UFW losses in its revenue requirement, my proposed reduction will need to be increased.

X. MISCELLANEOUS EXPENSE ADJUSTMENT

Q. Have you reviewed the discovery as it relates to the miscellaneous expenses associated with food, gifts and promotional items, charitable donations, and membership dues?

A. Yes, I have. As part of its first discovery request, the OAG asked KAWC to provide a list identifying all miscellaneous costs for the test year including, but not limited to, dinners (including holiday dinners), gifts, donations, membership dues, annual meeting costs, etc. The request also asked the Company to indicate whether the requested transaction had been included or removed from the requested revenue requirement. The Company responded that it had "not forecast the miscellaneous costs at a detail transaction level for the test year" but that it had excluded charitable contributions.[18]

In its supplemental discovery request, the OAG requested that the Company explain how the Company could determine whether or not it properly excluded items that the Commission does not typically allow in revenue requirement absent the detailed transaction level forecast as well as providing an explanation as to how the miscellaneous costs that were included met the Commission's criteria for miscellaneous expenses.[19]

The Company responded that it had removed charitable contributions after a review and analysis of the expenses, but it had included $6,799 related to gifts or promotional items, and $2,549 of membership dues that should have been excluded and that it would remove in an updated filing subsequent to the close of the base period.[20]

[18]See KAWC's Response to OAG Data Request, 1-17.
[19]OAG Data Request 2-13.
[20]See KAWC's Response to OAG Data Request, 2-13.

The Company did, however, indicate in its response that it believed the $5,699 in food expenses was appropriate to keep in its revenue requirement. Yet, KAWC did not provide details sufficient to justify how including the food cost met prior Commission precedent.[21]

Finally, when asked in the OAG's supplemental discovery about business development costs included in the revenue requirement and how it met the Commission's precedent from Case No. 2018-00358 that disallowed such costs,[22] the Company responded that it had included the cost of one KAWC employee totaling $180,082 in direct labor business development costs and $106,069 in service company business development costs.[23] The discussion following the breakdown of the costs attempted to justify business development generally, but did not detail how the service company's business development costs were specifically beneficial to Kentucky ratepayers. The response lacked specificity to ascertain what activities were performed by either the direct labor from KAWC or the shared service business development costs.[24]

[21]See Case No. 2003-00433, *An Adjustment of the Gas and Electric Rates, Terms, and Conditions of the Louisville Gas and Electric Company* (Ky. PSC June 30, 2004), Order at 49–52; Case No. 2003-00434, *An Adjustment of the Electric Rates, Terms, and Conditions of Kentucky Utilities Company* (Ky. PSC June 30, 2004), Order at 42–45.

[22]Case No. 2018-00358, *Electronic Application of Kentucky-American Water Company for an Adjustment of Rates* (Ky. PSC June 27, 2019), Order at 40–41.

[23]KAWC's Response to OAG Data Request, 2-15(a).

[24]KAWC's Response to OAG Data Request, 2-15(b).

Q. Based on the discovery responses, do you have an adjustment to the Company's revenue requirement as proposed?

A. Yes, I am proposing that the Commission remove the $121,116 for miscellaneous expenses that were included in the Company's test year related to unjustified expenses or those expenses that were inappropriately included. I have provided the detailed breakdown in my Table GRM-9 below.

TABLE GRM-9

Miscellaneous Expense Reduction Breakdown

Line	Expense Description	Amount
1	Food - not justified with specificity	$ 5,699
2	Gifts/Promotional items	$ 6,799
3	Dues for Covered Activities	$ 2,549
4	Shared Services Business Development - not justified with specificity	$ 106,069
5	Total Proposed Miscellaneous Expense Disallowance	$ 121,116

I have not proposed disallowing the KAWC direct labor cost for business development as the Order in Case No. 2018-00358 did not address Kentucky specific business development costs, rather the discussion was limited to business development from the shared services company.

XI. CASH WORKING CAPITAL

Q. Have you reviewed the direct testimony of Mr. Harold Walker, III, as it relates to the appropriate cash working capital ("CWC") allowance for KAWC's revenue requirement?

A. Yes, I have read Mr. Walker's direct testimony wherein he discusses CWC.

Q. In his testimony, Mr. Walker states that KAWC's working capital claim is composed of cash (lead/lag), materials and supplies, and prepayments. Do you agree those components would qualify as working capital?

A. Yes, I do.

Q. For determining the cash component, Mr. Walker performed a lead/lag study. Are you in agreement with the use of a lead/lag study to determine the cash component of the working capital allowance?

A. Yes, I am.

Q. Please describe the purpose of a lead/lag study.

A. A lead/lag study determines the amount of cash necessary to have on hand on a day-to-day basis for a utility to provide service to its ratepayers, and also determines whether the ratepayer or shareholder provided the cash.

Q. How does the lead/lag study determine who provides the cash to operate the utility?

A. A lead/lag study measures the time between service provided to the ratepayers and the average time it takes those ratepayers to pay their bills (revenue lag). The lead/lag study also determines the time between when services are paid for by the utility for the provision of service to ratepayers (expense leads). The difference between the revenue lag and the expense lead determines who provides the cash balances to operate the utility. For example, if the revenue lag is shorter than the expense lead, then the ratepayers have provided the cash necessary to operate the utility before the utility had to pay the cash expense. An example of this would be property taxes. Generally, property taxes are payable significantly in excess of the time period to collect revenues (revenue lag) from ratepayers. In this instance, the ratepayers provided the cash.

In the alternative, there are situations where the utility must pay cash to operate the utility before the utility receives cash from the ratepayers. Generally, labor expenses would require the utility to pay its cash labor costs before it can collect those funds from ratepayers. In this instance, the shareholders would have fronted the cash to pay those labor charges before receiving cash from the ratepayers.

In a lead/lag study, each cash expense is analyzed to determine if ratepayers or shareholders provide the cash necessary to operate the utility. The total CWC balance reveals if the ratepayers or shareholders are the providers of the cash allowances. For example, a total positive cash working capital balance would indicate that, on average, the shareholders of KAWC are providing cash funding before the ratepayers are paying their bills. On the other hand, a total negative working capital balance would indicate that, on average, the ratepayers are providing cash to the utility before the utility has to pay the cash expenses to operate the utility.

Q. In your previous answer you continuously use the term "cash." Is that an important distinction?

A. Yes. A lead/lag study should only measure the cash payments that are necessary to operate the utility. For example, depreciation expense is widely recognized as a non-cash expense and, therefore, should not be recognized in a properly performed lead/lag study.

Q. In the lead/lag study prepared by Mr. Walker, did he include non-cash items or costs that are not required to operate the utility?

A. Yes. Mr. Walker seeks revenue lag recovery for the following items:

- Regulatory Expense;
- Amortization;
- Uncollectibles;
- Depreciation and Amortization;
- Deferred Income Taxes; and
- Net Income.[25]

[25]See Schedule HW-1, page 4, attached to the Direct Testimony of Harold Walker, III.

Q. How did Mr. Walker reflect these items in his lead/lag study?

A. Mr. Walker assigned a zero day expense lead and a full revenue lag for those items. Essentially, Mr. Walker is arguing that these items should reflect the time value of the revenue lag, thereby, increasing the CWC balance.

Q. Do you agree that these items should be included in a lead/lag study?

A. No. These items reflect either non-cash items (depreciation) or items that are not required to operate the utility (carrying charge for net income). These items should be completely removed form a lead/lag study.

Q. Have other American Water affiliates excluded these components from the lead/lag study?

A. Yes. I have attached as Exhibit GRM-1, a copy of the lead/lag study prepared by Missouri-American Water Company ("Missouri-American") in Case No. WR-2022-0303.[26] In this lead/lag study, Missouri-American did not reflect the effect in its lead/lag study for the following items:

- Depreciation;
- Amortization;
- Deferred Income Taxes; and
- Amortization of Investment Tax Credit.
- Net Income was not listed on the lead/lag study schedules, therefore, it was not a component of the lead/lag study.

[26] https://www.efis.psc.mo.gov/Document/Display/330668.

Therefore, in the Missouri-American rate case, Missouri-American did not seek CWC recovery for those items.

Q. Who sponsored the Missouri-American testimony that supported the lead/lag study?

A. Mr. Walker.

Q. Has the Commission made its position clear regarding the treatment of these items?

A. Yes. In Case No. 2021-00183, involving a rate case of Columbia Gas of Kentucky, the Commission asserted that Columbia Kentucky and all other utilities are placed, "on notice that in any future rate cases, a lead/lag study is to be performed and shall exclude noncash items and balance sheet adjustments."[27]

Q. In your opinion is the lead/lag study proposed by KAWC in this rate case compliant with the Commission's order from Case No. 2021-00183?

A. No. The lead/lag study proposed by KAWC in this rate case is not compliant with the recent Commission precedent.

[27]Case No. 2021-00183, *Electronic Application of Columbia Gas of Kentucky, Inc. for an Adjustment of Rates; Approval of Depreciation Study; Approval of Tariff Revisions: Issuance of a Certificate of Public Convenience and Necessity; and Other Relief* (Ky. PSC December 28, 2021), Order at 14.

Q. Do you have any other proposed adjustments to KAWC's CWC study?

A. Yes. KAWC is proposing that its service company charges be treated as a prepayment. In the lead/lag study, KAWC lists the expense lead for service company charges as a negative 5.3 days. This lag assumes that KAWC must pay its own service company 5.3 days before service is rendered.

Q. Are you opposed to including a prepayment for service company charges?

A. Yes, I am.

Q. Please explain the reasons for your opposition.

A. The service company charges should be charged to the subsidiaries in the same manner as other outside providers, namely after the service has been provided. The service company operations are no different than any other outside service provider and the service company should reflect the approximate same expense lead.

Q. Did the Company provide any justification as to why the service company charges should be treated as a prepayment?

A. I was unable to find any testimony that even attempted to justify why the service company charges should be treated as a prepayment.

Q. What expense lead are you proposing in this rate case?

A. I am proposing that the service company charges receive the same expense lead as the contracted services charges. In this manner, the service company would be treated the same as an outside contractor for billing purposes.

Q. If you make all of the changes you previously described to the lead/lag study, what would be the corresponding CWC balance?

A. If the Commission were to accept all of my recommended changes, KAWC's CWC balance would be a negative $4,961,885.

Q. Do you believe your recommendation is in compliance with the Commission's recent precedent on CWC from Case No. 2021-00183?

A. Yes, I do.

Q. What is the revenue requirement by adjusting the KAWC lead/ lag study to be consistent with recent Commission precedent and setting the service company charges expense lead equal to the contracted service charges expense lead?

A. KAWC's revenue requirement would be reduced by $702,812. I have attached as Exhibit GRM-2 the calculation of KAWC's CWC balance, removing the cost items consistent with the Commission's Order in Case No. 2021-00183, and setting the service company charges expense lead equal to the contracted service charges expense lead.

XII. REGULATORY AND ACCOUNTING TREATMENTS

Q. Have you read the direct testimony of KAWC witness Mr. Jeffrey Newcomb as it relates to regulatory and accounting treatments?

A. Yes, I have.

Q. Please describe Mr. Newcomb's request regarding regulatory and accounting treatments.

A. Mr. Newcomb is requesting that the Commission grant deferral of production expenses, pension and other post-employment benefits expenses, and expenses related to taxes other than income, sales, and payroll taxes.[28] Essentially, Mr. Newcomb wishes to set up a regulatory asset for the difference between the authorized level of expense determined by the Commission in this case and the actual expense that the Company incurs when rates are in effect, which the Company will then ask for amortization of the deferral in its next case.[29] At its most basic, KAWC is asking to set up three tracking mechanisms to ensure exact expense recovery in future rate proceedings.

Q. Do you support Mr. Newcomb's proposal?

A. No, I do not. I believe that the expenses that the Company has requested deferral treatment for are normal and regular expenses that every large utility company will incur. The appropriate action for the Company would be to determine a reasonable proposed expense level that it anticipates will cover these on-going and normal

[28] See the Direct Testimony of Jeffrey Newcomb at page 24.
[29] See the Direct Testimony of Jeffrey Newcomb at page 25.

expenses. To the extent that the Company actually experiences a specific extraordinary level of expense associated with these (or any other) expenses, it should either file a general rate case or request an explicit deferral for the extraordinary expense incurred.

Q. In his request, Mr. Newcomb cites the Commission's standard for regulatory assets from Case No. 2008-00436. Do you think that this request for deferral treatment meets this standard?

A. No. As cited in his testimony,[30] the standard applies to expenses that are: (1) extraordinary/non-recurring which could not have reasonably been anticipated or included in the utility's planning; (2) resulting from a new statutory or administrative directive; (3) expenses for an industry-sponsored initiative; or (4) an extraordinary/non-recurring expense that will eventually be offset by cost savings.[31]

The expenses for which KAWC is requesting deferral are not novel, but instead they are continuous obligations, there are no specified new statutory or administrative policies dictating increases in these costs, they are not the result of industry-sponsored initiatives, and they are not costs that will be eventually and directly offset by a specific stream of cost savings. These are clearly expenses that are easily anticipated in a utility company's normal budget planning.

[30]See the Direct Testimony of Jeffrey Newcomb at page 26.

[31]Case No. 2008-00436, *The Application of East Kentucky Power Cooperative, Inc. for an Order Approving Accounting Practices to Establish a Regulatory Asset Related to Certain Replacement Power Costs Resulting from Generation Forced Outages* (Ky. PSC December 23, 2008), Order at 4.

Q. Beyond the Commission's standard, are there any other reasons why this request should not be granted?

A. Yes. This request considers each of these three normal expense line items in isolation and fails to consider that there might be cost offsets in other areas or that there may be offsetting revenues resulting from customer growth or improved efficiency. For example, requesting a deferral related to production expenses ignores that an increase in usage could be the cause of an increase to production expense. This increased production expense would be offset by additional revenue. As proposed, the request does not consider this possibility.

Q. Mr. Newcomb claims that regulatory asset deferrals would not disincentivize management to control expense.[32] Do you agree?

A. No. In granting deferral treatment to these expenses, absent consideration of all relevant factors of the Company's operation, the Commission most certainly would be disincentivizing proper cost control. When a company incurs a significant cost increase, there is often pressure to reduce costs in other areas of operation. By holding these expenses in isolation, there is less pressure to find efficiencies, secure offsetting cost reductions, or make changes in the way the Company operates to ensure rates are fair, just, and reasonable to customers.

[32]See the Direct Testimony of Jeffrey Newcomb at page 28.

Q. Are you familiar with how any other state utility commissions approach tracking mechanisms?

A. Yes. The Missouri Public Service Commission ("MO PSC") discussed its concerns regarding the overuse of Trackers/Riders in two Commission Orders wherein the MO PSC made the following statements:

> In the MO PSC Case No. ER-2012-0166, the MO PSC stated the following:
>
> "In general, the Commission remains skeptical of proposed tracking mechanisms. There is a legitimate concern that a tracker can reduce a company's incentive to aggressively control costs."[33]
>
> In Case No. ER-2014-0258, the MO PSC clarified that:
>
> "Tracker mechanisms can be a useful regulatory tool in the correct circumstances, but they should be used sparingly because they can reduce the incentive of the utility to closely control its costs."[34]

Q. Please summarize your position as it relates to regulatory and accounting treatments sought by KAWC.

A. I am opposed to establishing deferrals for the ongoing and normal expense items as requested by Mr. Newcomb. I do not believe that the Company has established that its deferral requests meet the standards set forth by the Commission, nor do I believe that there is a bona fide need for these deferrals. As such, I respectfully ask the Commission to reject Mr. Newcomb's request for deferrals.

[33]See page 96 of MO PSC's Report and Order in Case No. ER-2012-0166, issued December 12, 2012. https://efis.psc.mo.gov/Document/Display/76586.

[34]See page 50 of MO PSC's Report and Order in Case No. ER-2014-0258, issued April 29, 2015. https://efis.psc.mo.gov/Document/Display/101982.

XIII. QUALIFIED INFRASTRUCTURE PROGRAM

Q. Have you read the direct testimony of KAWC witness Mr. Jeffrey Newcomb as it pertains to the requested continuation of the qualified infrastructure program ("QIP")?

A. Yes, I have.

Q. Do you support the continuation of the QIP?

A. No, I do not. The QIP is a special regulatory tool that KAWC is attempting to not only continue, but to accelerate. The Commission first permitted the QIP in the Company's last base rate case, Case No. 2018-00358,[35] but has since reduced the scope of assets to be considered in the rider in both Case No. 2020-00027 and in Case No. 2021-00090.[36] The current QIP rider is proposed to be reset to zero with the advent of new base rates in this rate case.[37]

Q. Please describe what rate relief the QIP would provide KAWC.

A. According to KAWC witness Mr. Newcomb, "QIP rider is a regulatory tool providing recovery of the costs of capital, depreciation, and taxes associated with qualified infrastructure investment between base rate case filings."[38]

[35]Case No. 2018-00358, *Electronic Application of Kentucky-American Water Company for an Adjustment of Rates* (PSC Ky. June 27, 2019), Order at 83–84.
[36]See the Direct Testimony of Jeffrey Newcomb at page 16.
[37]See the Direct Testimony of Jeffrey Newcomb at page 18.
[38]See the Direct Testimony of Jeffrey Newcomb at page 15.

Q. Does the Company provide any reasons for the continuation of the QIP?

A. Yes. In the Company's application, KAWC states that:

> A concern that must be addressed by many water service providers, including Kentucky American Water, is its aging infrastructure and the need to replace and/or upgrade its facilities in order to fulfill its obligations of providing safe, adequate, and reliable water service. Through the Commission-approved QIP, Kentucky American Water has been able to address that concern.[39]

Additionally, KAWC witness Ms. Shelley Porter claims that:

> KAWC continues to drive savings and efficiencies in the implementation of its QIP program through planned replacement of main nearing or exceeding its useful life, paving partnerships with Lexington-Fayette Urban County Government and coordinated planning with other utilities, creation and improvement of standardized bidding documents, the continual enhancements of pipeline prioritization modeling allowing for both likelihood of failure and consequence of failure analysis that is intended to be reran during replacement planning activities, incorporating updates to GIS asset data and up to date system maintenance and leak repair data from MapCall, the Company's operational work management system.[40]

Q. Is KAWC proposing to maintain the QIP rider as it currently operates?

A. No. The Company has proposed an acceleration of the program to allow for much quicker main replacement. According to KAWC, pursuant to the current Commission imposed parameters on the QIP, the Company is replacing 10-13 miles of cast iron mains annually. However, the Company is seeking to expand the current scope of the infrastructure deemed eligible for QIP cost recovery to 27-34 miles of mains of any material type.[41] This would grow the annual capital spend from an estimated $20.7 million in 2024 to an average of $44.3 million annually in the years 2025 through

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[39]KAWC's Application, page 12, paragraph 30.
[40]See the Direct Testimony of Shelley Porter at page 12.
[41]See the Direct Testimony of Krista Citron at page 5.

2028.[42] This is more than doubling the current scope of the program. The bill impact from this increase in QIP activity results in growing the annual Residential QIP burden from $11.26 in 2025 to $89.20 by 2028, an increase of over 692%.[43]

Q. You stated that you are opposed to the continuation of the QIP. Please state the reasons for your opposition.

A. I believe the QIP fails in several aspects. First, riders engage in single-issue ratemaking. In this instance, KAWC would be allowed to seek rate relief for investments without filing a rate case. No other aspects of the Company's operations would be subject to review when determining these increased rates.

Second, the Company is asking the Commission to broadly expand the amount and type of pipeline replacement. It does not appear that the Company has given adequate thought to rate affordability.

Finally, in the proposed QIP, there is no provision for the decline in the previous QIP investments rolled into rate base from what is established as base rates in the previous rate case. Each year, the previous QIP rate base used to set base rates decreases due to the growth in the accumulated depreciation reserve. This decrease in net plant (QIP plant in service less accumulated depreciation reserve) is not accounted for in rates in between rate cases. However, the proposed QIP would ignore that decline in rate base when calculating the return component of the QIP investments subject to the rider surcharges. Essentially, without this consumer protection mechanism, the profits of KAWC will be enhanced.

[42]See KAWC's Response to OAG Data Request, 1-26(g).
[43]See KAWC's Response to OAG Data Request, 2-20.

Q. Please summarize your position as it relates to the QIP proposed by KAWC.

A. I am opposed to the continuation of the QIP for the reasons previously discussed. However, if the Commission deems the program worthy of continuing, I recommend including a depreciation offset to capture the decline in value associated with QIP rolled into rate base.

XIV. ADVANCED METERING INFRASTRUCTURE ("AMI") CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY

Q. Have you review the direct testimony of Ms. Melissa Schwarzell as it relates to the request that the Commission grant KAWC a Certificate of Public Convenience and Necessity ("CPCN") for the installation of AMI meters?

A. Yes, I have.

Q. Did KAWC perform a cost benefit analysis ("CBA") to support its request for the CPCN?

A. Yes.

Q. Do you have any concerns with KAWC's CBA?

A. Yes, I have two main concerns with the CPCN request. My first concern relates to the cost savings from the installation of AMI meters. My second concern relates to the possibility that the replacement of AMI meters may create stranded investments.

Q. Please discuss your first concern regarding cost savings.

A. In the CBA, certain cost savings are discussed. The cost savings discussed are:

- Safety Improvement;
- Customer Service Improvement; and
- Operational Efficiencies.

However, the CBA does not quantify those cost savings or propose how those cost savings will be reflected in customers' rates.

Q. Is the reflection of cost savings important?

A. Yes, if there is no mechanism to reflect those cost savings in customer rates, those cost savings will benefit only KAWC's shareholders. The CBA lists the cost savings to be achieved by the AMI meter replacement program. If those cost savings are reflected in the CBA, but not used to reduce customers' rates, then cost savings are of no value to customers. For example, assume cost savings for 2024 from AMI investments were projected to be $10,000. If there is not a process to capture those savings, the $10,000 cost savings in 2024 would not be transferred to ratepayers through rate changes.

Q. What is your concern regarding stranded investment from the AMI meter replacement program?

A. I am concerned that KAWC may not have fully considered the potential for stranded investment costs resulting from the retirement of the current generation of meters. When asked whether the stranded costs were taken into consideration in any CBA, the response indicated that the remaining net book value of the current assets would be recovered over the remaining lives of the assets.[44] To the extent that this is not the case

[44]See KAWC's Response to OAG Data Request, 1-40.

when actual replacements occur, we ask that the Commission prohibit the Company from seeking recovery in rates of any stranded investment.

Q. Does this conclude your direct testimony?

A. Yes, it does.

TOTAL COMPANY

SUMMARY CALCULATION OF CASH WORKING CAPITAL REQUIREMENTS

BASED ON LEAD-LAG STUDY FOR THE TWELVE MONTHS ENDED SEPTEMBER 30, 2021

Line Number	Expense Category	Present Rates Pro Forma For the 12 Months Ended 5/31/23	Average Daily Expense	Revenue Lag	Expense (Lead)/Lag	Net (Lead)/Lag	Cash Requirement
1							
2	Purchased Water	$1,498,324	$4,105				$56,238
3	Fuel and Power	12,614,879	34,561				832,927
4	Chemicals	15,968,848	43,750				350,002
5	Waste Disposal	3,122,160	8,554				(273,723)
6	Labor	38,677,254	105,965				3,624,005
7	Pensions	(210,164)	(576)				(28,041)
8	OPEB	(4,597,604)	(12,596)				0
9	Group Insurance	7,244,150	19,847				706,552
10	401K	808,219	2,214				80,822
11	DCP	1,115,804	3,057				111,581
12	ESPP	127,035	348				2,019
13	VEBA	140,329	384				(64,897)
14	Other Benefits	827,269	2,266				15,865
15	Support Services	40,373,441	110,612				5,298,323
16	Contracted services	4,183,727	11,462				(35,533)
17	Building Maintenance and Services	1,453,905	3,983				(27,883)
18	Telecommunication expenses	1,278,743	3,503				47,296
19	Postage, printing and stationary	0	0				0
20	Office supplies and services	802,280	2,198				145,509
21	Employee related expense travel & entertainment	593,590	1,626				(4,553)
22	Rents	266,186	729				23,994
23	Transportation	4,336,714	11,881				(42,773)
24	Miscellaneous	2,811,646	7,703				89,357
25	Uncollectible accounts expense	3,450,186	9,453				0
26	Customer Accounting	1,629,900	4,465				(134,857)
27	Regulatory Expense	346,551	949				43,390
28	Insurance Other than Group	7,626,091	20,893				2,383,937
29	Maintenance supplies and services	10,612,102	29,074				447,744
30							
31	Total Operations and Maintenance	157,101,565					13,647,301
32							
33	Depreciation	70,081,164	192,003				0
34	Amortization	7,516,650	20,594				0
35	Property Taxes	39,433,322	108,036				(12,121,696)
36	Payroll Taxes	2,935,765	8,043				275,077
37	PSC Fees	2,487,686	6,816				556,833
38	Other General Taxes	(121,890)	(334)				(11,421)
39	Current Federal Income Tax	(19,624,760)	(53,766)				(543,041)
40	Current State Income Tax	(3,514,941)	(9,630)				(97,263)
41	Deferred Income Taxes	14,795,957	40,537				0
42	Amortization of Investment Tax Credit	(85,779)	(235)				0
43	Interest Expense Deduction	54,733,502	149,955				(6,073,169)
44	Preferred Stock	0	0				0
45	Total Working Capital Requirement	$325,738,241					($4,367,379)
46							
47	Total Cash and Working Capital Requirement Used						($4,367,379)
48							
49							

TOTAL WATER

SUMMARY CALCULATION OF CASH WORKING CAPITAL REQUIREMENTS

BASED ON LEAD-LAG STUDY FOR THE TWELVE MONTHS ENDED SEPTEMBER 30, 2021

Line Number	Expense Category	Present Rates Pro Forma For the 12 Months Ended 5/31/23	Average Daily Expense	Revenue Lag	Expense (Lead)/Lag	Net (Lead)/Lag	Cash Requirement
1							
2	Purchased Water	$1,498,324	$4,105	45.70	32.00	13.70	$56,238
3	Fuel and Power	12,044,249	32,998	45.70	21.60	24.10	795,250
4	Chemicals	15,839,834	43,397	45.70	37.70	8.00	347,174
5	Waste Disposal	539,074	1,477	45.70	77.70	(32.00)	(47,261)
6	Labor	37,636,840	103,115	45.70	11.50	34.20	3,526,520
7	Pensions	(209,281)	(573)	45.70	(3.00)	48.70	(27,923)
8	OPEB	(4,578,294)	(12,543)	45.70	45.70	0.00	0
9	Group Insurance	7,109,291	19,478	45.70	10.10	35.60	693,399
10	401K	961,110	2,633	45.70	9.20	36.50	96,111
11	DCP	1,087,959	2,981	45.70	9.20	36.50	108,796
12	ESPP	123,968	340	45.70	39.90	5.80	1,970
13	VEBA	139,805	383	45.70	214.50	(168.80)	(64,655)
14	Other Benefits	766,030	2,099	45.70	38.70	7.00	14,691
15	Support Services	40,188,992	110,107	45.70	(2.20)	47.90	5,274,117
16	Contracted services	4,166,155	11,414	45.70	48.80	(3.10)	(35,384)
17	Building Maintenance and Services	1,447,798	3,967	45.70	52.70	(7.00)	(27,766)
18	Telecommunication expenses	1,273,373	3,489	45.70	32.20	13.50	47,097
19	Postage, printing and stationary	0	0	45.70	34.90	10.80	0
20	Office supplies and services	798,910	2,189	45.70	(20.50)	66.20	144,898
21	Employee related expense travel & entertainment	591,097	1,619	45.70	48.50	(2.80)	(4,534)
22	Rents	212,572	582	45.70	12.80	32.90	19,161
23	Transportation	4,066,848	11,142	45.70	49.30	(3.60)	(40,111)
24	Miscellaneous	2,494,980	6,836	45.70	34.10	11.60	79,293
25	Uncollectible accounts expense	3,274,447	8,971	45.70	45.70	0.00	0
26	Customer Accounting	1,623,190	4,447	45.70	75.90	(30.20)	(134,302)
27	Regulatory Expense	345,095	945	45.70	0.00	45.70	43,208
28	Insurance Other than Group	7,594,062	20,806	45.70	(68.40)	114.10	2,373,925
29	Maintenance supplies and services	10,222,316	28,006	45.70	30.30	15.40	431,298
30							
31	Total Operations and Maintenance	151,258,744					13,671,210
32							
33	Depreciation	66,864,283	183,190	45.70	45.70	0.00	0
34	Amortization	6,456,791	17,690	45.70	45.70	0.00	0
35	Property Taxes	38,109,922	104,411	45.70	157.90	(112.20)	(11,714,886)
36	Payroll Taxes	2,893,595	7,928	45.70	11.50	34.20	271,126
37	PSC Fees	2,477,238	6,787	45.70	(36.00)	81.70	554,494
38	Other General Taxes	(121,509)	(333)	45.70	11.50	34.20	(11,385)
39	Current Federal Income Tax	(19,788,395)	(54,215)	45.70	35.60	10.10	(547,569)
40	Current State Income Tax	(3,543,891)	(9,709)	45.70	35.60	10.10	(98,064)
41	Deferred Income Taxes	14,220,890	38,961	45.70	45.70	0.00	0
42	Amortization of Investment Tax Credit	(85,668)	(235)	45.70	45.70	0.00	0
43	Interest Expense Deduction	52,847,335	144,787	45.70	86.20	(40.50)	(5,863,882)
44	Preferred Stock	0	0	45.70	47.00	(1.30)	0
45	Total Working Capital Requirement	$311,589,335					($3,738,956)
46							
47	Total Cash and Working Capital Requirement Used						($3,738,956)
48							
49							

TOTAL SEWER

SUMMARY CALCULATION OF CASH WORKING CAPITAL REQUIREMENTS

BASED ON LEAD-LAG STUDY FOR THE TWELVE MONTHS ENDED SEPTEMBER 30, 2021

Line Number	Expense Category	Present Rates Pro Forma For the 12 Months Ended 5/31/23	Average Daily Expense	Revenue Lag	Expense (Lead)/Lag	Net (Lead)/Lag	Cash Requirement
1							
2	Purchased Water	$0	$0	45.70	32.00	13.70	$0
3	Fuel and Power	570,630	1,563	45.70	21.60	24.10	37,677
4	Chemicals	129,014	353	45.70	37.70	8.00	2,828
5	Waste Disposal	2,583,086	7,077	45.70	77.70	(32.00)	(226,462)
6	Labor	1,040,414	2,850	45.70	11.50	34.20	97,485
7	Pensions	(883)	(2)	45.70	(3.00)	48.70	(118)
8	OPEB	(19,310)	(53)	45.70	45.70	0.00	0
9	Group Insurance	134,859	369	45.70	10.10	35.60	13,153
10	401K	(152,891)	(419)	45.70	9.20	36.50	(15,289)
11	DCP	27,845	76	45.70	9.20	36.50	2,785
12	ESPP	3,067	8	45.70	39.90	5.80	49
13	VEBA	524	1	45.70	214.50	(168.80)	(242)
14	Other Benefits	61,239	168	45.70	38.70	7.00	1,174
15	Support Services	184,449	505	45.70	(2.20)	47.90	24,206
16	Contracted services	17,572	48	45.70	48.80	(3.10)	(149)
17	Building Maintenance and Services	6,107	17	45.70	52.70	(7.00)	(117)
18	Telecommunication expenses	5,370	15	45.70	32.20	13.50	199
19	Postage, printing and stationary	0	0	45.70	34.90	10.80	0
20	Office supplies and services	3,370	9	45.70	(20.50)	66.20	611
21	Employee related expense travel & entertainment	2,493	7	45.70	48.50	(2.80)	(19)
22	Rents	53,614	147	45.70	12.80	32.90	4,833
23	Transportation	269,866	739	45.70	49.30	(3.60)	(2,662)
24	Miscellaneous	316,666	868	45.70	34.10	11.60	10,064
25	Uncollectible accounts expense	175,739	481	45.70	45.70	0.00	0
26	Customer Accounting	6,710	18	45.70	75.90	(30.20)	(555)
27	Regulatory Expense	1,456	4	45.70	0.00	45.70	182
28	Insurance Other than Group	32,029	88	45.70	(68.40)	114.10	10,012
29	Maintenance supplies and services	389,786	1,068	45.70	30.30	15.40	16,446
30							
31	Total Operations and Maintenance	5,842,821					(23,909)
32							
33	Depreciation	3,216,881	8,813	45.70	45.70	0.00	0
34	Amortization	1,059,859	2,904	45.70	45.70	0.00	0
35	Property Taxes	1,323,400	3,626	45.70	157.90	(112.20)	(406,810)
36	Payroll Taxes	42,170	116	45.70	11.50	34.20	3,951
37	PSC Fees	10,448	29	45.70	(36.00)	81.70	2,339
38	Other General Taxes	(381)	(1)	45.70	11.50	34.20	(36)
39	Current Federal Income Tax	163,635	448	45.70	35.60	10.10	4,528
40	Current State Income Tax	28,950	79	45.70	35.60	10.10	801
41	Deferred Income Taxes	575,067	1,576	45.70	45.70	0.00	0
42	Amortization of Investment Tax Credit	(111)	(0)	45.70	45.70	0.00	0
43	Interest Expense Deduction	1,886,167	5,168	45.70	86.20	(40.50)	(209,287)
44	Preferred Stock	0	0	45.70	47.00	(1.30)	0
45	Total Working Capital Requirement	$14,148,906					($628,423)
46							
47	Total Cash and Working Capital Requirement Used						($628,423)
48							
49							

ST. LOUIS COUNTY

SUMMARY CALCULATION OF CASH WORKING CAPITAL REQUIREMENTS

BASED ON LEAD-LAG STUDY FOR THE TWELVE MONTHS ENDED SEPTEMBER 30, 2021

Line Number	Expense Category	Present Rates Pro Forma For the 12 Months Ended 5/31/23	Average Daily Expense	Revenue Lag	Expense (Lead)/Lag	Net (Lead)/Lag	Cash Requirement
1							
2	Purchased Water	$479,903	$1,315	45.70	32.00	13.70	$18,013
3	Fuel and Power	8,089,334	22,163	45.70	21.60	24.10	534,118
4	Chemicals	12,342,072	33,814	45.70	37.70	8.00	270,511
5	Waste Disposal	5,874	16	45.70	77.70	(32.00)	(515)
6	Labor	27,708,699	75,914	45.70	11.50	34.20	2,596,267
7	Pensions	(141,420)	(387)	45.70	(3.00)	48.70	(18,869)
8	OPEB	(3,093,727)	(8,476)	45.70	45.70	0.00	0
9	Group Insurance	4,891,635	13,402	45.70	10.10	35.60	477,102
10	401K	582,440	1,596	45.70	9.20	36.50	58,244
11	DCP	761,393	2,086	45.70	9.20	36.50	76,139
12	ESPP	82,506	226	45.70	39.90	5.80	1,311
13	VEBA	114,542	314	45.70	214.50	(168.80)	(52,972)
14	Other Benefits	514,358	1,409	45.70	38.70	7.00	9,864
15	Support Services	27,201,841	74,526	45.70	(2.20)	47.90	3,569,776
16	Contracted services	2,815,229	7,713	45.70	48.80	(3.10)	(23,910)
17	Building Maintenance and Services	978,332	2,680	45.70	52.70	(7.00)	(18,763)
18	Telecommunication expenses	860,467	2,357	45.70	32.20	13.50	31,825
19	Postage, printing and stationary	0	0	45.70	34.90	10.80	0
20	Office supplies and services	539,854	1,479	45.70	(20.50)	66.20	97,913
21	Employee related expense travel & entertainment	399,427	1,094	45.70	48.50	(2.80)	(3,064)
22	Rents	125,603	344	45.70	12.80	32.90	11,321
23	Transportation	3,241,582	8,881	45.70	49.30	(3.60)	(31,972)
24	Miscellaneous	1,302,307	3,568	45.70	34.10	11.60	41,388
25	Uncollectible accounts expense	2,403,310	6,584	45.70	45.70	0.00	0
26	Customer Accounting	1,106,497	3,031	45.70	75.90	(30.20)	(91,551)
27	Regulatory Expense	233,194	639	45.70	0.00	45.70	29,197
28	Insurance Other than Group	5,131,597	14,059	45.70	(68.40)	114.10	1,604,151
29	Maintenance supplies and services	6,949,966	19,041	45.70	30.30	15.40	293,231
30							
31	Total Operations and Maintenance	105,626,815					9,478,755
32							
33	Depreciation	47,103,625	129,051	45.70	45.70	0.00	0
34	Amortization	5,160,359	14,138	45.70	45.70	0.00	0
35	Property Taxes	28,327,198	77,609	45.70	157.90	(112.20)	(8,707,703)
36	Payroll Taxes	2,102,386	5,760	45.70	11.50	34.20	196,991
37	PSC Fees	1,673,964	4,586	45.70	(36.00)	81.70	374,693
38	Other General Taxes	(93,694)	(257)	45.70	11.50	34.20	(8,779)
39	Current Federal Income Tax	(12,439,043)	(34,080)	45.70	35.60	10.10	(344,204)
40	Current State Income Tax	(2,237,508)	(6,130)	45.70	35.60	10.10	(61,915)
41	Deferred Income Taxes	9,065,741	24,838	45.70	45.70	0.00	0
42	Amortization of Investment Tax Credit	(74,894)	(205)	45.70	45.70	0.00	0
43	Interest Expense Deduction	38,652,659	105,898	45.70	86.20	(40.50)	(4,288,857)
44	Preferred Stock	0	0	45.70	47.00	(1.30)	0
45	Total Working Capital Requirement	$222,867,608					($3,361,019)
46							
47	Total Cash and Working Capital Requirement Used						($3,361,019)
48							
49							

ALL OTHER WATER

SUMMARY CALCULATION OF CASH WORKING CAPITAL REQUIREMENTS

BASED ON LEAD-LAG STUDY FOR THE TWELVE MONTHS ENDED SEPTEMBER 30, 2021

Line Number	Expense Category	Present Rates Pro Forma For the 12 Months Ended 5/31/23	Average Daily Expense	Revenue Lag	Expense (Lead)/Lag	Net (Lead)/Lag	Cash Requirement
1							
2	Purchased Water	$1,018,421	$2,790	45.70	32.00	13.70	$38,226
3	Fuel and Power	3,954,915	10,835	45.70	21.60	24.10	261,133
4	Chemicals	3,497,762	9,583	45.70	37.70	8.00	76,663
5	Waste Disposal	533,200	1,461	45.70	77.70	(32.00)	(46,746)
6	Labor	9,928,141	27,200	45.70	11.50	34.20	930,253
7	Pensions	(67,861)	(186)	45.70	(3.00)	48.70	(9,054)
8	OPEB	(1,484,567)	(4,067)	45.70	45.70	0.00	0
9	Group Insurance	2,217,656	6,076	45.70	10.10	35.60	216,297
10	401K	378,670	1,037	45.70	9.20	36.50	37,867
11	DCP	326,566	895	45.70	9.20	36.50	32,657
12	ESPP	41,463	114	45.70	39.90	5.80	659
13	VEBA	25,263	69	45.70	214.50	(168.80)	(11,683)
14	Other Benefits	251,673	690	45.70	38.70	7.00	4,827
15	Support Services	12,987,151	35,581	45.70	(2.20)	47.90	1,704,341
16	Contracted services	1,350,925	3,701	45.70	48.80	(3.10)	(11,474)
17	Building Maintenance and Services	469,466	1,286	45.70	52.70	(7.00)	(9,003)
18	Telecommunication expenses	412,906	1,131	45.70	32.20	13.50	15,272
19	Postage, printing and stationary	0	0	45.70	34.90	10.80	0
20	Office supplies and services	259,056	710	45.70	(20.50)	66.20	46,985
21	Employee related expense travel & entertainment	191,670	525	45.70	48.50	(2.80)	(1,470)
22	Rents	86,969	238	45.70	12.80	32.90	7,839
23	Transportation	825,266	2,261	45.70	49.30	(3.60)	(8,140)
24	Miscellaneous	1,192,673	3,268	45.70	34.10	11.60	37,904
25	Uncollectible accounts expense	871,137	2,387	45.70	45.70	0.00	0
26	Customer Accounting	516,693	1,416	45.70	75.90	(30.20)	(42,751)
27	Regulatory Expense	111,901	307	45.70	0.00	45.70	14,011
28	Insurance Other than Group	2,462,465	6,746	45.70	(68.40)	114.10	769,773
29	Maintenance supplies and services	3,272,350	8,965	45.70	30.30	15.40	138,066
30							
31	Total Operations and Maintenance	45,631,930					4,192,452
32							
33	Depreciation	19,760,658	54,139	45.70	45.70	0.00	0
34	Amortization	1,296,431	3,552	45.70	45.70	0.00	0
35	Property Taxes	9,782,724	26,802	45.70	157.90	(112.20)	(3,007,183)
36	Payroll Taxes	791,209	2,168	45.70	11.50	34.20	74,135
37	PSC Fees	803,274	2,201	45.70	(36.00)	81.70	179,801
38	Other General Taxes	(27,814)	(76)	45.70	11.50	34.20	(2,606)
39	Current Federal Income Tax	(7,349,352)	(20,135)	45.70	35.60	10.10	(203,366)
40	Current State Income Tax	(1,306,385)	(3,579)	45.70	35.60	10.10	(36,149)
41	Deferred Income Taxes	5,155,149	14,124	45.70	45.70	0.00	0
42	Amortization of Investment Tax Credit	(10,774)	(30)	45.70	45.70	0.00	0
43	Interest Expense Deduction	14,194,676	38,890	45.70	86.20	(40.50)	(1,575,026)
44	Preferred Stock	0	0	45.70	47.00	(1.30)	0
45	Total Working Capital Requirement	$88,721,726					($377,942)
46							
47	Total Cash and Working Capital Requirement Used						($377,942)
48							
49							

ARNOLD

SUMMARY CALCULATION OF CASH WORKING CAPITAL REQUIREMENTS

BASED ON LEAD-LAG STUDY FOR THE TWELVE MONTHS ENDED SEPTEMBER 30, 2021

Line Number	Expense Category	Present Rates Pro Forma For the 12 Months Ended 5/31/23	Average Daily Expense	Revenue Lag	Expense (Lead)/Lag	Net (Lead)/Lag	Cash Requirement
1							
2	Purchased Water	$0	$0	45.70	32.00	13.70	$0
3	Fuel and Power	5,990	16	45.70	21.60	24.10	396
4	Chemicals	0	0	45.70	37.70	8.00	0
5	Waste Disposal	1,269,743	3,479	45.70	77.70	(32.00)	(111,320)
6	Labor	173,277	475	45.70	11.50	34.20	16,236
7	Pensions	(84)	(0)	45.70	(3.00)	48.70	(11)
8	OPEB	(1,840)	(5)	45.70	45.70	0.00	0
9	Group Insurance	24,713	68	45.70	10.10	35.60	2,410
10	401K	4,573	13	45.70	9.20	36.50	457
11	DCP	3,006	8	45.70	9.20	36.50	301
12	ESPP	26	0	45.70	39.90	5.80	0
13	VEBA	0	0	45.70	214.50	(168.80)	0
14	Other Benefits	272	1	45.70	38.70	7.00	5
15	Support Services	16,011	44	45.70	(2.20)	47.90	2,101
16	Contracted services	1,673	5	45.70	48.80	(3.10)	(14)
17	Building Maintenance and Services	582	2	45.70	52.70	(7.00)	(11)
18	Telecommunication expenses	511	1	45.70	32.20	13.50	19
19	Postage, printing and stationary	0	0	45.70	34.90	10.80	0
20	Office supplies and services	321	1	45.70	(20.50)	66.20	58
21	Employee related expense travel & entertainment	237	1	45.70	48.50	(2.80)	(2)
22	Rents	49,686	136	45.70	12.80	32.90	4,479
23	Transportation	122,117	335	45.70	49.30	(3.60)	(1,204)
24	Miscellaneous	2,660	7	45.70	34.10	11.60	85
25	Uncollectible accounts expense	64,149	176	45.70	45.70	0.00	0
26	Customer Accounting	639	2	45.70	75.90	(30.20)	(53)
27	Regulatory Expense	139	0	45.70	0.00	45.70	17
28	Insurance Other than Group	3,050	8	45.70	(68.40)	114.10	953
29	Maintenance supplies and services	22,646	62	45.70	30.30	15.40	955
30							
31	Total Operations and Maintenance	1,764,097					(84,143)
32							
33	Depreciation	503,484	1,379	45.70	45.70	0.00	0
34	Amortization	969,169	2,655	45.70	45.70	0.00	0
35	Property Taxes	378,617	1,037	45.70	157.90	(112.20)	(116,386)
36	Payroll Taxes	13,329	37	45.70	11.50	34.20	1,249
37	PSC Fees	995	3	45.70	(36.00)	81.70	223
38	Other General Taxes	(35)	(0)	45.70	11.50	34.20	(3)
39	Current Federal Income Tax	200,986	551	45.70	35.60	10.10	5,562
40	Current State Income Tax	35,651	98	45.70	35.60	10.10	987
41	Deferred Income Taxes	247,575	678	45.70	45.70	0.00	0
42	Amortization of Investment Tax Credit	(10)	(0)	45.70	45.70	0.00	0
43	Interest Expense Deduction	399,200	1,094	45.70	86.20	(40.50)	(44,295)
44	Preferred Stock	0	0	45.70	47.00	(1.30)	0
45	Total Working Capital Requirement	$4,513,058					($236,806)
46							
47	Total Cash and Working Capital Requirement Used						($236,806)
48							
49							

ALL OTHER WW

SUMMARY CALCULATION OF CASH WORKING CAPITAL REQUIREMENTS

BASED ON LEAD-LAG STUDY FOR THE TWELVE MONTHS ENDED SEPTEMBER 30, 2021

Line Number	Expense Category	Present Rates Pro Forma For the 12 Months Ended 5/31/23	Average Daily Expense	Revenue Lag	Expense (Lead)/Lag	Net (Lead)/Lag	Cash Requirement
1							
2	Purchased Water	$0	$0	45.70	32.00	13.70	$0
3	Fuel and Power	564,640	1,547	45.70	21.60	24.10	37,282
4	Chemicals	129,014	353	45.70	37.70	8.00	2,828
5	Waste Disposal	1,313,343	3,598	45.70	77.70	(32.00)	(115,142)
6	Labor	867,137	2,376	45.70	11.50	34.20	81,250
7	Pensions	(799)	(2)	45.70	(3.00)	48.70	(107)
8	OPEB	(17,470)	(48)	45.70	45.70	0.00	0
9	Group Insurance	110,146	302	45.70	10.10	35.60	10,743
10	401K	(157,464)	(431)	45.70	9.20	36.50	(15,746)
11	DCP	24,839	68	45.70	9.20	36.50	2,484
12	ESPP	3,041	8	45.70	39.90	5.80	48
13	VEBA	524	1	45.70	214.50	(168.80)	(242)
14	Other Benefits	60,967	167	45.70	38.70	7.00	1,169
15	Support Services	168,438	461	45.70	(2.20)	47.90	22,105
16	Contracted services	15,898	44	45.70	48.80	(3.10)	(135)
17	Building Maintenance and Services	5,525	15	45.70	52.70	(7.00)	(106)
18	Telecommunication expenses	4,859	13	45.70	32.20	13.50	180
19	Postage, printing and stationary	0	0	45.70	34.90	10.80	0
20	Office supplies and services	3,049	8	45.70	(20.50)	66.20	553
21	Employee related expense travel & entertainment	2,256	6	45.70	48.50	(2.80)	(17)
22	Rents	3,928	11	45.70	12.80	32.90	354
23	Transportation	147,749	405	45.70	49.30	(3.60)	(1,457)
24	Miscellaneous	314,006	860	45.70	34.10	11.60	9,979
25	Uncollectible accounts expense	111,590	306	45.70	45.70	0.00	0
26	Customer Accounting	6,071	17	45.70	75.90	(30.20)	(502)
27	Regulatory Expense	1,317	4	45.70	0.00	45.70	165
28	Insurance Other than Group	28,979	79	45.70	(68.40)	114.10	9,059
29	Maintenance supplies and services	367,140	1,006	45.70	30.30	15.40	15,490
30							
31	Total Operations and Maintenance	4,078,723					60,235
32							
33	Depreciation	2,713,397	7,434	45.70	45.70	0.00	0
34	Amortization	90,690	248	45.70	45.70	0.00	0
35	Property Taxes	944,783	2,588	45.70	157.90	(112.20)	(290,424)
36	Payroll Taxes	28,841	79	45.70	11.50	34.20	2,702
37	PSC Fees	9,453	26	45.70	(36.00)	81.70	2,116
38	Other General Taxes	(346)	(1)	45.70	11.50	34.20	(32)
39	Current Federal Income Tax	(37,351)	(102)	45.70	35.60	10.10	(1,034)
40	Current State Income Tax	(6,701)	(18)	45.70	35.60	10.10	(185)
41	Deferred Income Taxes	327,492	897	45.70	45.70	0.00	0
42	Amortization of Investment Tax Credit	(101)	(0)	45.70	45.70	0.00	0
43	Interest Expense Deduction	1,486,967	4,074	45.70	86.20	(40.50)	(164,992)
44	Preferred Stock	0	0	45.70	47.00	(1.30)	0
45	Total Working Capital Requirement	$9,635,847					($391,614)
46							
47	Total Cash and Working Capital Requirement Used						($391,614)
48							
49							

Kentucky-American Water Company

OAG/LFUCG Proposed CWC Requirement

Description	Amount	Revenue Lag	Expense Lag	Net Lag	CWC Factor	CWC Requirement
(1)	(2)	(3)	(4)	(5) = (3) - (4)	(6) = (5) / 366	(7) = (1) * (6)
Salaries & Wages	$ 8,967,621	37.75	11.50	26.25	0.071721	$ 643,170
Fuel, Power and Electric	$ 5,664,614	37.75	24.60	13.15	0.035929	$ 203,524
Chemicals	$ 5,624,592	37.75	28.50	9.25	0.025273	$ 142,152
Purchased Water	$ 368,973	37.75	44.00	(6.25)	(0.017077)	$ (6,301)
Waste Disposal	$ 679,404	37.75	75.70	(37.95)	(0.103689)	$ (70,446)
Service Company Charges	$ 12,519,428	37.75	25.60	12.15	0.033197	$ 415,604
Contracted Services	$ 1,437,684	37.75	25.60	12.15	0.033197	$ 47,726
Group Insurance	$ 1,572,674	37.75	10.50	27.25	0.074454	$ 117,091
Opeb	$ (600,315)	37.75	(97.50)	135.25	0.369536	$ (221,838)
Other Benefits	$ 775,907	37.75	16.00	21.75	0.059426	$ 46,109
Pensions	$ 136,903	37.75	(4.20)	41.95	0.114617	$ 15,691
Insurance Other than Group	$ 1,653,304	37.75	(90.70)	128.45	0.350956	$ 580,237
Rents	$ 47,180	37.75	24.30	13.45	0.036749	$ 1,734
Regulatory Expense	$ 660,519	37.75	37.75	-	-	$ -
Maintenance Service & Supplies	$ 1,309,065	37.75	50.30	(12.55)	(0.034290)	$ (44,887)
Amortization	$ 1,416,156	37.75	37.75	-	-	$ -
Uncollectibles	$ 676,694	37.75	37.75	-	-	$ -
Office Supplies & Services	$ 239,411	37.75	31.80	5.95	0.016257	$ 3,892
Employee Related Exp, Travel & Ent	$ 176,764	37.75	59.50	(21.75)	(0.059426)	$ (10,504)
Building Maintenance & Services	$ 911,837	37.75	31.40	6.35	0.017350	$ 15,820
Postage Printing & Stationary	$ 12,087	37.75	28.20	9.55	0.026093	$ 315
Telecommunication	$ 275,049	37.75	36.20	1.55	0.004235	$ 1,165
Miscellaneous Expense	$ 807,314	37.75	9.50	28.25	0.077186	$ 62,313
Transportation	$ 654,298	37.75	46.90	(9.15)	(0.025000)	$ (16,357)
Other Customer Accounting	$ 478,972	37.75	65.00	(27.25)	(0.074454)	$ (35,661)
Total O & M Expenses	$ 46,466,135					$ 1,890,549
Depreciation and Amortization	$ 28,872,589	37.75	37.75	-	-	$ -
Property Taxes	$ 9,813,711	37.75	238.40	(200.65)	(0.548224)	$ (5,380,112)
Utility Tax	$ 171,010	37.75	(152.00)	189.75	0.518443	$ 88,659
Payroll Taxes	$ 666,852	37.75	11.50	26.25	0.071721	$ 47,828
Income Taxes - Current - SIT	$ 1,148,704	37.75	28.80	8.95	0.024454	$ 28,090
Income Taxes - Current - FIT	$ 5,212,821	37.75	28.80	8.95	0.024454	$ 127,472
Deferred Income Taxes	$ 3,470,120	37.75	37.75	-	-	$ -
Interest Expense - Long - Term Debt	$ 12,708,843	37.75	89.30	(51.55)	(0.140847)	$ (1,790,002)
Interest Expense - Short - Term Debt	$ 235,349	37.75	14.50	23.25	0.063525	$ 14,950
Preferred Dividends	$ 176,512	37.75	15.60	22.15	0.060519	$ 10,682
Net Income	$ 33,184,200	37.75	37.75	-	-	$ -
Net Operating Funds	$ 142,126,846					$ (4,961,885)

AFFIDAVIT

STATE OF MISSOURI)

COUNTY OF ST. LOUIS)

GREG R. MEYER, being duly sworn, deposes and states: that the attached is his sworn testimony and that the statements contained are true and correct to the best of his knowledge, information and belief.

Greg R Meyer

Greg R. Meyer

Sworn to and subscribed before me on this
29th day of September 2023.

Adrienne J Navarro

Notary Public

ADRIENNE JEAN NAVARRO
Notary Public - Notary Seal
STATE OF MISSOURI
Jefferson County
My Commission Expires: Mar. 22, 2025
Commission # 21989987