**COMMONWEALTH OF KENTUCKY**

**BEFORE THE PUBLIC SERVICE COMMISSION**

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|---|---|---|
| **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** |
| | ) | |

**REBUTTAL TESTIMONY OF ANN E. BULKLEY**

**November 8, 2023**

## I. INTRODUCTION

**Q. Are you the same Ann E. Bulkley who previously submitted direct testimony in this proceeding?**

A. Yes. I am submitting this rebuttal testimony before the Kentucky Public Service Commission ("Commission") on behalf of Kentucky-American Water Company ("KAWC" or the "Company"), a wholly-owned subsidiary of American Water Works Company Inc. ("AWK").

**Q. What is the purpose of your rebuttal testimony?**

A. The purpose of my rebuttal testimony is to respond to the direct testimony of Richard A. Baudino on behalf of the Office of Attorney General of the Commonwealth of Kentucky ("OAG") regarding the just and reasonable return on equity ("ROE") and the appropriate capital structure for the Company.[1] I have not attempted to respond to every argument made by Mr. Baudino, and the fact that I may not have responded to any particular argument or statement made by him or others does not indicate my agreement with that argument or statement.

**Q. Are you sponsoring any exhibits as part of your rebuttal testimony?**

A. Yes. I am sponsoring Exhibits AEB-1-R through AEB-7-R, which have been prepared by me or under my direct supervision.

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[1] Kentucky Public Service Commission, Direct Testimony and Exhibits of Richard A. Baudino, September 29, 2023 ("Baudino Direct Testimony").

**Q. Have you updated the cost of equity analyses that you presented in your direct testimony to reflect current market conditions?**

A. Yes. As discussed in more detail herein, I have updated my cost of equity analyses based on market data through October 31, 2023. The updated results of these analyses reflect an increase in the cost of equity since the filing of my direct testimony and continue to support an ROE for the Company in this proceeding of 10.75 percent. My conclusion that the recommended ROE is reasonable continues to be based on not only the results of multiple cost of equity models, but also other factors, including capital market conditions, the capital attraction and comparable return standards, and the Company's specific risks.

**Q. How is the remainder of your rebuttal testimony organized?**

A. The remainder of my rebuttal testimony is organized as follows:

- Section II provides a summary and overview of my rebuttal testimony and the important factors to be considered in establishing the authorized ROE for the Company.
- Section III discusses the changes in capital market conditions since my direct testimony, their effect on the cost of equity, and the comparable return.
- Section IV provides the update to my cost of equity analyses based on market data as of October 31, 2023.
- Section V provides my response to the issues raised by Mr. Baudino.

## II. SUMMARY OF ANALYSIS AND CONCLUSIONS

**Q. What analyses does Mr. Baudino conduct, and what ROE is he recommending for the Company in this proceeding?**

A. Mr. Baudino conducts multiple constant growth DCF and CAPM analyses to arrive at his recommended ROE for the Company in this proceeding. Specifically, Mr. Baudino conducts separate DCF analyses based on each of the sources on which he relies for projected earnings per share ("EPS") and dividend per share ("DPS") growth rates, as well as conducts separate CAPM analyses based on the sources on which he relies for historical and projected market risk premia. Figure 1 summarizes the range of the results of Mr. Baudino's cost of equity models and his overall recommended ROE for the Company in this proceeding.

**Figure 1: Summary of the Results of Mr. Baudino's Cost of Equity Analyses and Recommended ROE**

| | **Mr. Baudino (OAG)** |
|---|---|
| Constant Growth DCF | |
| Method 1 | 8.67% - 9.94% |
| Method 2 | 8.41% - 9.52% |
| CAPM | 8.22% - 12.77% |
| **Overall Recommendation** | **9.40%** |

**Q. What factors should be considered in evaluating the results of the cost of equity analyses and establishing the authorized ROE?**

A. The primary factors that should be considered are: (1) the importance of investors' actual return requirements and the critical role of judgment in selecting the appropriate ROE; (2) the importance of providing a return that is comparable to returns on alternative investments with commensurate risk; (3) the need for a return that supports a utility's ability to attract needed capital at reasonable terms; and (4) the effect of current and expected capital market conditions; and (5) achieving a reasonable balance between the interests of investors and customers.

**Q. What are your key conclusions and recommendations regarding the appropriate ROE and capital structure for the Company?**

A. Nothing in Mr. Baudino's testimony has caused me to change my position. Based on my review of his testimony, my key conclusions regarding the ROE and capital structure for the Company in this proceeding are as follows.

- Updating the cost of equity estimation models that I relied upon in my direct testimony to reflect the most current data demonstrates that the cost of equity has increased since the filing of my direct testimony. Accordingly, the results continue to support my recommended ROE of 10.75 percent for the Company in this proceeding.
- The Company's existing authorized ROE of 9.70 percent was approved by the Commission in 2019. However, since 2019, interest rates have increased significantly, increasing the cost of equity for utilities. In fact, Mr. Baudino acknowledges that as interest rates rise, the cost of equity will also rise.
- While I disagree with various aspects of the cost of equity models conducted by Mr. Baudino in this proceeding, the fundamental issue is that his ROE recommendation of 9.40 percent is directionally inconsistent with the ROE authorized by the Commission in the Company's last rate proceeding relative to the changes in market conditions since that time that are indicative of an increase – not decrease – in the cost of equity.
- Capital market conditions that have led to an increase in the cost of equity are expected to remain during the period in which the Company's rates will be in effect.
    - Interest rates are expected to remain elevated through at least 1Q/2025.
    - Given that the spread between utility dividend yields and Treasury bond yields is well below the long-term average spread, analysts expect utility stocks to continue to underperform, which would mean that current DCF results are likely understated.
- The Company's proposed equity ratio of 52.45 is reasonable as compared to both the actual equity ratios of the utility subsidiaries of the proxy group companies and

the authorized equity ratios for other water and natural gas utilities. Specifically, the Company's proposed equity ratio is:

- below the average actual equity ratio of the utility subsidiaries of the proxy group companies (i.e., utilities with risk profiles that are similar to the Company's risk profile); and
- well within the range of equity ratios authorized for water and natural gas utilities across the U.S. in the past ten years.

## III. CAPITAL MARKET CONDITIONS

**Q. Do changes in capital market conditions since the Company's last rate proceeding continue to indicate an increase in the cost of equity?**

A. Yes. Since the Company's last rate proceeding that was filed in 2018, changes in market conditions have increased the cost of equity. Specifically, as shown in Figure 4 of my direct testimony, interest rates have increased significantly since that time as a result of the Federal Reserve's fight against inflation. In fact, long-term interest rates have increased even further since my direct testimony was filed, with the 30-year Treasury bond yield just reaching a high of 5.11 percent on October 19, 2023, a level at which it had not reached since 2007. Specifically, as shown in Exhibit AEB-4 of my direct testimony, the 30-day average yield on the 30-year Treasury bond was 3.69 percent as of April 30, 2023; however, as shown in Exhibit AEB-3-R, that has increased to 4.84 percent as of October 31, 2023.

Moreover, in the most recent Big Money poll released by *Barron's* in October 2023, which surveys money managers regarding the outlook for the next twelve months, two-thirds of the money managers surveyed expect the yield on the 10-year Treasury bond to be at least 4.50 percent in October 2024.[2] Similarly, according to the most recent *Blue Chip Financial Forecasts* report, the consensus estimate of the average yields on the 10-year and 30-year Treasury bonds are approximately 3.90 percent and 4.20 percent, respectively, through the first quarter of 2025.[3] Therefore, investors expect interest rates to remain elevated for at least the next 18 months. Further, while inflation has receded from its peak, it continues to be above the Federal Reserve's target level, and the reduction has largely been due to the significant increases in the federal funds rate in 2022 and thus far in 2023, as the Federal Open Market Committee ("FOMC") has continued to increase interest rates to reduce inflationary pressure.

**Q. What has Mr. Baudino stated regarding capital market conditions and their impact on the cost of equity for the Company in this proceeding?**

A. Mr. Baudino addresses many of the same capital market conditions that I have discussed, including: the rise of inflation that has brought restrictive Federal Reserve monetary policy and has led to substantially increased short-term and long-term interest rates over the past two years; poor utility stock price performance relative to other sectors of the market as interest rates have increased; and the expectation that interest rates will remain relatively high for the next few years.[4] Mr. Baudino states that the level of interest rates generally affect the authorized ROE for regulated utilities:

> The common stock of regulated utilities tends to be interest rate sensitive. This means that the cost of equity for regulated utilities tends to rise and fall

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[2] Jasinski, Nicholas, Big Money Pros Are Split on the Outlook for Stocks. But They Are Fans of Bonds", October 27, 2023. https://www.barrons.com/articles/big-money-poll-stock-market-bonds-economy-outlook-375aebae?mod=hp_MAG

[3] *Blue Chip Financial Forecasts*, Vol. 42, No. 11, November 1, 2023, p. 2.

[4] Baudino Direct Testimony, at 6-13.

> with changes in interest rates. For example, as interest rates rise, the cost of equity will also rise, and vice versa when interest rates fall. This relationship is due in large part to the capital-intensive nature of regulated industries, including water companies, that rely heavily on both debt and equity to finance their regulated investments.[5]

Mr. Baudino contends that his ROE recommendation fully reflects the current economic and financial market conditions.[6]

**Q. What are the expectations for inflation and interest rates over the near-term?**

A. The Federal Reserve has indicated that it expects inflation will remain elevated above its target level over at least the next year and that monetary policy will remain restrictive in order to reduce inflation. For example, Federal Reserve Chair Powell at the FOMC meeting in September 2023 observed that while inflation is off of its recent highs, it remains significantly above the Federal Reserve's long-term target and noted that further policy firming is possible including additional increases in the federal funds rate:

> Inflation remains well above our longer-run goal of 2 percent. Based on the Consumer Price Index, or CPI, and other data, we estimate that total PCE prices rose 3.4 percent over the 12 months ending in August; and that, excluding the volatile food and energy categories, core PCE prices rose 3.9 percent. Inflation has moderated somewhat since the middle of last year, and longer-term inflation expectations appear to remain well anchored, as reflected in a broad range of surveys of households, businesses, and forecasters, as well as measures from financial markets. Nevertheless, the process of getting inflation sustainably down to 2 percent has a long way to go. The median projection in the SEP for total PCE inflation is 3.3 percent this year, falls to 2.5 percent next year, and reaches 2 percent in 2026.[7]

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[5] *Id.*, at 5-6.

[6] *Id.*, at 3.

[7] Federal Reserve, Transcript of Chair Powell's Press Conference, September 20, 2023, at 2.

After the September 2023 and the November 2023 meetings Chair Powell kept open the possibility of additional rate increases, considering even December 2023, or thereafter if it is appropriate to do so. Further he noted that real interest rates would likely remain positive for some time:

> First of all, interest rates – real interest rates are, are positive now. They're meaningfully positive, and that's a good thing. We need policy to be restrictive so that we can get inflation down to target. Okay. And we need - we're going to need that to remain to be the case for some time. So I think, you know – remember that the – of course, the SEP [Summary of Economic Projections] is not a plan that is negotiated or discussed, really, as a plan. It's accumulation, really, and what you see are the medians. It's accumulation of individual forecasts from 19 people, and then what you're seeing are the medians. So I wouldn't want to, you know, bestow upon it the idea that, that it's really a plan. But what it reflects, though, is that economic activity's been stronger than we expected – stronger than I think everyone expected. And, so what you're – what you're seeing is, this is what people believe, as of now, will be appropriate to achieve what we're looking to achieve, which is progress toward our – toward our inflation goal, as you see in the SEP.[8]
>
> The fact is the committee is not thinking about rate cuts right now at all. We're not talking about rate cuts. We're still very focused on the first question, which is 'have we achieved a stance of monetary policy that's sufficiently restrictive to bring inflation down to 2% over time, sustainably?' That is the question we're focusing on.[9]

**Q. How poorly have utility stocks performed in 2023?**

A. Utility stocks underperformed the broader market in the second half of 2022 and have continued to significantly do so thus far in 2023, as Treasury bond yields have increased and risen to levels greater than the dividend yields of utility stocks. For example, State Street Global Advisors has an exchange-traded fund for each of the 11 sectors of the S&P 500, and of these sectors, the utilities sector is the worst-performing year-to-date by a wide

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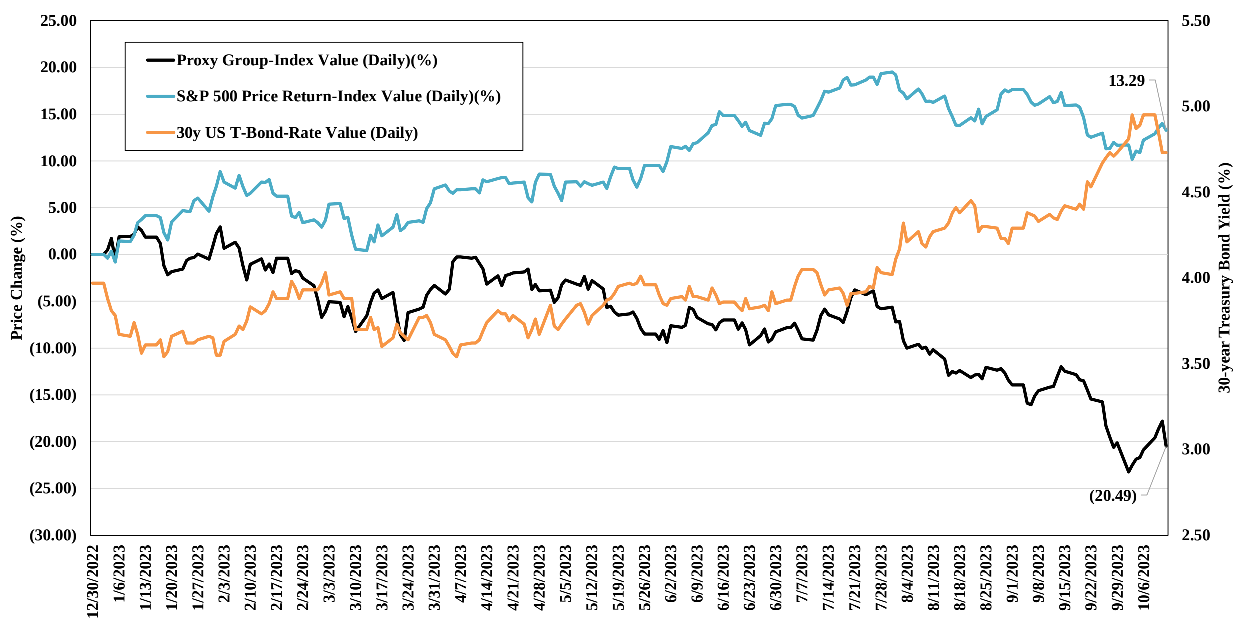
8 *Id.*, Transcript of Chair Powell Press Conference, September 20, 2023 at 6.

9 CNBC "Full recap: Fed leaves rates unchanged, Powell discusses December decision", November 1, 2023.

margin (*e.g.*, 14.00 percent return for the S&P 500 Index compared to a negative 15.52 percent return for the Utilities sector).[10] In fact, on October 2, 2023, the utilities sector dropped by 4.7 percent, its single highest one-day percentage decline since April 2020.[11] Similarly, as shown in Figure 2, the share prices for the companies included in my proxy group have declined by over 20 percent over this same time-period, while the yield on the 30-year Treasury bond has increased 76 basis points.

**Figure 2: Relative Performance of the Proxy Group and the S&P 500, January 1, 2023 – October 12, 2023[12]**




10 Accessed on October 12, 2023 and selected “YTD” performance comparison.

11 Valetkevich, Caroline. “S&P 500 ends near flat; utilities drop, focus on rate outlook.” Reuters, October 2, 2023.

12 S&P Capital IQ Pro.

**Q. Is the performance of the utility sector in 2023 correlated to the recent changes in the yields on long-term government bonds?**

A. Yes. I calculated the correlation between the daily changes in share prices of the companies in my proxy group and the yield on the 30-year Treasury bond since January 2023. The correlation coefficient is negative 0.90, which indicates that the share prices of the companies in my proxy group and the yield on the 30-year Treasury bond are highly inversely correlated (*i.e.*, as the yield on the 30-year Treasury bond increases, the share prices of the proxy group companies decrease, and vice versa). This finding is consistent with the analysis conducted by Goldman Sachs and Deutsche Bank referenced in my direct testimony that showed utility stock prices have one of the strongest negative relationships with bond yields.

**Q. Given that interest rates are expected to remain elevated, what are equity analysts' current expectations of the performance of the utilities sector over the near term?**

A. Equity analysts continue to project that utilities will underperform the broader market given the substantial increases in interest rates. For example, Fidelity Investments continues to classify the utility sector as underweight[13] and Bank of America recently noted that they are "not so constructive on [u]tilities" given that the dividend yields for utilities are below both the yields available on long- and short-term treasury bonds.[14] Moreover, as referenced above, the professional investors surveyed by *Barron's* in its most recent Big Money poll selected the utility sector as one of the four equity sectors that they liked the

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[13] Fidelity Investments. "Fourth Quarter 2023 Investment Research Update." October 19, 2023.

[14] Dumoulin-Smith, Julien, *et. al*. "US Electric Utilities & IPPs: As the leaves fall, preparing for Autumn utility outlook. Macro still has potholes." BofA Securities, September 6, 2023.

least over the next twelve months, indicating they are projecting that utilities will underperform the broader market in 2024.[15]

**Q. Does the spread between the dividend yields of utility stocks versus the yield on long-term government bonds continue to be indicative of an underperformance of utility stocks relative to the overall market going forward?**

A. Yes. As noted in my direct testimony, the current yield spread between the dividend yields of utility stocks and the yield on long-term government bonds is well below the historical average and that not only continues to be the case, but the spread has increased since the filing of my direct testimony. As shown in Figure 3 below, I updated Figure 5 of my direct testimony to rely on data through October 31, 2023 and calculated the yield spread as the difference between the dividend yield for my proxy group and the yield on the 10-year Treasury bond. Specifically, the yield spread as of April 28, 2023 (i.e., the end of the analytical period that I relied on in my direct testimony) was negative 0.38 percent, meaning that the yield on the 10-year Treasury bond exceeded the dividend yield for my proxy group by that amount. However, as of October 31, 2023, the yield spread has only further widened to negative 1.07 percent and remains even further below the long-term average since January 1, 2014 of 0.52 percent. Given that yields on government bonds are more attractive than utility stocks and interest rates are expected to remain relatively high

[15] Jasinski, Nicholas, Big Money Pros Are Split on the Outlook for Stocks. But They Are Fans of Bonds", October 27, 2023. https://www.barrons.com/articles/big-money-poll-stock-market-bonds-economy-outlook-375aebae?mod=hp_MAG

for at least the next year, this indicates continued underperformance of the utility sector over the near term.

**Figure 3: Spread between the Average Dividend Yield of My Proxy Group Companies and the 10-year Treasury Bond Yield, January 2014 to October 2023[16]**


**Q. Does Mr. Baudino's ROE recommendation appropriately reflect the change in market conditions since the completion of the Company's last rate proceeding in 2018?**

A. No. In the Company's last rate proceeding, the Commission approved an ROE of 9.70 percent. Given that Mr. Baudino acknowledges as interest rates rise, the cost of equity will also rise, and interest rates have risen substantially since the Company's last rate

[16] S&P Capital IQ Pro.

proceeding, it would be reasonable to conclude that the ROE should exceed 9.70 percent in the current proceeding. However, despite an increase in the cost of equity, Mr. Baudino recommends an ROE that is 30 basis points lower than the Company's currently authorized ROE.

## IV. UPDATED COST OF EQUITY ANALYSES

**Q. Have you updated your cost of equity analyses?**

A. Yes. I have updated the results of the cost of equity analyses based on market data through October 31, 2023 using the same analyses as in my direct testimony.

**Q. What are the updated results of your cost of equity analyses?**

A. Figure 4 (see also Rebuttal Exhibit AEB-1-R through Exhibit AEB-5-R) summarizes the results of my updated cost of equity analyses as of October 31, 2023.

**Figure 4: Updated Model Results[17]**

| | Minimum Growth Rate | Average Growth Rate | Maximum Growth Rate |
|---|---|---|---|
| **Constant Growth DCF** | | | |
| Mean Results: | | | |
| 30-Day Average | 8.90% | 10.00% | 11.31% |
| 90-Day Average | 8.66% | 9.77% | 11.08% |
| 180-Day Average | 8.50% | 9.60% | 10.91% |
| Average | 8.69% | 9.79% | 11.10% |
| Median Results: | | | |
| 30-Day Average | 8.91% | 9.98% | 11.34% |
| 90-Day Average | 8.65% | 9.54% | 10.90% |
| 180-Day Average | 8.52% | 9.28% | 10.63% |
| Average | 8.69% | 9.60% | 10.96% |

| | Current 30-day Average Treasury Bond Yield | Near-Term Blue Chip Forecast Yield | Long-Term Blue Chip Forecast Yield |
|---|---|---|---|
| **CAPM:** | | | |
| Current Value Line Beta | 10.86% | 10.79% | 10.68% |
| Current Bloomberg Beta | 10.38% | 10.29% | 10.13% |
| Long-term Avg. Beta | 10.16% | 10.05% | 9.88% |
| **ECAPM:** | | | |
| Current Value Line Beta | 11.18% | 11.13% | 11.04% |
| Current Bloomberg Beta | 10.82% | 10.74% | 10.63% |
| Long-term Avg. Beta | 10.65% | 10.57% | 10.44% |

**Q. Do the updated results support your recommended ROE of 10.75 percent in this proceeding?**

A. Yes. The range of updated results reflecting market data through October 31, 2023 continues to support my recommended ROE for KAWC of 10.75 percent. The results of

[17] The Constant Growth DCF results exclude the results for Middlesex Water Company ("MSEX") because these results do not provide a reasonable equity risk premium over the current yield on the Moody's Baa rated utility bond index, which was 6.48 percent on a 30-day average basis ending October 31, 2023 (*i.e.*, the DCF result based on the average growth rate for MSEX is 5.79 percent which is significantly below the 30-day average yield on the Moody's Baa-rated utility bonds of 6.48 percent as of October 31, 2023).

the DCF analyses are in many instances higher than the results included in my direct testimony, and the results of the CAPM models have increased. Further, as discussed in more detail previously, yields on long-term government bonds are expected to remain elevated and equity analysts continue to expect the utility sector to underperform the broader market over the near-term. Therefore, it is more reasonable to consider the range of DCF results that rely on the average to maximum growth rates, as well as the results of the other cost of equity estimation models, in authorizing a just and reasonable ROE for the Company.

## V. RESPONSE TO MR. BAUDINO

**Q. Please summarize Mr. Baudino's testimony regarding his recommended ROE and capital structure.**

A. Mr. Baudino develops both a constant growth DCF analysis and a CAPM analysis; however, he relies primarily on the results of his DCF model to develop his recommended ROE range and relies on the results of the CAPM as a check on the reasonableness of his DCF results. Given the recent increase in interest rates and decline in utility share prices, Mr. Baudino notes that he has excluded cost of equity results below 8.70 percent as "too conservative," and thus concludes that his DCF model supports a recommended ROE range of 8.70 percent to 10.00 percent.[18] He recommends an ROE of 9.40 percent for KAWC, which is the midpoint of his recommended range of 8.70 percent to 10.00 percent. Mr. Baudino contends that the cost of equity results of his CAPM analysis support his

[18] Baudino Direct Testimony, at 32.

recommended range and, in particular, notes that the high end of his range of 10 percent was informed by the results of his CAPM analysis using the historical market risk premium.[19] Finally, Mr. Baudino opposes the Company's proposed equity ratio of 52.45 percent and instead recommends an equity ratio of 50 percent, which he contends is consistent with KAWC's equity ratio in 2022 and slightly higher than the equity ratio the Company maintained between 2017 and 2021.[20]

**Q. Please identify the areas of Mr. Baudino's analysis with which you disagree.**

A. I disagree with the following aspects of Mr. Baudino's analyses: (1) the use of dividend growth rates in the constant growth DCF model; (2) the application of the constant growth DCF model to the proxy group; (3) reliance on the constant growth DCF results without consideration of how current market conditions are affecting the constant growth DCF model; (4) the market risk premium relied on to estimate the CAPM analysis; (5) the relevance of the ECAPM analysis; (6) the effect of company-specific risks on the cost of equity for KAWC; and (7) the appropriate equity ratio for the Company. I discuss each of these issues in the following sections of my rebuttal testimony.

## V.A. Constant Growth DCF

**Q. Please summarize Mr. Baudino's constant growth DCF analysis.**

A. Mr. Baudino conducts a constant growth DCF analysis using the proxy group that I relied on in my direct testimony. Specifically, Mr. Baudino:

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[19] *Id.*

[20] *Id.*, at 34-35.

- Develops the dividend yield using 6-month average stock prices and the current annual dividend of the companies in the proxy group and adjusts the dividend yield for growth using one-half of the expected growth rate.[21] Mr. Baudino uses the high and low stock price for each month during the six-month period from March 2023 through August 2023. The dividend yield is then calculated for each month using the dividend that had been announced by the company at that time. He then averages the six dividend yields over this time-period to derive the dividend yield that was used in his DCF analysis.[22]

- Relies on projected earnings per share ("EPS") growth rates from Yahoo! Finance, *Zacks*, and *Value Line*, as well as the projected dividend growth rates reported by *Value Line*.[23]

- Mr. Baudino then calculates his constant growth DCF analysis relying on the mean and median growth rate for the proxy group, which he refers to as Method 1 and Method 2, respectively.[24]

As shown in Figure 5, the results of Method 1 range from 9.67 percent to 9.94 percent, while the results of Method 2 range from 8.41 percent to 9.52 percent. However, Mr. Baudino excludes the low-end result for Method 2 of 8.41 percent due to the recent increase in interest rates and decline in utility share prices.[25] Thus, the lower bound of his DCF analysis is approximately 8.70 percent, while the upper is approximately 10.00 percent, which forms the basis of Mr. Baudino's recommended ROE range for KAWC.

[21] *Id.*, at 21.

[22] *Id.*, at Exhibit RAB-3.

[23] *Id.*, at 19-21.

[24] *Id.*, at 21.

[25] *Id.*, at 32.

**Figure 5: Mr. Baudino's Constant Growth DCF results**[26]

| | Low | Mean | High |
|---|---|---|---|
| Method 1 | 8.67% | 9.07% | 9.94% |
| Method 2 | 8.41% | 9.04% | 9.52% |

**Q. Do you agree with the six-month averaging period that Mr. Baudino relies on to calculate the dividend yields included in his constant growth DCF analysis?**

A. No. As noted in my direct testimony, I agree that it is appropriate to rely on an average of recent trading days to estimate the share prices relied on in the constant growth DCF model to ensure that the prices are not skewed by anomalous events. The averaging period selected must balance using the most current market data with ensuring the data is not skewed by anomalous events. As a result, I select averaging periods of 30, 90, and 180 trading days. While my 180-day averaging period is similar to the 6-month period that Mr. Baudino relies on, I believe less weight should be placed on the longer averaging periods at this time due to recent changes in capital market conditions.

For example, as shown previously in Figure 2, between January 2023 and October 12, 2023, the share prices for the companies included in my proxy group declined by over 20 percent. Similarly, as shown in Figure 6, due to the decline in share prices, the proxy group average dividend yields estimated by Mr. Baudino increased 19 basis points from 2.89 percent in March 2023 to 3.08 percent in August 2023. In fact, Mr. Baudino

[26] *Id*., at 32.

acknowledges that the utility sector has underperformed the broader market in 2023 as interest rates have increased.[27]

**Figure 6: Mr. Baudino's Proxy Group Dividend Yields**

| | Mar-23 | Apr-23 | May-23 | Jun-23 | Jul-23 | Aug-23 |
|---|---|---|---|---|---|---|
| Proxy Group Average | 2.89% | 2.79% | 2.89% | 2.95% | 2.96% | 3.08% |

As a result, the six-month averaging period relied on by Mr. Baudino will not fully reflect the recent decline in share prices, which means his dividend yields are biased downwards and the results of his DCF model understate the cost of equity for KAWC. Given the recent changes in market conditions, I have placed greater weight on the results of my DCF analysis relying on 30-day average share prices as opposed to the 90-day and 180-day price scenarios. Moreover, as I will discuss in more detail below, since utilities are expected to continue to underperform over the near-term, I place greater weight on the range produced by my mean and mean-high DCF results and other cost of equity estimation models such as the CAPM and ECAPM that reflect market conditions expected during the rate period through the use of projected inputs.

**Q. Does Mr. Baudino rely on the 6-month average when estimating the risk-free rate in his CAPM analysis?**

A. No. Mr. Baudino notes that he "initially" considered relying on the 6-month average yield (*i.e.*, March 2023 through August 2023) on the 30-year Treasury bond as the estimate of the risk-free rate; however, instead relied on the average yield on the 30-year Treasury

[27] *Id*., at 13.

bond for August 2023 due to the "steady" increase in long-term government bond yields in 2023.[28] Thus, consistent with this logic, and given the significant decline in utility stock prices in 2023, it is reasonable to conclude that Mr. Baudino should have decided against using a six-month averaging period to calculate the dividend yields in his constant growth DFC analysis and instead chosen a shorter averaging period that better reflects the recent performance of utility stocks.

**Q. Do you agree with Mr. Baudino's consideration of projected dividend per share ("DPS") growth rates?**

A. No. There are multiple reasons why reliance on *Value Line* projections of DPS growth is not appropriate:

1. Earnings are the fundamental determinant of a company's ability to pay dividends, and over the long-term dividend growth can only be sustained by earnings growth.[29]
2. Management decisions to conserve cash for capital investments, to manage the dividend payout for the purpose of minimizing future dividend reductions, or to signal future earnings prospects can influence dividend growth rates in near-term periods. These decisions affect the dividends and the payout ratio in the short term but are not necessarily indicative of a firm's long-term earnings growth. For example, forty S&P 500 companies suspended dividend payments in 2020 as a result of the increased uncertainty due to COVID-19.[30] These dividend suspensions occurred because companies believed earnings over the short term would decline and, therefore, elected to conserve cash to offset the financial effects of COVID-19.

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[28] *Id.*, at 30.

[29] Brigham, Eugene F. and Joel F. Houston. *Fundamentals of Financial Management*. Concise Fourth Edition, Thomson South-Western, 2004, at 317 ("Growth in dividends occurs primarily as a result of growth in earnings per share (EPS). Earnings growth, in turn, results from a number of factors, including (1) inflation, (2) the amount of earnings the company retains and invests, and (3) the rate of return the company earns on its equity (ROE).").

[30] Langley, Karen. "U.S. Companies Slashed Dividends at Fastest Pace in More Than a Decade." Wall Street Journal, July 8, 2020.

3. There is significant academic research demonstrating that EPS growth rates are most relevant in stock price valuation.[31] For example, Liu, et. al. (2002) examined "the valuation performance of a comprehensive list of value drivers" and found that "forward earnings explain stock prices remarkably well" and were generally superior to other value drivers analyzed. Gleason, et. al. (2012) found that the sell-side analysts with the most accurate stock price targets were those whom the researchers found to have more accurate earnings forecasts. The use of DPS growth rates ignores the academic research demonstrating that EPS growth rates are most relevant in stock price valuation.

4. Investment analysts report predominant reliance on EPS growth projections. In a survey completed by 297 members of the Association for Investment Management and Research, the majority of respondents ranked earnings as the most important variable in valuing a security (more important than cash flow, dividends, or book value).[32]

5. Projected DPS growth rates from *Value Line* are the views of an individual analyst. In contrast, projected EPS growth rates from Yahoo! Finance and Zacks are based on consensus estimates available from multiple sources. In other words, projected EPS growth rates include the contributions of more than one analyst and thus the results are less likely to be biased in one direction or another. Moreover, the fact that projected EPS growth estimates are available from multiple sources on a consensus basis attests to the importance of projected EPS growth rates to investors when developing long-term growth expectations.

Therefore, projections of EPS growth provide a more robust estimate of total company growth since it is earnings growth that will influence DPS growth. All of these

[31] *See, e.g.,* Harris, Robert S. "Using Analysts' Growth Forecasts to Estimate Shareholder Required Rates of Return." *Financial Management*, Spring 1986, at 66; Vander Weide, James H. and Willard T. Carleton. "Investor growth expectations: Analysts vs. history." *The Journal of Portfolio Management*, Spring, 1988; Harris, Robert S. and Felicia C.Marston. "Estimating Shareholder Risk Premia Using Analysts' Growth Forecasts." *Financial Management*, Summer, 1992; Advanced Research Center. "Investor Growth Expectations." Summer 2004; Brigham, Eugene F. and Dilip K. Shome and Steve R. Vinson. "The Risk Premium Approach to Measuring a Utility's Cost of Equity." *Financial Management*, Vol. 14, No. 1, Spring, 1985; Morin, Dr. Roger A. New Regulatory Finance. Public Utilities Reports, Inc., 2006, pp. 299-303; Liu, Jing, et al. "Equity Valuation Using Multiples." *Journal of Accounting Research*, Vol. 40 No. 1, March 2002; Gleason, C.A., et al. "Valuation Model Use and the Price Target Performance of Sell-Side Equity Analysts." *Contemporary Accounting Research*, September 2011; Jung, Boochun, et. al. "Do financial analysts' long-term growth forecasts matter? Evidence from stock recommendations and career outcomes." *Journal of Accounting and Economics*, Vol. 53 Issues 1-2, February-April 2012.

[32] Block, Stanley B. "A Study of Financial Analysts: Practice and Theory." *Financial Analysts Journal*, July/August 1999.

reasons are why I relied on projected EPS growth rates for purposes of my constant growth DCF analysis.

**Q. Does Mr. Baudino develop cost of equity estimates for each individual company in the proxy group?**

A. No. Unlike the DCF analyses presented in my direct testimony, Mr. Baudino's DCF analysis does not provide the result for each individual company.

**Q. Is it important to consider the cost of equity results for each proxy company?**

A. Yes. As discussed in the *Hope* decision, developing a return that reflects investor expectations should be of primary importance, not the model or methodology employed to derive that result. As such, it is important to consider whether the return estimates for each individual company are reasonable.

**Q. Have you calculated the constant growth DCF results for each of the companies in the proxy group using the dividend yields and growth rates assumed by Mr. Baudino?**

A. Yes. Exhibit AEB-6-R provides the DCF result for each of the companies in the proxy group based on the dividend yields calculated by Mr. Baudino, the DPS growth rates from *Value Line*, and the EPS growth rates from *Value Line*, Yahoo! Finance, and *Zacks* that are relied on by Mr. Baudino.

**Q. Do you have any concerns regarding the individual DCF results for the companies in Mr. Baudino's proxy group?**

A. Yes, I do. As shown in Exhibit AEB-6-R, the DCF result for Northwest Natural Gas Company ("NWN") is of 4.88 percent when relying on the *Value Line* projected DPS growth rate. In addition, the DCF results for Middlesex Water Company ("MSEX") are 4.33 percent when relying on the projected EPS growth rates from Yahoo! Finance and *Zacks* and is 5.87 percent when relying on the average of Mr. Baudino's four growth rate estimates. These results are below the 30-day average yield as of August 31, 2023 on Moody's Baa-rated utility bonds of 5.94 percent. A DCF result below the cost of debt is unrealistic because it violates the fundamental financial tenet that equity investors require a higher return than bondholders to compensate them for the additional risks associated with owning common equity. Consequently, the DCF result for NWN of 4.88 percent, as well as the DCF results for MSEX that range from 4.33 percent to 5.87 percent, would not compensate investors for the added risk of an equity investment. Therefore, had Mr. Baudino calculated the individual DCF results for each proxy group company instead of relying on the average dividend yield and average and median growth rates, he would have realized that the results for NWN and MSEX included in these averages should have been excluded. The inclusion of the individual DCF results for NWN and MSEX biases the average (Method 1) and median (Method 2) results of Mr. Baudino's constant growth DCF analysis downwards.

**Q. Have other jurisdictions imposed an outlier test on the results of the DCF model?**

A. Yes. In Opinion No. 569-A, the Federal Energy Regulatory Commission ("FERC") affirmed the use of outlier tests as a reasonable approach for addressing results that are too low to be reasonably considered in any measure of central tendency.[33]

[33] *Ass'n. of Businesses Advocating Tariff Equity v. Midcontinent Indep. Sys. Operator, Inc.*, Opinion No. 569-A, 171 FERC ¶ 61,154 (2020), at PP 154-161.

**Q. Does Mr. Baudino also exclude DCF results that he considers to be too low given current market conditions?**

A. Yes. While Mr. Baudino does not calculate individual DCF results for each proxy group company, he does review the average and median DCF results for the proxy group. Specifically, Mr. Baudino concludes that cost of equity results below 8.70 percent are "too conservative" given current market conditions, including persistently high inflation, increasing long-term government bond yields, as well as the recent decline in utility share prices.[34]

**Q. How would the results of Mr. Baudino's constant growth DCF analyses change if you adjusted for the issues you have identified?**

A. Making the following reasonable adjustments to Mr. Baudino's constant growth DCF model would substantially change the results of his analyses:

1. Calculate individual DCF results for each company in the proxy group;
2. Rely on the average dividend yield for August 2023 as opposed to the 6-month average dividend yield for the period March 2023 through August 2023;
3. Rely on projected EPS growth rates from *Value Line*, Yahoo! Finance, and *Zacks*, and;
4. Apply an outlier screen to exclude individual DCF results that are below the 30-day average yield on Moody's Baa-rated utility bonds as of August 31, 2023.

As shown in Figure 7 (see also Exhibit AEB-6-R), by making these reasonable changes to Mr. Baudino's constant growth DCF analysis, the mean cost of equity result

34 Baudino Direct Testimony, at 21-22, 32.

increases by 67 basis points for Method 1 and 57 basis points for Method 2. Likewise, the cost of equity range for both Method 1 and Method 2 also shift materially higher.

**Figure 7: Summary of Adjustments to Mr. Baudino's Constant Growth DCF Results**

| | Method 1 (Average) | | Method 2 (Median) | |
|---|---|---|---|---|
| | **Mean** | **COE Range** | **Median** | **COE Range** |
| As Filed | 9.07% | 8.67% - 9.94% | 9.04% | 8.41% - 9.52% |
| Average dividend yields for Aug. 2023, EPS growth rates, and Outlier Screen | 9.74% | 9.28% - 10.10% | 9.61% | 8.81% - 9.98% |

**Q. What do you conclude about the results of the DCF model under current and prospective market conditions?**

A. As discussed in my direct testimony and previously herein, interest rates have increased significantly over the past several months. Given that the share prices of utility stocks are inversely correlated to interest rates, the expectation would be that the utility sector would underperform as interest rates increase. In fact, Mr. Baudino acknowledges that the utility sector has underperformed in 2023 due to the rise in interest rates.[35] In addition, since the yields on long-term government bonds still exceed the dividend yields of utilities and the yields on long-term government bonds are expected to remain elevated, it is reasonable to conclude that utilities will continue to underperform the broader market. This suggests that the cost of equity for utilities will increase over the near-term and thus, current estimates of the DCF model are likely understating the forward-looking cost of equity for KAWC.

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[35] *Id.*, at 13.

Moreover, current and prospective market conditions support consideration of other cost of equity estimation models such as the CAPM, and ECAPM, which reflect expected market conditions during the period that KAWC's rates will be in effect.

**Q. Have regulatory commissions acknowledged that the DCF model might understate the cost of equity given current capital market conditions?**

A. Yes. For example, in its May 2022 decision in establishing the cost of equity for Aqua Pennsylvania, Inc., the Pennsylvania Public Utility Commission ("PAPUC") specifically concluded that the current capital market conditions of high inflation and increasing interest rates has resulted in the DCF model understating the utility cost of equity, and that weight should be placed on risk premium models, such as the CAPM, in the determination of the ROE:

> To help control rising inflation, the Federal Open Market Committee has signaled that it is ending its policies designed to maintain low interest rates. Aqua Exc. at 9. Because the DCF model does not directly account for interest rates, consequently, it is slow to respond to interest rate changes. However, I&E's CAPM model uses forecasted yields on ten-year Treasury bonds, and accordingly, its methodology captures forward looking changes in interest rates.
>
> Therefore, our methodology for determining Aqua's ROE shall utilize both I&E's DCF and CAPM methodologies. As noted above, the Commission recognizes the importance of informed judgment and information provided by other ROE models. In the 2012 PPL Order, the Commission considered PPL's CAPM and RP methods, tempered by informed judgment, instead of DCF-only results. We conclude that methodologies other than the DCF can be used as a check upon the reasonableness of the DCF derived ROE calculation. Historically, we have relied primarily upon the DCF methodology in arriving at ROE determinations and have utilized the results of the CAPM as a check upon the reasonableness of the DCF derived equity return. As such, where evidence based on other methods suggests that the DCF-only results may understate the utility's ROE, we will consider those other methods, to some degree, in determining the appropriate range of reasonableness for our equity return determination. In light of the above, we

> shall determine an appropriate ROE for Aqua using informed judgement based on I&E's DCF and CAPM methodologies.[36]

More recently, the Massachusetts Department of Public Utilities ("Department") also recently came to a similar conclusion:

> The Department recently considered the relationship between low interest rates and utility stock prices over the last several years and whether a projected increase in long-term interest rates caused the DCF analysis to understate the cost of equity. D.P.U. 20-120, at 416-419. The Department found that, although utility stocks had increased above historic levels in conjunction with low interest rates, the evidence in that proceeding that long-term interest rates would change was speculative. D.P.U. 20-120, at 417-419. In this proceeding, the record is clear that long-term interest rates have increased compared to the period of time from which the parties derived the dividend yields used in the DCF analyses (Exh. ES-VVR-Rebutal-1, at 23-26; Tr. 14, at 1463). We also have considered the Attorney General's evidence of investors forecasting that utility stocks will retain their high valuations in the near term (Tr. 14, at 1449-1452; RR-DPU-48). ***Based on the foregoing evidence, the Department finds that there is greater certainty that the DCF results understate the Company's cost of equity.***[37]

## V.B. CAPM

**Q. Please summarize Mr. Baudino's CAPM analysis.**

A. Mr. Baudino's CAPM analysis relies on a risk-free rate that reflects the average yield on 30-year Treasury bonds in August 2023, betas published by *Value Line* for the companies in his proxy group, and three approaches to estimating the market risk premium: (1) a forward-looking market risk premium based on the expected return on the market; (2) historical market risk premia; and (3) two published sources (*i.e.*, Kroll and Professor

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[36] Pennsylvania Public Utility Commission, Docket Nos. R-2021-3027385 and R-2021-3027386, Opinion and Order, May 12, 2022, at 154–155.

[37] Massachusetts Department of Public Utilities, D.P.U. 22-22, November 30, 2022, p. 385-386; emphasis added.

Damodaran) of a market risk premium.[38] Using these assumptions and inputs, Mr. Baudino derives CAPM results of 12.77 percent (based on a forward-looking market risk premium), 8.64 percent to 10.04 percent (based on historical market risk premia) and 8.20 percent to 8.75 percent (based on the published estimates of the market risk premium from *Kroll* and Professor Damodaran).[39]

**Q. What is the primary difference between your application of the CAPM and Mr. Baudino's application of this model?**

A. The primary difference between our respective applications of the CAPM is the estimate of the market risk premium, and my primary concern with Mr. Baudino's CAPM analysis is his reliance on both the historical market risk premia and the published estimates of the market risk premium from *Kroll* and Professor Damodaran.

**Q. Do you agree with Mr. Baudino's use of a historical market risk premium for estimating the CAPM?**

A. No. I have multiple concerns with Mr. Baudino's use of a historical market risk premium. Fundamentally, the market return and market risk premium should be forward-looking, and Mr. Baudino's historically-derived market return and market risk premium estimates are certainly not forward-looking and nor has he provided any evidence that the historical averages on which he relies are reflective of the expected market conditions during the

[38] Baudino Direct Testimony, at 25, 30, 31.

[39] *Id.*, at 31.

period in which the Company's proposed rates will be in effect. As *Morningstar* has observed, the market risk premium is a forward-looking concept, not a historical analysis.

> It is important to note that the expected equity risk premium, as it is used in discount rates and the cost of capital analysis, is a forward-looking concept. That is, the equity risk premium that is used in the discount rate should be reflective of what investors think the risk premium will be going forward.[40]

While the use of a historically-derived average market return and market risk premium are reflective of the returns realized by investors under different market and economic conditions, they are not necessarily reflective of the market return required by investors in the current and expected market environment. Currently, interest rates have increased substantially and are expected to remain elevated over at least the next year, inflation remains well above the Federal Reserve's target level, and uncertainty (overall higher risk) in the market has increased because of the lagged effect of the Federal Reserve's policies on the economy. The effect of these recent changes in market conditions on investor return requirements is not factored into the average real return of the S&P 500 that Mr. Baudino relies on to calculate his market risk premium.

In addition to this overarching issue, there is an additional problem with the historically-derived market risk premia relied on by Mr. Baudino, as each of Mr. Baudino's historical market risk premia also fail to consider the inverse relationship between interest rates and the market risk premium under current market conditions (*i.e.,* as interest rates decrease, the market risk premium increases).

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[40] *Morningstar Inc.*, 2010 Ibbotson SBBI Valuation Yearbook, at 55.

**Q. Why does the historical market risk premium relied upon by Mr. Baudino fail to account for the inverse relationship between interest rates and the market risk premia?**

A. Mr. Baudino simply takes an average of historical market risk premia and then utilizes a current risk-free rate in the CAPM equation; however, the current risk-free rate bears no relationship to the average historical interest rate underlying the average historical market risk premia on which Mr. Baudino relies. However, it is important to recognize both academic literature and market evidence indicating that the equity risk premium is inversely related to the level of interest rates (*i.e.*, as interest rates increase, the equity risk premium decreases, and vice versa).[41]

To illustrate this point, in one of Mr. Baudino's estimates of the historical market risk premium, he has relied on the arithmetic market risk premium for the period of 1926-2022 as reported by *Kroll*. Relying on that historical data, when calculated as the difference between the return on Large Company Stocks and the income-only return on long-term government bond, the historical market risk premium for 1926-2022 is 7.17 percent. Further, the historical income-only return on government bonds over that same period was 4.85 percent;[42] however, the average risk-free rate on long-term government bonds in August 2023 that Mr. Baudino has relied on in his CAPM is 4.30 percent. Therefore, because current interest rates on long-term government bonds (*i.e.*, 4.30 percent) are below

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41 *See e.g.*, Berry, S. Keith. "Interest Rate Risk and Utility Risk Premia during 1982-93." *Managerial and Decision Economics*, Vol. 19, No. 2, March, 1998. *See also*, Harris, Robert S. "Using Analysts' Growth Forecasts to Estimate Shareholder Required Rates of Return." *Financial Management*, Spring 1986, at 66.

42 *Kroll*, Valuation Handbook: Guide to Cost of Capital, 2023.

the historical average (*i.e.*, 4.85 percent), the inverse relationship between interest rates and the market risk premium implies that the current market risk premium should be above the long-term historical average of 7.17 percent. Consequently, Mr. Baudino's use of a historical market risk premium understates the market risk premium in the current market environment.

**Q. Has *Kroll*, the publisher of the historical data on which Mr. Baudino relies to estimate his historical market risk premia, highlighted a potential inconsistency with relying on historical data for a forward-looking analysis such as the CAPM?**

A. Yes. As *Kroll* observes, "[i]n using a historical measure of the equity risk premium, one assumes that what has happened in the past is representative of what might be expected in the future."[43] However, because the long-term government bond yields are currently below those Mr. Baudino has relied upon in his historical average market risk premium estimate, the market risk premium based on long-term historical average data is certainly not representative of what is expected in the future.

**Q. Is there also evidence that the use of a historical market premium can produce counter-intuitive results?**

A. Yes. Figure 8 illustrates the problem with relying on the historical market risk premium such as Mr. Baudino has done. Specifically, the figure shows that from 2007-2009, the historical market risk premium decreased even as market volatility (the primary statistical measure of risk) significantly increased. Further, this figure demonstrates the significant

[43] *Kroll*, 2022 SBBI Yearbook, at 198.

swings in the annual equity risk premium that were averaged into the long-term historical average calculations. As shown, in 2008, the annual equity "premium" was negative, which implies a discount. It is incomprehensible that the perceived risk to equity was negative (implying a lower required return) in the height of the financial market collapse when the overall market return was a negative 37 percent. This individual observation, which runs counter to the theory of the equity risk premium, reduced the average market risk premium for the prior 80 years by 60 basis points.

**Figure 8: Historical Market Risk Premium and Market Volatility**

| | **Market Volatility** | **Market Return** | **Annual Equity Premium** | **Long-term Average Historical Market Risk Premium**[44] |
|---|---|---|---|---|
| 2007 | 17.54 | 5.49% | 0.63% | 7.10% |
| 2008 | 32.69 | -37.00% | -41.45% | 6.50% |
| 2009 | 31.48 | 26.46% | 3.47% | 6.70% |

The assumption that investors would expect or require a lower risk premium during periods of increased volatility is counter-intuitive and leads to unreliable analytical results. As noted earlier, the relevant objective in the application of the CAPM is to ensure that all three components of the model (*i.e.*, the risk-free rate, the beta, and the market risk premium) are consistent with market conditions and investor perceptions. The forecasted market risk premium estimates used in my original and updated CAPM analyses specifically address that concern.

[44] Ibbotson SBBI Yearbook. *Morningstar Inc*. 2008, at 28. *Ibbotson SBBI Yearbook. Morningstar Inc*. 2009, at 23; Ibbotson SBBI Yearbook. *Morningstar Inc*. 2010, at 23. The historical market risk premium equals the total return on large company stocks less the income-only return on long-term government securities.

**Q. Are the market risk premia published by *Kroll* and Professor Damodaran and relied on by Mr. Baudino in two of his CAPM analyses also inconsistent with the inverse relationship between interest rates and the market risk premium?**

A. Yes. As shown in Figure 9, the market risk premia published by *Kroll* and Professor Damodaran relied on by Mr. Baudino are also inconsistent with the inverse relationship between interest rates and the market risk premium. Specifically, the aforementioned market risk premia are well below the long-term average market risk premium, and yet contrary to the inverse relationship between interest rates and the market risk premium, Mr. Baudino's risk-free rate is also well below the long-term term average risk-free rate.

**Figure 9: Misalignment of *Kroll* and Professor Damodaran Market Risk Premia Relied on by Mr. Baudino**

| Source | Market Risk Premium | Amount Below Long-Term Avg. | Risk-Free Rate | Amount Below Long-Term Avg. |
|---|---|---|---|---|
| **Long-Term Historical Avg.** | **7.17%** | | **4.85%** | |
| *Kroll* - Normalized | 5.50% | -1.67% | 4.30% | -0.55% |
| Professor Damodaran | 4.82% | -2.35% | 4.30% | -0.55% |

**Q. Have you recalculated Mr. Baudino's CAPM analysis to address your concerns with his estimates of the market risk premium?**

A. Yes. Specifically, I adjusted Mr. Baudino's CAPM analyses to:

1. Exclude his CAPM analyses that rely on the market risk premia published by *Kroll* and Professor Damodaran given that these market risk premia are: (1) not reflective of the inverse relationship between the market risk premium and interest rates; and (2) the use of these market risk premia result in a CAPM range of 8.20 percent to 8.75 percent, which is unreasonably low, particularly since Mr. Baudino has

excluded cost of equity results below 8.70 percent given current market conditions (*i.e.*, Mr. Baudino does not rely on the result of his CAPM analysis using the market risk premium published by Professor Damodaran of 8.20 percent).

2. Adjust his CAPM analyses that rely on the historical risk premia to not rely specifically on the historical market risk premium, but instead calculate the market risk premium as the difference between the historical market returns from 1926 through 2022 that he relies on (*i.e.*, arithmetic average, supply-side, and supply-side accounting for World War II Interest Rate bias) and his estimate of the risk-free rate. While I do not agree with the use of the historical market return from 1926 through 2022 as the estimate of the market return for the reasons discussed, this specification of the market risk premium is more appropriate than the specification relied on by Mr. Baudino because the revised specification of the market risk premium will reflect the inverse relationship between interest rates and the market risk premium (*i.e.*, because current interest rates are lower than the long-term historical average, the market risk premium should be greater than the historical average risk premium).

3. Include his CAPM analysis that relied on the expected market return calculated using a constant growth DCF model and data from *Value Line*. As discussed in more detail below, the use of a constant growth DCF model to estimate the market return is not unreasonable as Mr. Baudino concludes.

As shown in Figure 10 (see also Exhibit AEB-7-R), by making these reasonable changes to Mr. Baudino's CAPM analysis, the average of all of his CAPM analyses increases by 100 basis points from 9.64 percent to 10.64 percent, while the range of 8.20 percent to 12.77 percent shifts higher to 9.33 percent to 12.77 percent.

**Figure 10: Summary of Adjustments to Mr. Baudino's CAPM Analysis**[45]

| CAPM Methodology | As Filed | As Adjusted |
|---|---|---|
| Forward-looking Market Risk Premium – *Value Line* | 12.77% | 12.77% |
| Historical Market Risk Premia (1926-2022) | | |
| Arithmetic Mean | 10.04% | 10.56% |
| Supply-side Market Risk Premium | 9.44% | 9.89% |
| Supply-side Market Risk Premium less WWII Bias | 8.64% | 9.33% |
| Implied Market Risk Premia | | |
| *Kroll* | 8.75% | N/A |
| Professor Damodaran | 8.20% | N/A |
| **Average of CAPM Results** | **9.64%** [46] | **10.64%** |

**Q. What is the primary disagreement of Mr. Baudino regarding your CAPM analyses?**

A. The primary disagreement that Mr. Baudino has with my CAPM analyses is that he contends the forward-looking market return, and thus market risk premium, in my CAPM analyses are too high and not reasonable.[47]

**Q. Do you agree with Mr. Baudino that your forward-looking market return, and thus market risk premium, is inflated?**

A. No. It is reasonable to assume that the average growth of the S&P 500 Index could be sustainable in the long run. The calculation of the market risk premium is based on the return on the broader stock market, as measured by S&P 500 Index, less the return on a

[45] Grey shading indicates results that Mr. Baudino noted he did not rely to develop his recommended ROE range and recommended ROE.

[46] The average is 9.41 percent excluding the cost of equity results shaded grey which are the models results that were not relied on by Mr. Baudino.

[47] Baudino Direct Testimony, at 39-42.

risk-free instrument (which in my case, is the yield on the 30-year Treasury bond). The S&P 500 Index is composed of the largest top performing companies. Over time, the specific companies that are included in the S&P 500 Index will vary; however, because the index is composed of the largest top performing companies, it is reasonable to assume the index will always contain individual companies with projected earnings growth rates that will be considered high. Therefore, investor expectations of growth and return overall for the index as a whole may not change over time because of the selection process involved in the index including the largest top performing companies.

**Q. Has the concern raised by Mr. Baudino regarding the use of a constant growth DCF model that relies on projected EPS growth rates to estimate the market return been addressed in a court proceeding?**

A. Yes. The U.S. State Court of Appeals for the District of Columbia has addressed the concern regarding the use of projected EPS growth rates in a constant growth DCF model to estimate the market return in its review of FERC Opinion No. 569-B. In the Court's decision, it acknowledged that the FERC has relied on the use of EPS growth rates in the calculation of the forward-looking market return on the S&P 500 because the S&P 500 is regularly updated to include companies with high market capitalization and it includes companies at all stages of growth, including lower and higher growth potential. The Court determined that FERC's rationale for using projected EPS growth rates was sufficient and did not accept the challenge to this assumption.[48]

[48] United States Court of Appeals, District of Columbia Circuit, Opinion, Docket No. 16-1325, August 9, 2022, at 19.

**Q. Are the claims of Mr. Baudino that your forward-looking market return is inflated internally consistent with his own analyses?**

A. No. While Mr. Baudino criticizes my market return, his testimony as to the appropriate long-term earnings growth rate of the market contradict the market returns that he uses in his own CAPM analyses. In Figure 11 below, I have summarized the range of market returns that Mr. Baudino relied on in his CAPM analyses.[49] As shown, Mr. Baudino relied on market returns for his CAPM analyses that range from 9.80 percent to 12.02 percent.[50] Assuming that his estimates of the total market return includes a dividend yield component equal to the dividend yield that I rely on for the S&P 500 in my DCF-derived market return (*i.e.*, 1.78 percent),[51] the average long-term EPS growth rate for the market implied in his CAPM analyses ranges from 8.02 percent to 10.24 percent, all of which are substantially higher than the historical and projected gross domestic product ("GDP") growth rates that Mr. Baudino contends demonstrates that my market return is too high. Therefore, while Mr. Baudino references historical and projected GDP growth rates to allege that my market return is too high, ironically, that same data also invalidates his own CAPM analyses.

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[49] The range excludes the expected market return estimated using data from Value Line, the implied market return from Professor Damodaran and the market return based on the supply side MRP accounting for the World War II Interest Rate bias because Mr. Baudino did not rely on these approaches when developing his recommended ROE range.

[50] Baudino Direct Testimony, at Exhibits RAB-5; the high-end of Mr. Baudino's range is the historical arithmetic average return for Large Company Stocks as reported by Kroll for the period of 1926-2022. The low-end of Mr. Baudino's range is the implied market return based on Kroll's market risk premium which was estimated as the sum of Kroll's market risk premium of 5.50 percent and the risk-free rate relied on by Mr. Baudino (average yield on the 30-year Treasury bond for August 2023).

[51] Exhibit AEB-5-R.

**Figure 11: Inconsistencies between the Long-Term Market Growth Rates Relied on by Mr. Baudino in his CAPM Analyses Relative to his Claimed Historical and Projected Long-Term GDP Growth Rates**

| Witness | Total Market Return in CAPM | Avg. Div. Yld. of Market | Implied Avg. Long-Term Market Gwth. Rate | Historical (1929-2022) Long-Term GDP Growth Rate | Projected Long-Term GDP Growth Rate |
|---|---|---|---|---|---|
| Baudino - Max | 12.02% | 1.78% | 10.24% | 6.10% | 4.00% |
| Baudino - Min | 9.80% | 1.78% | 8.02% | 6.10% | 4.00% |

**Q. Is there support in other jurisdictions for the use of a forward-looking market return and market-risk premium in the CAPM analysis such as you have relied upon?**

A. Yes. For example, the FERC, the Illinois Commerce Commission ("ICC"), PAPUC and the Maine Public Utilities Commission ("Maine PUC") have also relied on the constant growth DCF model to estimate the market return in the CAPM analysis. In Opinion No. 569-A, the FERC continued to support the use of the constant growth DCF model to calculate the market return for the CAPM noting:

> We also continue to find that the CAPM should use a one-step DCF for its risk premium. This is because the rationale for using a two-step DCF methodology for a specific group of utilities does not apply when conducting a DCF study of the dividend-paying companies in the S&P 500, as the Commission found in Opinion Nos. 531-B and 569.172 A long-term component is unnecessary because of the regular updates to the S&P 500, which allows it to continue to grow at a short-term growth rate and because S&P 500 companies include stocks that are both new and mature, the latter of which have a moderating effect on the short-term growth rates.[52]

[52] *Ass'n. of Businesses Advocating Tariff Equity v. Midcontinent Indep. Sys. Operator, Inc.*, 171 FERC ¶ 61,154 (2020) ("Opinion No. 569-A"), at ¶ 85.

Furthermore, as shown in Figure 12, ICC, PAPUC, and Maine PUC have also relied on the constant growth DCF model to estimate the market return. In each case, the market return was estimated using the constant growth DCF model and analysts' projected EPS growth rates, which resulted in a range of market return estimates from 11.33 percent to 13.94 percent. As also shown, the ICC, the PPUC and the Maine PUC relied on the estimated CAPM results by the Staff of the ICC, the Bureau of Investigation and Enforcement ("I&E") of the PAPUC, and the Staff of the Maine PUC, respectively, to determine the authorized ROE in each of the proceedings and did not dispute the use of the constant growth DCF model to calculate the market return.

**Figure 12: Regulatory Commissions – Market Return Estimated Using the Constant Growth DCF Model**

| Intervening Party | Company | Docket No. | Market Return | Date of Order | Did the Commission Rely on the Party's CAPM? |
|---|---|---|---|---|---|
| Staff of the ICC | North Shore Gas Company | 20-0810 | CGDCF of the dividend-paying companies in the S&P 500 (11.95%)[53] | 9/8/21 | Yes[54] |
| I&E | Aqua Pennsylvania, Inc. | R-2021-3027385 | CGDCF of the Value Line Universe and S&P 500 (12.14%)55 | 5/12/22 | Yes, the PPUC placed primary weight on I&E's CAPM[56] |
| Staff of the MPUC | Northern Utilities, Inc. | 2019-00092 | CGDCF of the dividend-paying companies in the S&P 500 (11.33%-13.49%)[57] | 4/1/20 | Yes[58] |

**Q. Are you aware of any regulatory commissions that commented on the historical return on the market overall?**

A. Yes. In a recent cost of capital proceeding for the electric utilities, the California Public Utilities Commission noted that all parties recognized that historical market returns and economically logical projections fall within the range of 12 percent.[59] As noted, this recognition is consistent with the market return that I have relied on in my direct and rebuttal testimonies.

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53 Illinois Commerce Commission, Docket No. 20-0810, Order, September 8, 2021, at 71.

54 *Id.*, at 86-87.

55 Pennsylvania Public Utility Commission, Docket No. R-2021-3027385, Opinion and Order, May 12, 2022, at 147.

56 *Id.*, at 178.

57 Maine Public Utilities Commission, Docket No. 2019-00092, Bench Analysis, October 29, 2019, at 21.

58 *Id.*, Order Part II, April 1, 2020, at 58.

59 California Public Utilities Commission, Application 22-04-008, *et. al*., Decision 22-12-031, December 15, 2022.

## V.C. ECAPM

**Q. Please summarize Mr. Baudino's critique of the use of the ECAPM analysis.**

A. Mr. Baudino appears to oppose my reliance on the ECAPM because he contends that I have not provided any evidence that "investors favor this version of the ECAPM over the standard CAPM."[60]

**Q. Is the concept of the ECAPM and the conclusion that the risk-return relationship is flatter than predicted by the CAPM generally accepted in financial literature?**

A. Yes. In *Modern Regulatory Finance*, Dr. Morin provides a list of studies each of which concludes that the CAPM understates the returns for companies with betas less than 1.0 (which is typically utilities) and overstates the return for companies with betas greater than 1.0.[61] It is these empirical studies referenced by Dr. Morin that formed the basis of the development of alternative models such as the ECAPM that would better predict the risk return-relationship observed when reviewing actual market data.

Academics and researchers could then use the equation shown below to determine the value of the constant term (α) or "alpha factor" using historical market data:

$$K_e = r_f + \alpha + \beta\left( \left(r_m - r_f\right) - \alpha \right)$$

Where:

Ke = the required market ROE;

[60] Baudino Direct Testimony, at 42.

[61] Morin, Dr. Roger A. *Modern Regulatory Fi*nance. Public Utilities Report, Inc., 2021, at 206-208.

$\alpha$ = a constant term;

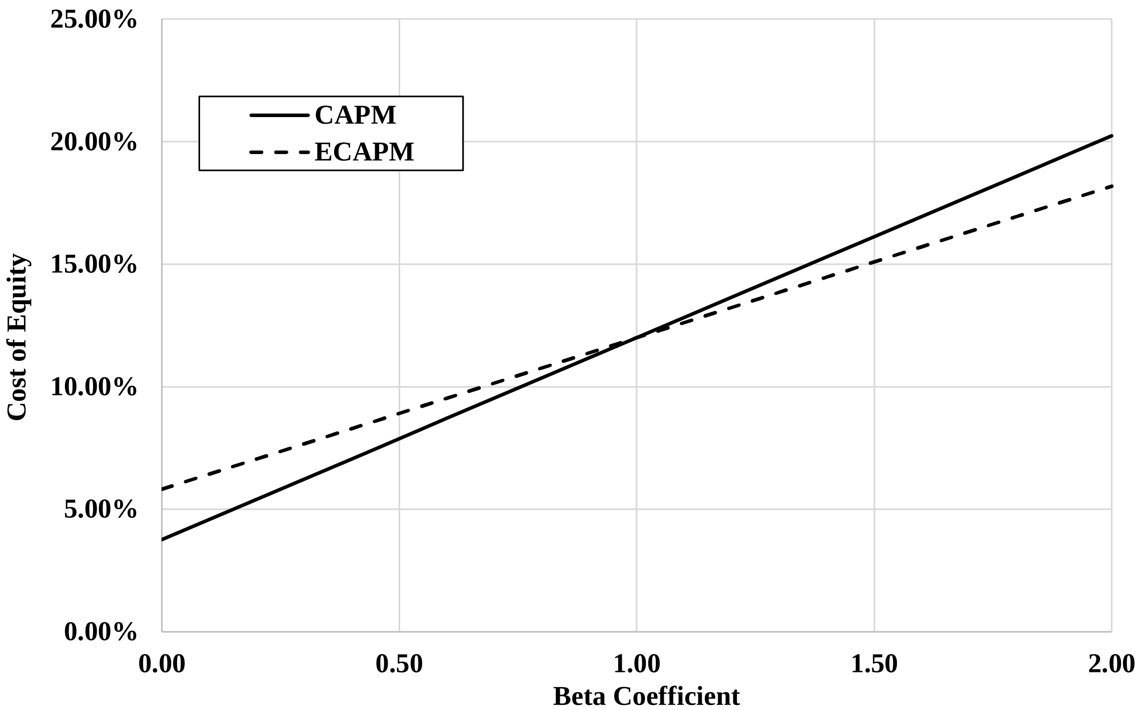
$\beta$ = Beta coefficient of an individual security;

$r_f$ = the risk-free ROR; and

$r_m$ = the required return on the market as a whole.

The effect of the constant term on the CAPM is to decrease the slope of the risk/return relationship as shown in Figure 13.

**Figure 13: CAPM and ECAPM Return Estimates[62]**




There have been numerous additional studies published to estimate the value of the constant term or alpha factor in the ECAPM equation. Figure 14 provides the list of studies

62 This figure contains the risk-return relationship of the CAPM and ECAPM analyses included in my direct testimony assuming the near-term projected risk-free rate.

summarized by Dr. Morin. As shown, six of the eight studies estimated positive values of the constant term, which indicates that the consensus among the studies is that the CAPM understates the observed return. Additionally, among the six studies that estimate only positive values of the constant term, the range of the constant term was 1.63 percent to 13.56 percent. Dr. Morin relied on a constant term in the range of 1 to 2 percent to develop the 0.25 and 0.75 factors included in the ECAPM and considering the range of the constant term provided in Figure 14, it would appear Dr. Morin's estimate is conservative.

**Figure 14: Empirical Evidence on the Alpha Factor (Constant Term)[63]**

| Author | Range of Alpha |
|---|---|
| Fischer (1993) | -3.6% to 3.6% |
| Fischer, Jensen and Scholes (1972) | -9.61% to 12.24% |
| Fama and McBeth (1972) | 4.08% to 9.36% |
| Fama and French (1992) | 10.08% to 13.56% |
| Litzenberger and Ramaswamy (1979) | 5.32% to 8.17% |
| Litzenberger, Ramaswamy and Sosin (1980) | 1.63% to 5.04% |
| Pettengill, Sundaram and Mathur (1995) | 4.6% |
| Morin (1989) | 2.0% |

**Q. Do any of the studies cited by Dr. Morin examine the ability of the CAPM to estimate the return of utilities?**

A. Yes. There are several academic studies that show the CAPM does understate the return for regulated utilities. For example, as referenced by Dr. Morin and as shown in Figure

[63] Morin, Dr. Roger A. *Modern Regulatory Finance*. Public Utilities Reports, Inc., 2021, at 222.

14, Litzenberger, Ramaswamy, and Howard (1980) studied the ability of the CAPM to estimate the returns for utilities.[64] The authors found that the CAPM tends to understate the return for stocks such as utilities, which have a beta less than 1.00. To develop the analysis, the authors utilized both adjusted and raw betas, and in both cases, the CAPM understated the return for utilities with betas less than 1.00.

Additionally, I have also reviewed the more recent Chrétien and Coggins (2011) study that evaluated the CAPM and its ability to estimate the risk premium for the utility industry in particular subgroups of utilities for a data set that included market data through the end of 2006.[65] Chrétien and Coggins (2011) considered the CAPM, the Fama-French three-factor model and a model similar to the ECAPM used in my direct testimony. The study shows that the ECAPM significantly outperformed the traditional CAPM at predicting the observed risk premium for the various utility subgroups.

**Q. Are you aware of state regulatory commissions that have accepted the use of the ECAPM in the manner as you have conducted?**

A. Yes. There are various regulatory commissions that have supported the use of the ECAPM in establishing an authorized ROE and have done so when adjusted betas are used in the ECAPM analysis. For example, the New York Public Service Commission ("NYPSC"), the Montana Public Service Commission ("Montana PSC"), and North Carolina Utilities Commission ("NCUC") have accepted the ECAPM analysis with the use of adjusted beta

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[64] Litzenberger, Robert, *et al*. "On the CAPM Approach to the Estimation of A Public Utility's Cost of Equity Capital." *The Journal of Finance*, Vol. 35, No. 2, 1980, pp. 369–383.

[65] Chrétien, Stéphane, and Frank Coggins. "Cost Of Equity For Energy Utilities: Beyond The CAPM." *Energy Studies Review*, Vol. 18, No. 2, 2011.

coefficients in establishing the authorized ROE for regulated utilities. Specifically, the NYPSC gives equal weight to the CAPM and ECAPM (which it refers to as the "Zero Beta" CAPM) results,[66] the Montana PSC has expressed preference for the ECAPM analysis,[67] and the NCUC has recently found that both the adjustment to beta in the CAPM and the adjustment in the ECAPM were needed because they correct for different things.[68]

### V.D. Business and Regulatory Risks

**Q. As a general matter, what is Mr. Baudino's position regarding the business and regulatory risks that you identified and discussed in your direct testimony?**

A. For each of the business and regulatory risks that I identified and discussed, Mr. Baudino states that the Commission should not increase the authorized ROE of the Company.

**Q. Do you agree with Mr. Baudino's position?**

A. No. As noted in my direct testimony, I did not make a specific adjustment to my recommended ROE based on the business and regulatory risks of the Company relative to the proxy group, but rather I did consider them in the aggregate when determining where the Company's requested ROE falls within the range of the analytical results of the cost of equity analyses. Mr. Baudino does not dispute the results of the comparative risk analysis that I presented in my direct testimony, including the comparative regulatory risks of the Company versus the proxy group in Exhibit AEB-8, thus there is no basis to suggest that

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[66] *See, e.g.*, New York Public Service Commission, Case No. 20-G-0101, Order, May 19, 2021, at 44-46.

[67] Montana Public Service Commission, Docket No. D2017.9.80, Order No. 7575c, September 26, 2018, at 46.

[68] North Carolina Utilities Commission, Docket No. E-2, SUB 1300, Order Accepting Stipulations, Granting Partial Rate Increase, and Requiring Public Notice, August 18, 2023, at 162-163.

such factors should not be considered by the Commission in its authorization of the ROE in this proceeding.

**Q. What is Mr. Baudino's position regarding flotation costs?**

A. Mr. Baudino states that, consistent with past practice, the Commission should not allow flotation costs in the authorized ROE, and that I have not provided any new evidence that indicates the Commission should change its practice. Mr. Baudino contends that it is likely that flotation costs are already accounted for in current stock prices, and thus a flotation cost adjustment in the authorized ROE would be double counting.[69]

**Q. Do you continue to believe that flotation costs should be considered by the Commission when establishing the ROE in this proceeding?**

A. Yes. While I am not recommending a specific flotation cost adjustment, flotation costs are legitimate costs for equity holders that are not recovered through the rate of return on equity derived from the DCF or CAPM analysis. Just as rate base investments, flotation costs are also part of the invested costs of the utility, and the need to reimburse shareholders for the lost returns associated with equity issuance costs has been recognized by the academic and financial communities. Since the actual book equity of a stock issuance is calculated as the market value less flotation costs, the book equity of that issuance is always less than the market value of the stock. Therefore, all else equal, investors can earn their cost of equity in any year only if the company is allowed to earn a return on the common equity that is higher than the required return. This is because the total common equity base has

[69] Baudino Direct Testimony, at 43-44.

been permanently reduced by the amount of the flotation cost. As noted in *Modern Regulatory Finance*: "Since flotation costs of common stock issues cannot be amortized because they have no finite maturity, they must be recovered by way of an upward adjustment to the allowed return on equity."[70] The text goes on to state that a permanent adjustment is needed because:

> "…(a) even if no further stock issues are contemplated, the flotation cost adjustment is still permanently required to keep shareholders whole, and (b) flotation costs are only recovered if the rate of return is applied to total equity, including retained earnings, in all furture years, even if no future financing is contemplated."[71]

**Q. Is there academic support for the method you used to estimate flotation costs?**

A. Yes. *Modern Regulatory Finance* identifies the "conventional approach" to calculating flotation costs in regulatory proceedings as dividing the expected dividend by 1 minus the flotation cost (e.g., for flotation costs of 5 percent, dividing the expected dividend by 0.95 will produce the adjusted cost of equity capita), and states regarding this approach that:

> Its use in regulatory proceedings by cost of capital witnesses is widespread. The formula is discussed in several college-level corporate finance textbooks, such as Brigham and Ehrhardt (2011).[72]

[70] Morin, Roger A. *Modern Regulatory Finance*. Public Utilities Reports, Inc., 2021, at 337.

[71] *Id*., at 338.

[72] *Id*., at 336.

**Q. Have regulatory commissions approved the inclusion of flotation costs in the authorization of a utility's ROE?**

A. Yes. Various regulatory commissions across the United States have previously allowed the recovery of flotation costs in the authorization of a utility's ROE based on the circumstances in the case.[73]

**Q. What is Mr. Baudino's position regarding the Company's risk associated with its future capital expenditures?**

A. Mr. Baudino agrees that the Company has a significant projected capital expenditure program; however, he states that the Company's use of a future test year and the Qualified Infrastructure Program ("QIP") help mitigate the risk of that capital expenditure program, and thus the Commission should not increase the Company's authorized ROE due to its capital expenditure risk.[74]

**Q. Has Mr. Baudino appropriately assessed the Company's risk related to its extensive capital expenditure program?**

A. No. As stated in my direct testimony, I agree with Mr. Baudino that the use of a future test year and the QIP help mitigate the Company's regulatory cost recovery risk; however, the appropriate comparison for purposes of assessing the risk of business and regulatory risk of the Company is relative to the operating utilities of the proxy group – not focusing solely

[73] *See, e.g.*, Indiana Utility Regulatory Commission, Cause No. 42359, Order, May 18, 2004, at 43; Connecticut Public Utilities Regulatory Authority, Docket No. 10-12-02, June 29, 2011, at 133–13. South Dakota Public Utilities Commission, Docket No. EL11-019, Final Decision and Order, July 2, 2012, at 6; South Dakota Public Utilities Commission, Docket No. EL18-021, Final Decision and Order, May 30, 2019, at 8; Maine Public Utilities Commission, Docket No. 2017-00198, Order, June 28, 2018; Maine Public Utilities Commission, Docket No. 2017-00065, Order, February 28, 2018.

[74] Baudino Direct Testimony, at 44.

on the Company. As shown on Exhibit AEB-8, the majority of the operating subsidiaries of the proxy group companies also utilize partially or fully forecasted test years for ratemaking purposes, and the vast majority also have mechanisms to recover the cost of capital expenditures outside of rate proceedings. In addition, as noted, the cost recovery related to the QIP is limited to the replacement of aging infrastructure and not related to expansion investments. Accordingly, while the Company's future test year and QIP aid in the timely recovery of costs, they do not reduce the Company's risk relative to the proxy group. Therefore, it is reasonable that the Commission consider the risk associated with the extent of the Company's capital expenditure program relative to the proxy group when setting the authorized ROE in this proceeding.

**Q. Mr. Baudino states that the Commission should not authorize a higher return for the Company based on its risks associated with environmental and water quality regulations. What is your response?**

A. Again, Mr. Baudino acknowledges that the Company faces these risks, and simply contends that he does not believe that "these additional risks significantly affect" the Company's risk as compared to the proxy group. Mr. Baudino provides no analysis or support for his position that these risks do not significantly affect the Company's overall risk relative to the proxy group, and it is reasonable that the Commission consider the Company's risk related to environmental and water quality regulations relative to the proxy group in conjunction with all other factors when setting the authorized ROE in this proceeding.

**Q. Mr. Baudino states that the Company did not request a decoupling or other type of mechanism in this proceeding that would provide protection against volumetric risk, and that it is inappropriate for the Company to seek a higher ROE than the midpoint of the proxy group due to a factor that it did not request in this proceeding.[75] Do you agree with Mr. Baudino's characterization?**

A. No. Mr. Baudino's position implies that if the Company had proposed a decoupling or other similar mechanism in this proceeding to address volumetric risk, such mechanism would have been approved; however, there is no basis for that contention. Further, even if such a mechanism were approved, the Company would be comparable to the majority of the operating utilities of the proxy group, and that fact would need to be considered in conjunction with the other business and regulatory risks of the Company relative to the proxy group. However, the reality is that the Company does not currently have protection against volumetric risk while the majority of other comparable utilities in the proxy group do have some form of protection, and thus it is reasonable that this fact be considered by the Commission when authorizing the ROE in this proceeding.

## V.E. Capital Structure

**Q. What is Mr. Baudino's proposed capital structure for the Company?**

A. Mr. Baudino accepts the Company's proposed short-term debt and preferred stock ratios; however, he suggests that the Company's proposed equity ratio is excessive compared to its actual equity ratios over the past five years, and thus recommends decreasing the equity

[75] Baudino Direct Testimony, at 44.

ratio to 50.00 percent and concomitantly increasing the long-term debt ratio to 48.66 percent.[76]

**Q. Is there any basis for Mr. Baudino's recommended equity ratio?**

A. No. Mr. Baudino has offered no analysis to support his position that the Company's actual historical equity ratio is reasonable for purposes of establishing the going forward equity ratio in this proceeding. Simply because the Company has had an actual equity ratio that historically is lower than what is proposed in this proceeding does not justify maintaining that level of equity ratio in this proceeding.

**Q. Is the Company's proposed equity ratio consistent with the equity ratios that have been authorized for water and natural gas utilities in the past ten years?**

A. Yes. Figure 15 presents the authorized equity ratios for water and natural gas utilities across the U.S. over the past decade, properly excluding both limited issue rider cases and authorizations in Arkansas, Indiana, Michigan, and Florida due to the inclusion of zero-cost capital in the capital structure. As shown in Figure 15, the Company's proposed equity ratio of 52.45 percent is consistent with the mean and median equity ratios authorized for water and natural gas utilities across the U.S. over the past few years and is well within the range of the authorized equity ratios for these utilities.

[76] Baudino Direct Testimony, at 34.

**Figure 15: Average Authorized ROEs for Water and Natural Gas Utilities[77]**

| Year | Mean | Median | Minimum | Maximum |
|---|---|---|---|---|
| 2013 | 50.32% | 50.43% | 40.75% | 59.30% |
| 2014 | 51.25% | 51.60% | 44.00% | 58.96% |
| 2015 | 50.39% | 50.48% | 42.01% | 53.54% |
| 2016 | 51.45% | 50.77% | 45.84% | 60.50% |
| 2017 | 50.20% | 51.45% | 42.90% | 55.70% |
| 2018 | 51.85% | 52.00% | 46.00% | 57.00% |
| 2019 | 52.57% | 52.02% | 48.00% | 60.18% |
| 2020 | 52.04% | 51.63% | 47.09% | 60.12% |
| 2021 | 51.83% | 52.00% | 47.45% | 59.88% |
| 2022 | 52.12% | 52.00% | 47.00% | 60.59% |
| 2023 | 51.89% | 50.35% | 40.73% | 62.20% |

**Q. What is your conclusion regarding the appropriate capital structure for the Company?**

A. I continue to conclude that that the Company's proposed capital structure is reasonable. The Company's proposed equity ratio of 52.45 percent is both: (1) consistent with the average actual equity ratio of the utility subsidiaries of the proxy group companies (*i.e.*, utilities with risk profiles that are similar to the Company's risk profile); and (2) consistent with the mean and median equity ratios authorized for other water and natural gas utilities across the U.S. over the past ten years.

**Q. Does this conclude your rebuttal testimony?**

A. Yes, it does.

[77] S&P Capital IQ Pro.

## VERIFICATION

**COMMONWEALTH OF MASSACHUSETTES )**
**) SS:**
**COUNTY OF SUFFOLK )**

The undersigned, Ann E. Bulkley, being duly sworn, deposes and says that she is the Principal at The Brattle Group, that she has personal knowledge of the matters set forth in the accompanying testimony for which she is identified as the responsible witness, and that the answers contained therein are true and correct to the best of her information, knowledge and belief.

**Ann E. Bulkley**

Subscribed and sworn to before me, a Notary Public in and before said County and State,

this 18th day of October, 2023.

Notary Public

My Commission Expires:

6/30/2028

Gerard M. Rooney
NOTARY PUBLIC
Commonwealth of
Massachusetts
My Commission Expires
6/30/2028

**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** | **)** | **CASE NO. 2023-00191** |
| **FOR INSTALLATION OF ADVANCED METERING** | **)** | |
| **INFRASTRUCTURE, APPROVAL OF CERTAIN** | **)** | |
| **REGULATORY AND ACCOUNTING** | **)** | |
| **TREATMENTS, AND TARIFF REVISIONS** | **)** | |

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**REBUTTAL TESTIMONY OF KRISTA E. CITRON**

**November 8, 2023**

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**Q. Please state your name and business address.**

A. My name is Krista Citron. My business address is 2300 Richmond Road, Lexington, Kentucky 40502.

**Q. Did you previously submit direct testimony in this proceeding on behalf of Kentucky-American Water Company, Inc. ("Kentucky-American," "KAWC" or the "Company") in this proceeding?**

A. Yes. I filed Direct Testimony in this proceeding on June 30, 2023.

**Q. What is the purpose of your rebuttal testimony in this proceeding?**

A. The purpose of my rebuttal testimony is to support the Company's proposal for the expansion of the Company's Qualified Infrastructure Program ("QIP"); and respond to AG/LFUCG witness Meyer's opposition to: (1) continuation of the QIP; and (2) expansion of the QIP.

**Q. Are you sponsoring any schedules or exhibits with your Rebuttal Testimony?**

A. No.

## QUALIFIED INFRASTRUCTURE PROGRAM

**Q. Mr. Meyer opposes both the continuation and the proposed expansion of the QIP, but does he address the *need* for pipeline replacement?**

A. No, not at all. His argument seems to be with the *use* of the QIP mechanism as a method of cost recovery for replacing pipe, but he does not question the *need* to replace aging pipe. Of course, the Commission has recognized the need to replace aging pipe for numerous utilities within its jurisdiction and has allowed mechanism cost recovery for those programs for gas and water utilities including KAWC's QIP.

**Q. Is it necessary for KAWC to replace its aging pipe, and in fact, further accelerate KAWC's replacement rate?**

A. Yes. While the existing scope of the QIP has allowed the Company to accelerate some replacement of its aging infrastructure, it is not sufficient to address the pace at which the infrastructure should be replaced to best serve the long-term interest of our customers. Nearly 250 miles of pipe of various materials in KAWC's system will have already reached or exceeded their useful life in or before the year 2025, leading to a large volume of replacements due at once. These replacements will need to be distributed over several years in addition to the replacements of other pipes that reach the end of *their* useful lives during that same time.

Based on the current mix of pipe age and material within KAWC's system, the anticipated rate of replacement needs are over twice the current QIP program rate. KAWC replaces approximately 0.5 percent of its system annually through the QIP at present; in order to replace the entirety of the system in keeping with the pipe's life expectancy, the recommended rate is to replace 27-34 miles of main annually, which would be a replacement rate of 1.1 to 1.4 percent.

**Q. Do you agree with Witness Meyer's opposition to the continuation of the QIP?**

A. No, I do not. As discussed above and in more detail in my direct testimony, the need for pipeline replacement is great and the QIP is a well-suited mechanism for the cost recovery of that replacement. It has the advantages of faster but more gradual cost recovery which smooths out rate impacts for customers and the approval of the QIP in KAWC's 2018 rate case is one of the reasons KAWC was able to avoid filing a rate case for over five years.

Prior to QIP, KAWC rate cases were much more frequent. Also, use of the QIP has enabled the Commission a greater opportunity to examine KAWC's pipeline replacement projects with more detail than would typically occur in a rate case. KAWC provides an annual application that lists each proposed project, with opportunity for data requests, as well as an annual balancing adjustment, also with opportunity for data requests. Those case records are extensive and well-documented: Case No. 2020-00027, Case No. 2021-00376, Case No. 2021-00090, Case No. 2022-00328, Case No. 2022-00032, Case No. 2023-00300, and Case No. 2023-00030.

Furthermore, in Case No. 2018-00358 when the QIP was approved, the Commission noted that "there was substantial evidence regarding the need for the QIP" and that the Commission "finds it reasonable to approve an alternative cost recovery based on smaller, more gradual rate increases."[1] Mr. Meyer claims that KAWC has not given adequate thought to rate affordability, but in fact, the QIP mechanism accomplishes exactly what the Commission predicted – a smoothing out of the cost impact of increased pipeline replacement and the avoidance of rate shock. In my direct testimony, I discuss the cost of responding to main breaks compared to planned replacement projects. Responding to main breaks is costly, averaging over $1,000 per linear foot; additionally, this method only replaces 10-40 feet of pipe at a time. Waiting for pipes to break to replace them is neither prudent nor affordable. The QIP helps to avoid that.

[1] Case No. 2018-00358, June 27, 2019 Order, p. 81.

Q. **Do you continue to believe that expansion of the QIP is necessary and beneficial to customers?**

A. Yes. Not only does Mr. Meyer not comment on the need to replace pipe, he offers nothing to refute what I established in my direct testimony which was that the current replacement rate of 10-13 miles per year under the QIP is insufficient. I explained that a 27-34 miles per year replacement rate is necessary to actually match the amount of pipe that has reached or exceeded its useful life.[2] Mr. Meyer fails to address the need to increase the pace at all. He says only that it will be too expensive. He ignores what I demonstrated in my direct testimony[3] which is that continued deferral for pipe replacement will cause service quality to suffer and will actually lead to even *more* expensive projects in the future.

**Q. What steps has KAWC taken to minimize the cost of pipe replacement?**

A. QIP jobs are competitively bid to contractors, and KAWC has expanded that list of bidders over the past several years. KAWC can utilize national contracts that leverage the size and breadth of American Water for purchasing equipment and materials. KAWC works extensively with LFUCG and other utilities to coordinate projects or restoration activities whenever possible, resulting in cost savings or cost-share options. This and many other cost savings measures are all covered in greater detail in my direct at pages 18-24. Mr. Meyer does not address my testimony on these points at all.

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[2] Citron Direct Testimony, pp. 5-7.

[3] Citron Direct Testimony, p. 10.

## **CONCLUSION**

**Q. Does this conclude your rebuttal testimony?**

A. Yes.

**VERIFICATION**

**COMMONWEALTH OF KENTUCKY )**
**) SS:**
**COUNTY OF FAYETTE )**

The undersigned, Krista E. Citron, being duly sworn, deposes and says that she is the Senior Project Engineer for Kentucky American Water, that she has personal knowledge of the matters set forth in the accompanying testimony for which she is identified as the responsible witness, and that the answers contained therein are true and correct to the best of her information, knowledge and belief.

Krista Citron

**Krista E. Citron**

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 24th day of October, 2023.

Molly McCleese Van Over
Notary Public

My Commission Expires:
July 31, 2025
Notary ID: KYNP26988

**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** | **)** | **CASE NO. 2023-00191** |
| **FOR INSTALLATION OF ADVANCED METERING** | **)** | |
| **INFRASTRUCTURE, APPROVAL OF CERTAIN** | **)** | |
| **REGULATORY AND ACCOUNTING** | **)** | |
| **TREATMENTS, AND TARIFF REVISIONS** | **)** | |

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**REBUTTAL TESTIMONY OF NICHOLAS FURIA**

**November 8, 2023**

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**Q. Please state your name and business address.**

A. My name is Nicholas Furia. My business address is 1 Water Street, Camden, New Jersey 08102.

**Q. Did you previously submit direct testimony in this proceeding on behalf of Kentucky-American Water Company, Inc. ("Kentucky-American," "KAWC" or the "Company") in this proceeding?**

A. Yes. I filed Direct Testimony in this proceeding on June 30, 2023.

**Q. What is the purpose of your rebuttal testimony in this proceeding?**

A. The purpose of my rebuttal testimony is twofold:

1) Present the updated the 13-month average capital structure of KAWC for the forecasted test-year ending January 31, 2025 and weighted average cost of capital ("WACC") when incorporating actuals through September 30, 2023, and;

2) Respond to the Direct Testimony of Attorney General ("AG") witness Richard A. Baudino as it pertains to KAWC's Capital Structure.

**Q. Are you sponsoring any schedules or exhibits with your Rebuttal Testimony?**

A. I am sponsoring updated Exhibit 37 - J. This exhibit presents the Company's proposed updated capital structure and WACC.

## UPDATES TO BASE PERIOD CAPITAL STRUCTURE AND WACC

**Q. Please explain how you have updated the Company's capital structure for the base period ending September 30, 2023.**

A. The Company's September 30, 2023 capital structure, which reflected projected data for the period April 2023 through September 2023 when initially filed, was updated to reflect actual capital components at September 30, 2023.

**Q. Please explain the changes to the capital components after updating for actuals at September 30, 2023.**

A. The Company incorporated updates for actuals for April 2023 through September 2023, resulting in the following changes to the capital structure components:

1) Long-term debt ("LTD"): Kentucky-American had planned on receiving $53 million of LTD in November 2023, which was to be divided evenly between 10- and 30-year taxable bonds issued through American Water Capital Corp. ("AWCC") at 4.95% and 5.55% coupons, respectively. AWCC stays abreast of the changes in the capital markets and adjusts plans to efficiently execute on financing needs at favorable terms to benefit Kentucky-American's customers. As such, the Company actually received $45 million of LTD in September 2023 consisting of a $19 million 3-year bond at a 3.625% coupon and a $26 million 5-year tax exempt bond at a 3.875% coupon.

2) Common Equity: Kentucky-American had projected to have $9,250,984 of retained earnings activity for April through September 2023 period. The Company had $5,950,502 of retained earnings for the period. The $3.255 million reduction of common equity was driven by lower net income for the period (reduction of $2.961 million), slightly offset by an increase in dividends ($0.294 million). The lower net income was driven by $1.0 million in lower than projected revenues related to customer usage and demand and a 3-month delay in the implementation of updates to the Qualified Infrastructure Program ("QIP") rider, and $1.9 million higher operating expenses related to depreciation, property taxes and insurance other than group ("IOTG") expense. Additionally, the Company had $49,727 of paid-in-capital activity for the period which was not forecasted.

3) Short-term Debt ("STD"): Kentucky-American projected a STD balance of $48,250,703 at September 30, 2023 at a 5.25% cost rate. The Company actually had a STD balance of $6,117,979 at September 30, 2023 at a 5.45% cost rate. The change in balance was driven by the timing shift of the LTD issuance from November to September 2023 which caused an offset to STD.

**Q. How do the changes to actuals impact the terminal values of the capital structure at September 30, 2023?**

A. Table 1 below shows the September 30, 2023 terminal capital structure components, carrying amounts, weightings, cost rates, weighted costs and overall WACC as filed by KAWC. Table 2 shows the actual terminal September capital structure components, carrying amounts, weightings, cost rates, weighted costs and overall WACC updated for KAWC's rebuttal filing. The updated September 30, 2023 terminal common equity percentage and WACC are 51.601% and 7.740%, respectively.

**Table 1**

| As Filed<br>Terminal at September 30, 2023<br>Component | Carrying Amount | | Weighting | Cost Rate | WACC |
|---|---|---|---|---|---|
| Short-Term Debt | $ | 48,250,703 | 8.654% | 5.250% | 0.450% |
| Long-Term Debt | $ | 216,599,690 | 38.846% | 4.570% | 1.780% |
| Preferred Stock | $ | 2,244,914 | 0.403% | 8.510% | 0.030% |
| Common Equity | $ | 290,493,639 | 52.098% | 10.750% | 5.600% |
| **Total Capitalization** | **$** | **557,588,946** | **100.000%** | | **7.860%** |

**Table 2**

| Updated for Rebuttal<br>Terminal at September 30, 2023<br>Component | Carrying Amount | | Weighting | Cost Rate | WACC |
|---|---|---|---|---|---|
| Short-Term Debt | $ | 6,117,979 | 1.099% | 5.450% | 0.060% |
| Long-Term Debt | $ | 261,102,251 | 46.897% | 4.470% | 2.100% |
| Preferred Stock | $ | 2,244,914 | 0.403% | 8.510% | 0.030% |
| Common Equity | $ | 287,287,884 | 51.601% | 10.750% | 5.550% |
| **Total Capitalization** | **$** | **556,753,028** | **100.000%** | | **7.740%** |

## UPDATES TO FORECAST PERIOD CAPITAL STRUCTURE AND WACC

**Q. Please explain the revisions you have made to Kentucky-American's capital structure for the projected period (October 1, 2023 – January 31, 2025) of the forecast period ending January 31, 2025.**

A. Specific to the projected period, the Company has made the following changes:

1) LTD: Kentucky-American had projected to receive $20 million of LTD divided evenly between 10- and 30-year taxable bonds in May 2024 with coupons of 4.596% and 5.303%, respectively. Kentucky-American has updated its projection to $28 million of LTD in May of 2024 divided evenly between 10- and 30-year taxable bonds with coupons of 5.904% and 6.201%, respectively. The primary driver for the increase in the May 2024 LTD

issuance was the timing shift of the 2023 LTD issuance from November to September, and the need for more permanent financing to replace short-term financing during this period. The coupons were updated to include current market expectations for changes in future rates as represented by the Bloomberg Forward Curve Analysis of the Secured Overnight Financing Index for the 10- and 30-year tenors, plus an estimated current credit spread for each tenor. This is the same process utilized by the Company in its direct filing to project future coupons.

2) Common Equity: Kentucky-American in the initial filing had projected to have $12,912,433 of retained earnings activity for the October 2023 through January 2025. The Company, as part of my rebuttal testimony, updated its projection to $15,155,445 of retained earnings activity for the October 2023 through January 2025 period. The update was driven by a change in dividend practice which resulted in a decrease in dividends for the period. No changes were made to equity infusions or projected net income for the period.

3) STD: Kentucky-American had projected a net reduction in STD of $(38,043,786) for the period October 2023 through January 2025. The Company updated its projection of STD activity for the projected period October 2023 through January 2025 to be a net increase of $4,263,202. The update was a direct result of the shifting of the 2023 LTD issuance from November to September which caused an offset to STD needs for the projected period. Kentucky-American also updated its STD costs for the projected period October 2023 through January 2025. The projected STD costs are based on the one-month maturity Overnight Index Swap ("OIS") forward curve with the current credit spread

applied. This is the same process utilized by the Company in its direct filing to project future STD rates.

**Q. How do the changes to actuals impact the capital structure for the 13-month average ending January 31, 2025?**

A. Table 3 below shows the capital structure as filed for the 13-month average ending January 31, 2025, for the components, carrying amounts, weightings, cost rates, weighted costs and overall WACC. Table 4 shows the updated capital structure for the 13-month average ending January 31, 2025, updated for changes in this rebuttal filing, for the components, carrying amounts, weightings, cost rates, weighted costs and overall WACC. The updated January 31, 2025 13-month-average common equity percentage and WACC are 52.219% and 7.800%, respectively.

**Table 3**

| As Filed 13-Month Average at January 31, 2025 | | | | | |
|---|---|---|---|---|---|
| Component | | Carrying Amount | Weighting | Cost Rate | WACC |
| Short-Term Debt | $ | 5,752,848 | 0.963% | 3.818% | 0.040% |
| Long-Term Debt | $ | 275,967,193 | 46.211% | 4.681% | 2.160% |
| Preferred Stock | $ | 2,245,236 | 0.376% | 8.510% | 0.030% |
| Common Equity | $ | 313,228,976 | 52.450% | 10.750% | 5.640% |
| **Total Capitalization** | **$** | **597,194,252** | **100.000%** | | **7.870%** |

**Table 4**

| Updated for Rebuttal<br>13-Month Average at January 31, 2025<br>Component | Carrying Amount | Weighting | Cost Rate | WACC |
|---|---|---|---|---|
| Short-Term Debt | $ 9,168,090 | 1.537% | 5.354% | 0.080% |
| Long-Term Debt | $ 273,581,929 | 45.868% | 4.544% | 2.080% |
| Preferred Stock | $ 2,245,236 | 0.376% | 8.510% | 0.030% |
| Common Equity | $ 311,462,178 | 52.219% | 10.750% | 5.610% |
| **Total Capitalization** | **$ 596,457,433** | **100.000%** | | **7.800%** |

## RESPONSE TO WITNESS BAUDINO'S CAPITAL STRUCTURE RECOMMENDATION

**Q. Have you reviewed the testimony of Witness Baudino?**

A. Yes.

**Q. What does Witness Baudino say about Kentucky-American's proposed costs of short-term debt, long-term debt, and preferred stock?**

A. Witness Baudino recommends the Commission adopt Kentucky-American's proposed costs of short-term debt, long-term debt, and preferred stock.

**Q. What does Witness Baudino propose for Kentucky-American's capital structure in this rate case?**

A. Witness Baudino lowers Kentucky-American's common equity ratio to 50% with no corresponding adjustment to the ROE and proposed a corresponding increase in the long-term debt ratio to 48.66%, while holding fixed the percentages of short-term debt and preferred stock at the levels proposed by Kentucky-American.

**Q. Do you agree with Witness Baudino's proposed common equity ratio?**

A. No, I do not. Other than citing dated historical information, Witness Baudino provides no credible basis for utilizing a common equity ratio of 50% for the forecasted test-year ending January 31, 2025 and does not consider how Kentucky-American has been financed in recent periods or how Kentucky-American is projected to be financed for the forecasted test year. A review of the September 30, 2023 13-month average capital structure in Table 5 below shows a common equity percentage of 51.701%, indicating that Kentucky-American's capitalization financing its used and useful rate base is already above witness Baudino's arbitrary recommended common equity ratio.

**Q. What is the actual capital structure for the 13-month average ended September 2023?**

A. As shown in Table 5 below, the capital structure for the 13-month average ended September 30, 2023, updated with actual results reflects a common equity ratio of 51.701%, showing that Kentucky-American's rate base is and has been financed at a greater common equity ratio than the historical ratios, and those recommended by Witness Baudino.

**Table 5**

| Updated for Rebuttal<br>13-Month Average at September 30, 2023 | | | | | |
|---|---|---|---|---|---|
| Component | | Carrying Amount | Weighting | Cost Rate | WACC |
| Short-Term Debt | $ | 12,378,885 | 2.313% | 4.666% | 0.110% |
| Long-Term Debt | $ | 243,857,303 | 45.566% | 4.255% | 1.940% |
| Preferred Stock | $ | 2,244,721 | 0.419% | 8.510% | 0.040% |
| Common Equity | $ | 276,689,133 | 51.701% | 10.750% | 5.560% |
| **Total Capitalization** | **$** | **535,170,042** | **100.000%** | | **7.650%** |

**Q. Is a historical review of capitalization ratios the appropriate basis for establishing a common equity ratio for the forecasted test-year ending January 31, 2025?**

A. No, it is not. The appropriate basis for determining the common equity ratio for the forecasted test-year ending January 31, 2025 is one that is reasonable and takes into consideration the Company's ongoing investments in capital improvements to meet the new and changing regulations in the water industry, replace aged treatment and distribution facilities, and enable it to continue to provide safe and reliable water service to its customers through the forecasted test-year. These important investments have driven, and will continue to drive, the need for new capital which, as I previously testified, includes two new LTD financings totaling $73 million ($45 million of which occurred in September 2023) and two new equity infusions totaling $20.5 million, none of which is considered when solely reviewing historical data.

**Q. What is an appropriate basis for establishing a common equity ratio for the forecasted test-year ending January 31, 2025?**

A. An appropriate common equity ratio should consider how the forecasted rate base is financed or projected to be financed, whether or not it is reasonable as compared with its Proxy Group as defined in Company witness Bulkley's direct testimony, and whether it provides sufficient financial strength to allow access to cost-efficient financing. As included in my direct testimony, Kentucky-American has planned two LTD financings totaling $73 million ($45 million occurred in September as updated in my rebuttal testimony) and two equity infusions totaling $20.5 million in the forecast period ending January 31, 2025. These financings, together with internally generated financing via retained earnings, result in a January 31, 2025 13-month-average common equity ratio of

52.219%. This is the equity level that appropriately considers how the Company's investments will actually be financed. Further, Kentucky-American's January 31, 2025 common equity ratio is reasonable in comparison to the Proxy Group's 3-year average common equity ratio of 53.69% included in Witness Bulkley's direct testimony, and it supports cost-efficient financing. A utility that is well run, generates predictable financial results, and maintains a reasonable capital structure that allows for the efficient attraction of capital benefits its customers. There is a direct link between a utility delivering predictable financial results and maintaining solid credit ratings. Financial results dictated by positive, growing, and predictable earnings, along with other financial measurement results contribute to a company's ability to access capital at a reasonable cost. Conversely, companies with poor financial results or with capital structures that are outside reasonable levels will pay more to access capital.

**Q. Is Kentucky-American's recommended common equity ratio an outlier compared to common equity ratios ordered by the Commission?**

A. No. A review of the ordered common equity percentages for Kentucky utilities over the past four (4) years shows that Kentucky-American's current and recommended common equity ratios are reasonable in comparison. Table 6 reflects these publicly disclosed ordered common equity percentages for other Kentucky utilities.

**Table 6**

| Utility | Docket | Filed Equity % | Ordered Equity % | Order Date | Case Resolution |
|---|---|---|---|---|---|
| **Duke (Electric)** | 2022-00372 | 52.51% | 52.15% | 10/12/2023 | Litigated |
| **Water Service (Water)** | 2022-00147 | 49.71% | 50.09% | 4/12/2023 | Litigated |
| **Atmos (Gas)** | 2021-00214 | 57.05% | 54.50% | 5/19/2022 | Litigated |
| **Delta (Gas)** | 2021-00185 | 51.76% | 51.72% | 1/3/2022 | Settlement |
| **Duke (Gas)** | 2021-00190 | 50.70% | 51.34% | 12/28/2021 | Settlement |
| **Columbia (Gas)** | 2021-00183 | 52.64% | 52.64% | 12/28/2021 | Settlement |
| **LG&E (Gas)** | 2020-00350 | 53.13% | 53.19% | 6/30/2021 | Settlement |
| **LG&E (Electric)** | 2020-00350 | 53.13% | 53.19% | 6/30/2021 | Settlement |
| **KU (Electric)** | 2020-00349 | 53.14% | 53.23% | 6/30/2021 | Settlement |
| **Kentucky Power (Electric)** | 2020-00174 | 43.25% | 43.25% | 1/13/2021 | Litigated |
| **Duke (Electric)** | 2019-00271 | 48.23% | 48.23% | 4/27/2020 | Litigated |

## CONCLUSION

**Q. Does this conclude your rebuttal testimony?**

A. Yes.

## VERIFICATION

**STATE OF NEW JERSEY** )
) **SS:**
**COUNTY OF CAMDEN** )

The undersigned, Nicholas Furia, being duly sworn, deposes and says that he is the Senior Director, Assistant Treasurer for American Water Works Service Company, Inc., that he has personal knowledge of the matters set forth in the accompanying testimony for which he is identified as the responsible witness, and that the answers contained therein are true and correct to the best of his information, knowledge and belief.

**Nicholas Furia**

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 18 day of October, 2023.

Meresa M. Yager
Notary Public

My Commission Expires:
10/2/2024

MERESAANN M YAGER
Notary Public - State of New Jersey
My Commission Expires Oct 2, 2024

**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** | **)<br>)<br>)<br>)<br>)<br>)<br>)<br>)** | **CASE NO. 2023-00191** |

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**REBUTTAL TESTIMONY OF WILLIAM A. LEWIS**

**November 8, 2023**

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**Q. Please state your name and business address.**

A. My name is William A. Lewis. My business address is 2300 Richmond Road, Lexington, Kentucky 40502.

**Q. Did you previously submit Direct Testimony in this proceeding on behalf of Kentucky-American Water Company, Inc. ("Kentucky-American," "KAWC" or the "Company") in this proceeding?**

A. Yes. I filed Direct Testimony in this proceeding on June 30, 2023.

**Q. What is the purpose of your Rebuttal Testimony in this proceeding?**

A. The purpose of my Rebuttal Testimony is to respond to the Office of the Attorney General of the Commonwealth of Kentucky and Lexington-Fayette Urban County Government ("AG/LFUCG") witness Meyer's proposed revenue requirement adjustments for:

- Unaccounted for Water ("UFW")
- Performance Compensation
- Employee Levels

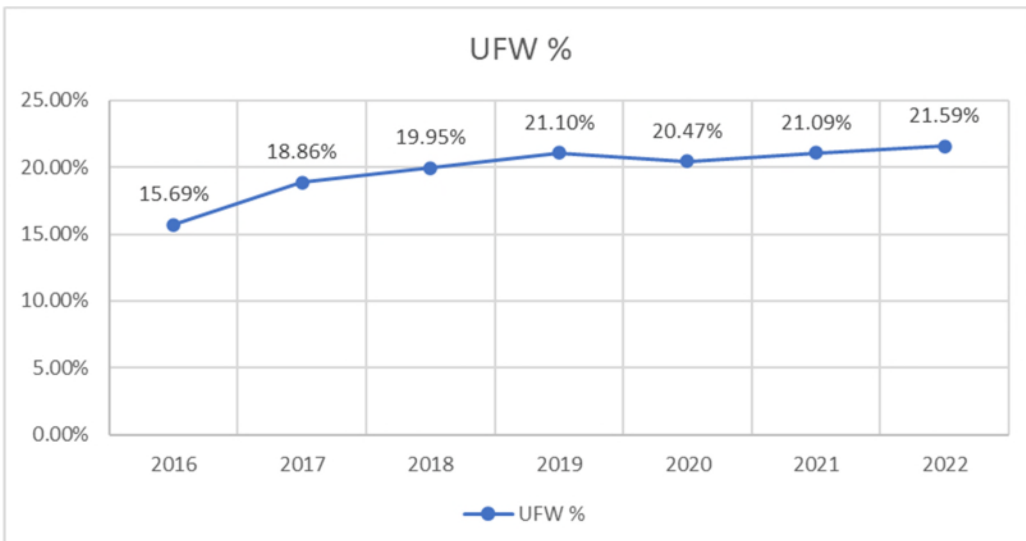
**Q. Are you sponsoring any schedules or exhibits with your Rebuttal Testimony?**

A. No.

## <u>RESPONSE TO AG/LFUCG POSITION ON UNACCOUNTED FOR WATER LOSS</u>

**Q. AG/LFUCG witness Meyers claims that the Company has not met the burden of demonstrating that the alternative level is more reasonable than the Commission's 15% unaccounted-for water loss standard. His reason is that the Company has not demonstrated "…that the special connections represent a significant contributor to the Company's persistent water loss problem." Do you agree with Mr. Meyer's recommendation?**

A. No. Mr. Meyer's testimony fails to acknowledge that KAWC's UFW loss reduction strategy is based on an existing comprehensive UFW loss reduction plan that KAWC updates annually. He bases his opinion only on KAWC's more recent focus areas such as fire service lines and special connections. UFW loss is a complex issue that has evolved over several decades, and KAWC's ongoing UFW loss reduction program has mitigated KAWC's UFW loss reduction. As seen in the table below, KAWC has been able to slow the rate at which UFW loss has increased over time. Between 2016 and 2019, the rate of increase was 5.41%. By contrast, the rate of increase between 2019 and 2022 was 0.49%.




As KAWC continues to refine its approach and strategies to address UFW loss over time, our understanding of where those losses occur also evolves and therefore, our focus will change over time. The Company has identified privately owned fire service lines and unmetered multiple service special connections as areas of focus that have the potential to significantly reduce the Company's UFW loss. Mr. Meyer's conclusion that KAWC's assessment of the UFW loss identified during the review of 24 fire service lines does not demonstrate significant water loss due to special connections is incorrect. While fire service lines are generally described as special connections, they are not the only type of special connection within the KAWC distribution system or the most significant cause of UFW loss from special connection systems. Please refer to the rebuttal testimony of KAWC Witness Porter for additional explanation of special connections significant contribution to the Company's UFW losses and the Company's strategy for further reducing UFW from special connection systems.

**<u>RESPONSE TO AG/LFUCG POSITION ON PERFORMANCE COMPENSATION</u>**

**Q. Mr. Meyer recommends that the Commission remove 50% of the Company's APP and the entirety of the Company's LTPP. What is his basis for proposing to remove these expenses?**

A. Mr. Meyer concludes that the financial metrics tied to 50% of the Company's APP and to the entire LTPP primarily benefit shareholders and do not provide measurable benefits to customers.

**Q. Do you agree with Mr. Meyer's conclusions?**

A. No, I do not. Mr. Mustich and I presented significant testimony on the benefits that accrue to customers. Mr. Meyer states that there are no measurable benefits to customers without addressing the benefits that the Company has supported.

**Q. Does Mr. Meyer contend the total market based compensation paid to the Company's employees, including APP and LTPP, is unreasonable?**

A. No. Mr. Meyer does not claim or present any basis to conclude that the market based total compensation paid to Company employees is unreasonable or otherwise imprudent. He explicitly notes that his "proposal is not to eliminate the programs or deprive the Company's employees of incentive compensation." Meyer's Direct, p. 15, lines 11-13.

This statement appears to recognize that KAWC's total market based employee compensation, including performance-based compensation, is reasonable. No other party has presented any testimony that contradicts the testimony Mr. Mustich and I have presented that KAWC's total market-based compensation is a reasonable and necessary cost incurred to serve customers. Mr. Mustich has demonstrated that KAWC employees' total target compensation, which *includes* performance pay, is slightly *below* the market for similarly skilled employees. That finding has not been refuted. As I noted in my Direct Testimony, the Company must be able to attract and retain experienced personnel to help ensure the Company can continue to provide safe and reliable service to customers and total compensation that is near market is a critical component of attracting this talent. The Company's total market-based compensation, including performance pay, is a necessary cost to provide service to customers and therefore, all of it should be recoverable through rates. Performance pay is not in addition to KAWC employees' reasonable compensation; it must be included to make KAWC employees' total market-based compensation reasonable.

**Q. How would the Company fare in attracting a qualified workforce if APP and LTPP were removed from employee compensation?**

A. Mr. Mustich has prepared an analysis demonstrating KAWC's total market-based employee compensation would be far below market without the APP and LTPP levels Mr. Meyer contends should not be included in rates. The Company would have a difficult time retaining employees much less attracting new employees at pay levels that are 16% to 19% below market-based compensation. This is not a theoretical problem. A recent survey of Kentucky's water and wastewater workforce published in the July/August 2023 edition of the American Water Works Journal identified significant gaps in qualified employees in the Bluegrass State and noted that pay gaps was a driver.[1]

**Q. Would Mr. Meyers' recommendation to remove APP and LTPP from recoverable costs be impacted by changing the Company's compensation structure?**

A. It appears the full market based compensation would be completely recovered from customers if KAWC included the disputed portion of compensation in employees' base pay rather than awarding it through APP and LTPP. No testimony contradicts the Company's demonstration that its total market based employee compensation, including performance pay, is reasonable and prudent. Mr. Meyer only disputes the manner in which the Company pays part of the compensation. Changing the manner of compensating employees to remove the disputed method (APP and LTPP) and placing all of the compensation in base pay should result in recovering one hundred percent (100%) of the higher base pay in the revenue requirement. However, making this adjustment would not be in the long-term interest of our customers because it would remove the strong incentive APP and LTPP provide employees to proactively working towards efficiency. In my experience, the APP and LTPP metrics focuses employees on managing the business more efficiently.

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[1] The July/August 2023 edition of the American Water Works Journal is available athttps://awwa.onlinelibrary.wiley.com/toc/15518833/2023/115/6.

**Q. Mr. Meyer contends that the portion of the APP and LTPP he proposes to remove does not provide measurable benefits to customers. Are there measurable customer benefits that accrue from LTPP and the financial components of the APP?**

A. Yes. Measurable customer benefits accrue to customers from appropriately aligning employees' interests with pursuing financial results for the Company in line with market expectations. For an operational example, as a result of initiatives to improve efficiency, KAWC is reducing the amount of coagulant utilized in treating water. Coagulant is one of the highest cost chemicals used in the water treatment process. Adding coagulant is required to meet applicable water quality standards. However, coagulant can be over applied with little or no demonstrable benefit to water quality with the exception of guaranteeing the coagulant dose will meet all raw water quality conditions. KAWC has implemented changes to the coagulant dosing strategy to reduce the overall amount of coagulant used by relying more on other existing treatment processes, improved process controls and additional employee training. KAWC is in the early stages of implementing this initiative and we are still evaluating savings that might accrue, but we estimate this will result in up to $100,000 reduction in annual production costs while still surpassing minimum water quality requirements.

Another example is a recent financing executed by the Company. KAWC and its affiliates must raise capital on a regular basis to fund the capital improvements critical to maintaining adequate and safe service. Rising interest rates have required the Company to think creatively about ways to manage the interest rates, both for the financial health of the Company and to help achieve lower costs for customers. This incentive to maximize the financial health of the Company resulted in our treasury group exploring alternatives to long-term financing that resulted in American Water Capital issuing exchangeable notes with a lower rate. Indicative new issue pricing for a 10-year or 30-year bond would have required a higher annual fee. Customers will directly benefit from these lower financing costs. Mr. Furia describes the updated capital structure in his Rebuttal Testimony.

Mr. Furia also testified to the "direct link between a utility delivering predictable financial results and maintaining solid credit ratings" and that "[r]atings agencies consider an entity's financial results both as a qualitative and a quantitative measure in establishing a company's credit rating." Furia Direct, p. **7**. As I explain in my Direct Testimony, this is why it is important to focus utility employees on the financial health of the organization: a financially healthy utility benefits customers because it enables the utility to meet its service obligations at reasonable financing costs.[2]

As I explained in my Direct Testimony, the financial measures of APP and LTPP serve to align the interests of our customers, employees and investors. In order to achieve financial performance pay goals, such as targeted earnings per share ("EPS") performance, employees must continuously work to maintain and improve operating efficiency. Each of these investments has or will result in tangible and material cost savings that would otherwise be incurred by customers. The financial components of APP and LTPP

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[2] The Commission has recognized that it must balance the interests of customers and investors. *Columbia Gas of Kentucky, Inc.*, Cause No. 10498, 1989 WL 418512 (Ky. PSC 10/6/98). The financial component of APP and LTPP presents a straight-forward path to achieving a win-win in this balance. A result that benefits both is good for the state of Kentucky, both because customers served within the state by KAWC realize the benefits of efficiencies and because residents who invest in the Company, such as the Kentucky Public Pension Authority, benefit from returns consist with market expectations. See Kentucky Public Pension Authority Investments, https://www.kyret.ky.gov/Investments/Investments%20Holdings/KTYALL%20Holdings%20as%20of%2030%20June%202023.pdf.

incentivize KAWC employees to identify these savings opportunities because controlling operating costs is essential to achieving a targeted EPS, and helping to maintain the affordability of our service for our customers. The benefits to customers are measurable and significant.

**Q. Is it appropriate to justify the costs of the financial components of APP and LTPP by comparing them to the savings and efficiencies customers derive?**

A. No. First, looking at the APP and LTPP financial component incentives simply as a cost to be balanced against savings that inure to customers is inappropriate because the APP/LTPP cost is not incremental to the reasonable expense KAWC must incur to fairly compensate employees. As I explained above and noted in my Direct Testimony, the appropriate and reasonable expense KAWC incurs to compensate employees is the total amount of market based compensation, including the component of APP and LTPP related to financial metrics. Conditioning a portion of the expense we must incur to operate the business in a financially responsible manner is a prudent way of aligning employee interests with our customers.

Second, efforts to quantify many of the benefits derived from incentivizing employees to operate the business in a financially responsible manner would be challenging, although such benefits clearly exist. Every time KAWC secures goods or services employees are expected and incentivized to make the most efficient decision. The incentive derives from the financial component of the APP and LTPP and each decision adds up to a material amount of benefits for customers. Employees regularly make these decisions but capturing and quantifying all of them would be impractical.

**Q. Are there other benefits of LTPP that provide tangible benefits to customers?**

A. Yes. The LTPP reduces attrition among employees that receive it by incentivizing them to remain with the organization. Because stock-based compensation vests on a phased basis in three installments over a prospective three-year period, employees must remain with the organization to realize the vesting of their awards. The Company provides LTPP primarily to leadership level employees. Maintaining leadership level employees benefits customers by retaining experienced, high quality employees that understand the Company and the initiatives that support the Company's ability to continue to provide safe, reliable, and affordable service.

**Q. Why is KAWC proposing to recover its full APP and LTPP notwithstanding the Commission's findings in the Company's last rate case?**

A. The testimony provided in this proceeding that demonstrates the direct, tangible and meaningful benefits that customers receive from encouraging employees to operate the business efficiently to help achieve APP and LTPP goals (including financial metrics) negates the Commission's concerns that customers receive "little benefits" from these measures. Refusing to allow recovery of a portion of total market based employee compensation, merely because it is used to incentivize activity by employes, inappropriately renders costs that are necessary to serve the best interest of our customers unrecoverable.

**Q. Why is it inappropriate to disallow recovery of total market based employee compensation cost that has been shown to be reasonable?**

A. Employee compensation is a necessary cost of providing utility service. Therefore, it should be assessed under the same lens as other necessary operating costs: if a utility prudently incurs reasonable compensation costs, relative to what the industry pays for the same services, it should be permitted to recover all of those costs through rates. So, the Commission should rightly be concerned when total market based employee compensation is too high, which may unreasonably increase rates, and when employee compensation is too low, which may impact service to customers. The Commission's focus should be on the reasonableness of the Company's overall level of total compensation, giving management the discretion to design the compensation package that is best structured to compensate employees properly and to motivate efficiency, safety, courtesy and other valuable employee traits. If the Company's overall compensation level is reasonable, because it is in line with or below the market, regardless of the combination of fixed and variable payments that the employees earn, then, by definition, the Company's overall compensation expense is reasonable and prudently incurred and should be recoverable. As noted above, Mr. Meyer does not dispute the reasonableness of the Company's overall compensation package. Accordingly, it is inappropriate to disallow a component of that cost simply because it doesn't comport with his view of how employee compensation should be structured.

## EMPLOYEE LEVELS

**Q. AG/LFUCG witness Mr. Meyer proposes a reduction in labor expense to reduce the revenue requirement by $617,983 million based on unfilled employment positions or "vacancies." Do you agree with this proposal?**

A. No, I do not. The Company's work must be completed with available resources (full-time employees, overtime, temporary employees or contract employees). KAWC has two methods by which it can present the cost structure to accomplish its work: (1) assume no vacancies and adjust overtime, temporary employee and contractor expenses accordingly; or (2) assume a vacancy rate and include increased expenses for overtime, temporary employee and contractor expenses to complete the work. The Company has chosen the first methodology and has presented its cost structure accordingly.

**Q. Why do you disagree with Mr. Meyer's adjustment?**

A. Mr. Meyer chose only a portion of the second methodology, a reduction for employee vacancies. He did not provide for the corresponding increased overtime, temporary or contract labor costs that would be incurred to accomplish the same level of work, as contemplated by the Company's proposed employee level. Therefore, this proposed reduction is incomplete and insufficient to address the costs required to perform the work.

**Q. Has this topic been discussed in prior rate cases?**

A. Yes, AG witnesses have proposed similar reductions in Case No. 1995-00554, Case No. 2004-00103, Case No. 2010-00036, and Case No. 2018-00358 and the Commission has upheld the Company's methodology in each case, recognizing that:

> If vacant employee positions exist, work will either be shifted to other employees and thus result in an increase in overtime costs or Kentucky-American will hire additional temporary/contract labor. Kentucky-American has shown that its forecasts for overtime and

> temporary/contract labor have been reduced to reflect a full workforce. The vacant employee positions to which the AG refers will result in decreased direct labor costs, but that decrease will be offset by increases in overtime or temporary labor costs.[3]

In Case No. 2018-00358, the Commission stated the following on the employee vacancy issue:

> We are not persuaded by the Attorney General/LFUCG's arguments. They are similar to arguments from the Attorney General that we have rejected in prior Kentucky-American rate proceedings in which we noted that the Attorney General considered only the impact of employee vacancies on Kentucky-American's labor forecast and did not consider the impact of the vacancies on Kentucky-American's overtime and temporary/contract forecast. We continue to adhere to this position. If vacant employee positions exist, work will either be shifted to other employees and thus result in an increase in overtime costs, or Kentucky-American will hire additional temporary/contract labor.[4]

**Q. Do you believe the Commission should continue to follow its precedent on this issue?**

A. Yes, not only because it is grounded in precedent, but because it is based on the sound principle that, if we are accomplishing our workload with a combination of regular time, overtime, temporary labor and contractors, and we propose a full complement of employees while making a commensurate reduction of overtime, temporary labor or contractors, then Mr. Meyer's reduction would have to be accompanied by an increase in overtime, temporary workers and/or contractors. In this case, for example, the Company

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[3] Case No. 2010-00036, *Application of Kentucky-American Water Company for an Adjustment of Rates Supported by a Fully Forecasted Test Year*, Order, p. 25 (Dec. 14, 2010).

[4] Case No. 2018-00358, *Application of Kentucky-American Water Company for an Adjustment of Rates Supported by a Fully Forecasted Test Year*, Order, p. 39 (June 27, 2019).

has demonstrated that its forecast for overtime is lower than the overtime utilized during 2022 and the base period. Mr. Watkins discusses this further in his rebuttal testimony.

## CONCLUSION

**Q. Does this conclude your rebuttal testimony?**

A. Yes.

**VERIFICATION**

**COMMONWEALTH OF KENTUCKY )**
**) SS:**
**COUNTY OF FAYETTE )**

The undersigned, William Andy Lewis, being duly sworn, deposes and says that he is the Vice President of Operations for Kentucky-American Water Company, that he has personal knowledge of the matters set forth in the accompanying testimony for which he is identified as the responsible witness, and that the answers contained therein are true and correct to the best of his information, knowledge and belief.

______________________________
**William A. Lewis**

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 24th day of October, 2023.

Molly McCleese Van Over
Notary Public

My Commission Expires:
July 31, 2025
Notary ID: KYNP26988

**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** | **)** | **CASE NO. 2023-00191** |
| **FOR INSTALLATION OF ADVANCED METERING** | **)** | |
| **INFRASTRUCTURE, APPROVAL OF CERTAIN** | **)** | |
| **REGULATORY AND ACCOUNTING** | **)** | |
| **TREATMENTS, AND TARIFF REVISIONS** | **)** | |

**REBUTTAL TESTIMONY OF ROBERT V. MUSTICH**

**November 8, 2023**

**Q. Please state your name and business address.**

A. My name is Robert V. Mustich. I am Managing Director and East Region Rewards Business Leader for Willis Towers Watson.

**Q. Did you previously submit direct testimony in this proceeding on behalf of Kentucky-American Water Company, Inc. ("Kentucky-American," "KAWC" or the "Company") in this proceeding?**

A. Yes. I filed direct testimony on June 30, 2023.

**Q. On whose behalf are you submitting this testimony?**

A. Kentucky American Water Company ("KAWC" or the "Company"), a wholly-owned subsidiary of American Water Works Company Inc. ("AWK").

**Q. What is the purpose of your rebuttal testimony?**

A. The purpose of my testimony is to rebut the testimony of Greg Meyer on behalf of Office of the Attorney General of the Commonwealth of Kentucky ("OAG") and the Lexington-Fayette Urban County Government ("LFUCG") and demonstrate that his arguments against recovery of 50% of the Annual Performance Plan ("APP") aligned with earnings per share and 100% of the Long-term Performance Plan ("LTPP") are inconsistent with providing reasonable and the effective employee compensation programs that serve as management tools to drive positive customer outcomes.

**Q. Does Mr. Meyer provide reasons for his recommendation?**

A. Yes, he believes that the portion of the Company's APP that is aligned to earnings per share and the entirety of the Company's LTPP primarily benefit shareholders and do not provide measurable benefits to ratepayers.

**Q. Mr. Mustich, are you familiar with the practices of industry, generally, and public utility companies in particular, with respect to performance-based compensation?**

A. Yes, I am.

**Q. With respect to the utilities industry and industry in general, is it common for businesses across America to have in place performance-based compensation plans similar to KAWC's APP and LTPP?**

A. Yes, it is. Based on WTW's study referenced in my direct testimony and my personal experience working with hundreds of companies and WTW advising thousands of companies annually, the vast majority of companies have APPs that use financial and non-financial metrics and have LTPPs that use financial and/or relative total shareholder return metrics. Consequently, it is safe to say that the performance-based compensation plans that KAWC maintains are consistent with the practice followed by a vast amount of corporations in American business.

**Q. Generally, what is the purpose of such performance-based compensation plans?**

A. With respect to plans such as the APP, the purpose is to attract and retain a performance oriented workforce that is provided tangible financial incentives in the form of variable performance based compensation, to improve productivity, efficiency and other desirable goals (such as safety, environmental compliance, customer satisfaction, etc.) that management deems important to conducting a successful business. These plans send powerful messages to employees because their compensation is contingent on these important customer oriented goals. In the case of the LTPP-type metrics, the goal is to reduce the costs and disruptions associated with employee turnover by providing incentives to remain with the company and improve company performance. As noted, both of these types of plans are quite common in American business and are time-tested and successful ways to increase productivity, efficiency and employee performance while reducing the costs and inefficiencies of employee turnover. In addition, employees expect to participate in such plans since they are widely prevalent and the absence of them would make KAWC less competitive from a talent attraction perspective.

**Q. Does Mr. Meyer's testimony suggest that customers and shareholders have competing interests when financial metrics are in performance plans?**

A. Yes, he does.

**Q. How does he suggest this?**

A. He recommends that the expenses related to financial metrics primarily benefit shareholders and that related performance plan expenses be allocated to shareholders and that operational/customer metrics benefit customers and that only those incentive plan expenses should be allocated to customers.

**Q. What is wrong with Mr. Meyer's recommendations?**

A. He fails to recognize that including financial goals in performance pay programs, like the approach that KAWC takes, reflects the interdependence of a company's financial performance with its operational success. Strong financial performance enables the Company to invest in resources—both physical and people—that helps ensure the efficient operation of the Company, which ultimately benefits customers. Incorporating financial metrics in performance plans is common across all types of organizations, even those that are not publicly traded, or owned by publicly traded parent companies, as KAWC is. In fact, many privately held companies, and even mission based not-for-profit organizations, incorporate financial metrics in their performance pay programs to send the message to employees that financial efficiency and viability are essential to operational success, and to delivering on customer objectives and expectations.

**Q. If KAWC employees didn't receive their performance pay, how would it affect their compensation?**

A. If KAWC employees didn't receive their performance pay, or even a portion of it, they would receive compensation that is well below reasonable and competitive levels of market median total remuneration as shown in the charts below:

| **Summary of Kentucky American Water's *KAWC* vs. Market Median (National Market Perspective)** | | | |
|---|---|---|---|
| **Base Pay** | **Target Total Cash Compensation** | **Target Total Direct Compensation** | **Target Total Remuneration** |
| -13% | -19% | -21% | -19% |

| **Summary of Kentucky American Water's *KYAW* vs. Market Median (Midwest Regional Market Perspective)** | | | |
|---|---|---|---|
| **Base Pay** | **Target Total Cash Compensation** | **Target Total Direct Compensation** | **Target Total Remuneration** |
| -10% | -17% | -19% | -16% |

**Q. Does this conclude your testimony?**

A. Yes, it does.

## VERIFICATION

**COMMONWEALTH OF VIRGINIA )**
**) SS:**
**COUNTY OF ARLINGTON )**

The undersigned, Robert V. Mustich, being duly sworn, deposes and says that he is the Managing Director and East Region Rewards Business Leader for Willis Towers Watson, that he has personal knowledge of the matters set forth in the accompanying testimony for which he is identified as the responsible witness, and that the answers contained therein are true and correct to the best of his information, knowledge and belief.

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**Robert V. Mustich**

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 24 day of October, 2023.

Martha Aimee Larimore

Notary Public

My Commission Expires:
05/31/2026

MARTHA AIMEE LARIMORE
NOTARY PUBLIC
REG# 7019113
MY COMMISSION EXPIRES
05/31/2026
COMMONWEALTH OF VIRGINIA

**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** | **)** | **CASE NO. 2023-00191** |
| **FOR INSTALLATION OF ADVANCED METERING** | **)** | |
| **INFRASTRUCTURE, APPROVAL OF CERTAIN** | **)** | |
| **REGULATORY AND ACCOUNTING** | **)** | |
| **TREATMENTS, AND TARIFF REVISIONS** | **)** | |

**REBUTTAL TESTIMONY OF JEFFREY NEWCOMB**

**November 8, 2023**

**Q. Please state your name and business address.**

A. My name is Jeffrey Newcomb. My business address is 2300 Richmond Road, Lexington, Kentucky 40502.

**Q. Did you previously submit direct testimony in this proceeding on behalf of Kentucky-American Water Company, Inc. ("Kentucky-American," "KAWC" or the "Company") in this proceeding?**

A. Yes. I filed direct testimony on June 30, 2023.

**Q. What is the purpose of your rebuttal testimony?**

A. The purpose of my rebuttal testimony is to:

1. Support the Company's updated revenue requirement and revenue deficiency
2. Respond to the Office of the Attorney General of the Commonwealth of Kentucky and Lexington-Fayette Urban County Government ("AG/LFUCG") witness Meyer's proposed revenue requirement adjustments for:
   - Non-Labor Employee-Related Costs
   - Electronic Payment Fees
   - Miscellaneous Expenses
3. Respond to AG/LFUCG witness Meyer's opposition to the Company's request for Regulatory and Accounting Treatments for Select Expenses:
   - Production Costs
   - Pension and Other Post-Employment Benefits ("OPEB") Expenses
   - Tax Expenses (excluding Sales Tax)

4. Respond to AG/LFUCG witness Meyer's opposition to the continuation of the Company's Qualified Infrastructure Program ("QIP") and recommended depreciation offset

## KAWC UPDATED REVENUE REQUIREMENT

**Q. What is the Company's proposed revenue requirement and revenue deficiency?**

A. The Company's proposed revenue requirement, equal to the cost of providing service, is approximately $142.3 million for the 12 months ending January 31, 2025, as originally filed. The Company's revenue deficiency is approximately $26.1 million, which is an approximate 22.7 percent deficiency, as originally filed.

**Q. Are there updates to the Company's originally filed proposed revenue requirement and revenue deficiency?**

A. Yes. The Company's proposed revenue requirement, equal to the cost of providing service, is approximately $141.8 million for the 12 months ending January 31, 2025, and the Company's revenue deficiency is approximately $25.6 million, which is an approximate 22 percent deficiency, as updated in this filing. The updated proposed revenue requirement and revenue deficiency reflects the following:

1. Updated rate of return ("ROR")
2. Reduction of Board of Directors Fees
3. Updated utility regulatory assessment fee ("PSC Fee")
4. Reduction of miscellaneous expense
5. Corrected customer accounting expense

A summary of the impacts from these updates has been included as the cover page to the Company's base period update being filed contemporaneously with the Company's rebuttal testimony.

**Q. Please summarize the update to ROR.**

A. The updated proposed revenue requirement and revenue deficiency reflects an updated ROR of 7.80 percent, down seven basis points from 7.87 percent as originally filed. The updated ROR reflects actual financing as of the base period end of September 30, 2023, and the most current financing plan through the end of the forecasted test year, January 31, 2025. Company witness Furia further discusses this update.

**Q. Please summarize the reduction of Board of Directors Fees.**

A. The updated proposed revenue requirement and revenue deficiency reflects a $74,023 reduction to Board of Directors Fees from an originally filed $99,023 to an updated $25,000. The updated Board of Directors Fees amount of $25,000 reflects the current plans to only have two (2) external directors and paying each external director a reduced annual retainer of $2,500, previously $5,000, a reduced per meeting fee of $2,500, also previously $5,000, and reflects no inflationary adjustment since the Company does not currently plan to make any changes to the Board of Directors' annual retainer or per meeting fees for external directors in 2024.

**Q. Please summarize the update to PSC Fee.**

A. The updated proposed revenue requirement and revenue deficiency reflects an updated PSC Fee that decreases General Tax ("taxes other than income") expense. The Company has updated the PSC Fee for the forecasted test year by applying the current PSC Fee rate to the total forecasted revenues, less AFUDC. The PSC Fee, as originally filed, was calculated using the Company's Annual Public Service Commission Assessment for the period July 1, 2022, to June 30, 2023. The updated PSC Fee rate is calculated using the Company's Annual Public Service Commission Assessment for the period July 1, 2023, to June 30, 2024.

**Q. Please summarize the reduction to miscellaneous expense.**

A. The updated proposed revenue requirement and revenue deficiency reflects a $9,348 reduction to miscellaneous expense. Through the discovery process, the Company identified $6,799 of Gifts/Promotional items and $2,549 of Membership Dues allocated to Covered Activities, for a combined amount of $9,348 that should have been removed from the forecasted test year.

**Q. Please summarize the correction to customer accounting expense.**

A. The updated proposed revenue requirement and revenue deficiency reflects a $73,359 correction that increases customer accounting expense. Through the discovery process, it came to the Company's attention that the electronic payment processing fees for e-check payments in the amount of $73,359 were omitted.

## AG/LFUCG PROPOSED REVENUE REQUIREMENT ADJUSTMENTS

**Q. Did AG/LFUCG propose revenue requirement adjustments for labor costs and performance pay?**

A. Yes. AG/LFUCG witness Meyer proposed several adjustments to the Company's stated costs for labor and performance pay. Company witnesses Watkins and Lewis respond to witness Meyer's proposed labor adjustments and Company witnesses Lewis and Mustich respond to witness Meyer's proposed performance pay adjustments. Please see their respective rebuttal testimonies for why witness Meyer's proposed adjustments should be rejected.

**Q. Did AG/LFUCG propose revenue requirement adjustments for non-labor employee related expenses.**

A. Yes. AG/LFUCG witness Meyer states that his proposed adjustments related to labor and performance pay would require related adjustments to payroll taxes and potentially other employee related benefits (such as, pension and 401(k) matching expense). Witness Meyer, however, did not quantify those adjustments, stating that the Company would need to provide this calculation or provide detailed workpapers sufficient to calculate his proposed non-labor employee related expense adjustments.

**Q. Do you agree with AG/LFUCG witness Meyer's proposed revenue requirement adjustment for non-labor employee related expenses?**

A. No. As witness Meyer states himself, his proposed non-labor employee related expense adjustments stem from his proposed adjustments to labor and performance pay. The Company does not agree with those proposed adjustments. Therefore, no adjustments to payroll taxes and potentially other employee related benefits are necessary. I would further note that the Company's proposed Regulatory and Accounting Treatment with regard to the "taxes other than income" expense would address actual variation of payroll tax amounts above or below the amount authorized in rates to a regulatory asset or liability, as appropriate, from the effective date of new rates in this proceeding until the Company's next base rate case. As proposed, this "taxes other than income" expense accounting deferral will protect both customers and the Company against any variation in payroll tax expense.

**Q. Please summarize the AG/LFUCG's proposed revenue requirement adjustment for customer accounting expenses related to electronic payment fees.**

A. AG/LFUCG witness Meyer proposed the removal of annualized electronic payment fees assessed by KAWC's vendor for customer payments processed via credit card and electronic check as an operating expense. Witness Meyer does not believe that the Company's proposal will help with on-time bill payment and that it will "[c]reate 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."

**Q. Do you agree with AG/LFUCG witness Meyer's proposed revenue requirement adjustment for customer accounting expenses related to electronic payment fees?**

A. No. First, the availability of a credit card payment option provides customers the benefit of cash flow management. The timing of a customer's cash inflows will not always be perfectly timed with a customer's bill payment due date, and the availability of a fee free credit card payment option provides a means for on-time bill payment to avoid late fees and/or potential disconnection for non-payment. Second, if witness Meyer's concern is with the ability of a low-income household to pay their bill, I would direct him to the direct testimony of Company witness Rea and the Company's Universal Affordability rate design proposal. Lastly, in regards to witness Meyer's contention that eliminating the direct charge of vendor electronic payment fees is likely to create a "subsidy," I would point to other cost of service/revenue requirement components that are not directly charged to customers through rate design. Some examples include, but are not limited to: (1) customers who choose non-credit card or non-e-check payment options are not directly charged the cost of their chosen payment form even though the cost of those payment options are reflected in the Company's cost of service/revenue requirement, and (2) customers who choose to receive a paper bill via the United States Postal Service are not directly charged the cost of postage, printing, paper, and an envelope.

**Q. Please summarize the AG/LFUCG proposed revenue requirement adjustment for miscellaneous expense.**

A. In addition to the $6,799 of Gifts/Promotional items and $2,549 of Membership Dues allocated to Covered Activities that the Company has removed in its updated proposed revenue requirement and revenue deficiency, AG/LFUCG witness Meyer proposed the removal of $5,699 of Food and $106,069 of Service Company Business Development costs because these costs lacked specificity.

**Q. Do you agree with AG/LFUCG witness Meyer's proposed revenue requirement adjustment for miscellaneous expense related to Food and Service Company Business Development costs?**

A. No. The $5,699 of Food is a de minimis level of normal and ongoing expense that is reasonable and does not appear to fit the Commission precedent cited by AG/LFUCG witness Meyer. Company witness Watkins addresses the Service Company Business Development costs in his rebuttal testimony.

## REGULATORY AND ACCOUNTING TREATMENTS

**Q. Have you read the direct testimony of AG/LFUCG witness Meyer as it relates to the Company's request for regulatory accounting deferral treatments?**

A. Yes, I have.

**Q. Is AG/LFUCG witness Meyer's description of the Company's request for regulatory accounting deferral treatments complete and accurate?**

A. No. First, witness Meyer omitted or failed to address the Company's request as it relates to income taxes. Second, witness Meyer failed to recognize, or ignored the fact, that the Company's request is symmetrical by only acknowledging scenarios where the request results in regulatory assets when the request could also result in regulatory liabilities that preserve customer savings that would be passed back to customers in Kentucky-American's next base rate proceeding.

**Q. Please summarize the AG/LFUCG position as it relates to the Company's request for regulatory accounting deferral treatments.**

A. AG/LFUCG witness Meyer opposes the Company's request for regulatory accounting deferral treatments. Witness Meyer states the reasons for his opposition include: (1) his belief that the request would be "[e]stablishing deferrals for ongoing and normal expense items," (2) his belief that the Company has not established how the deferral request meets the legal standard the Commission has historically applied when considering regulatory accounting treatment, and (3) his belief that there is not a "[b]ona fide need for these deferrals."

**Q. Do you agree with AG/LFUCG witness Meyer's position as it relates to the Company's request for regulatory accounting deferral treatments?**

A. No, I do not.

**Q. Would the Company's request for regulatory accounting deferral treatments be establishing deferrals for ongoing and normal expense items?**

A. No. The respective annual level of ongoing and normal expenses of each expense type is to be established in this rate case as part of the Company's base rates. Not until the effective date of new rates in this case, would the Company compare its actual expenses incurred to the amount included within base rates from this proceeding. The difference between the two would be deferred to a regulatory asset or liability with the balance included in base rates and, if approved by the Commission, amortized over a defined period determined in the Company's next general rate case.

**Q. Has the Company established the appropriateness of and need for its request for regulatory accounting deferral treatments?**

A. Yes. In contrast to AG/LFUCG witness Meyer's direct testimony, in my direct testimony, I address for each expense type why it is appropriate for the Company to be permitted to record the actual level of expense above or below the amount authorized in rates to a regulatory asset or liability and why there is a need for the regulatory accounting deferral treatment. I establish appropriateness in the context of the legal standard the Commission has historically applied when considering regulatory accounting treatment and provide other considerations for why the Company's request for regulatory accounting deferral treatments is appropriate and should be approved.

**Q. Why is it appropriate that the Company be permitted to record the amount of production expense above or below the amount authorized in rates to a regulatory asset or liability?**

A. As stated in my direct testimony, production costs are a significant operating expense that the Company must incur to continue to provide safe and reliable service to its customers. The Company is already seeing volatility in these expenses as discussed by Company witness O'Drain in his direct testimony. This fluctuation and volatility are extraordinary and beyond the Company's control. In addition, the Company does not control when electric providers make rate filings nor does the Company control the outcome of those cases. However, those rates are approved by the Commission following a determination that they are just and reasonable.

Further, water utilities under the Commission's jurisdiction who purchase their water, and their customers, are already afforded similar protection in the form of a purchase water adjustment mechanism. KAWC produces substantially all of its water, and therefore, the Company and its customers should be afforded similar protection as they would if that water was purchased instead of produced. The purpose of the Company's request for deferral is to both protect the Company's customers if the expense were to decrease in the future, as well as to allow the Company the opportunity to include in a future proceeding the increased levels of cost.

**Q. Are there any considerations that you would like to add as to why it is appropriate that the Company be permitted to record the amount of production expense above or below the amount authorized in rates to a regulatory asset or liability?**

A. Yes. First, I would like to point to the below chart, which was also included in my direct testimony, that highlights how extraordinary the 26 percent increase in total production expenses was in 2022.

| Total Production Expense | | | |
|---|---|---|---|
| | Authorized | Actual | Variance |
| 2014 | $6,262,927 | $5,708,789 | ($554,138) |
| 2015 | 6,262,927 | 5,915,196 | (347,731) |
| 2016 | 6,355,162 | 6,442,729 | 87,567 |
| 2017 | 6,532,991 | 6,426,312 | (106,679) |
| 2018 | 6,532,991 | 6,506,304 | (26,687) |
| 2019 | 7,027,201 | 6,726,850 | (300,351) |
| 2020 | 7,502,812 | 6,715,508 | (787,304) |
| 2021 | 7,502,812 | 7,320,602 | (182,210) |
| 2022 | 7,502,812 | 9,230,012 | 1,727,200 |

Second, with the exception of 2022 and 2016, the Company had actual total production expense savings compared to authorized, but had no means to preserve and pass back those savings to customers. Third, had the regulatory and accounting treatment which the Company seeks in this case been in place in 2014 and continued through 2022, not only would the Company have been protected in 2022 and 2016 when actual total production expenses were higher than what was authorized in base rates, a net $490,334 of savings would have been preserved for pass back to customers. Lastly, operationally, the Company has a current production expense cost control initiative underway where it is looking to optimize production treatment chemical dosages to lower that component of total production expenses. The outcome of the initiative is not known or measurable at this time, but it is an example of a cost control initiative which the Company would like to preserve any potential savings for customers in return for protection from increases to production expenses that are beyond the Company's control.

**Q. Why is it appropriate that the Company be permitted to record the amount of Pension and OPEB above or below the amount authorized in rates to a regulatory asset or liability?**

A. As stated in my direct testimony, the level of ongoing and normal pension and OPEB expenses are based on a forecasted test year ending January 2025, but the actual 2023 costs were used for forecasting pension and OPEB expenses in this case. The actual amount of these expenses going forward will change based on a number of factors. In fact, pension and OPEB expenses are a complex calculation based upon actuarial reports that consider a number of variables. The level of fluctuation in these expenses from year to year can change drastically based on market fluctuations and the factors used to calculate the expenses. In this case, pension expense drives $113,286 of revenue requirement increase and OPEB drives another $48,375. The pension expense in the base year was $23,580 and the forecasted test year amount is $136,866, which is a 480 percent increase. The OPEB expense in the base year was ($648,697) and the forecasted test year amount is ($600,322), which is a 7.5 percent increase. When markets change and this expense reverses, customers will benefit through the recording of these deferral accounts. In the past, if Kentucky-American had a balancing account, Pension and OPEB costs that had gone down in those subsequent years would have been returned to customers. This deferral ensures that customers only pay for the Pension and OPEB expenses incurred, nothing more and nothing less, while allowing the Company to collect the proper revenues to cover a portion of the Company's labor related expenses already experiencing volatility. This fluctuation and volatility are beyond the Company's control and is a significant expense for the Company. The purpose of the Company's request for deferral is to both protect the Company's customers if the expense were to decrease in the future, as well as to allow the Company the opportunity to include in a future proceeding the increased levels of cost.

**Q. Are there any considerations that you would like to add as to why it is appropriate that the Company be permitted to record the amount of pension and OPEB expenses above or below the amount authorized in rates to a regulatory asset or liability?**

A. Yes. I would like to point to the below chart, which was also included in my direct testimony, and make several comments.

| Pension | | | | | OPEB | | | |
|---|---|---|---|---|---|---|---|---|
| | Authorized | Actual | Variance | | | Authorized | Actual | Variance |
| | | | | | | | | |
| 2014 | $947,305 | $246,193 | ($701,112) | | 2014 | $672,410 | $251,967 | ($420,443) |
| 2015 | 947,305 | 599,719 | (347,586) | | 2015 | 672,410 | 512,546 | (159,864) |
| 2016 | 832,227 | 648,092 | (184,135) | | 2016 | 642,001 | 212,336 | (429,665) |
| 2017 | 602,070 | 702,667 | 100,597 | | 2017 | 581,184 | 108,278 | (472,906) |
| 2018 | 602,070 | 507,241 | (94,829) | | 2018 | 581,184 | (492,184) | (1,073,368) |
| 2019 | 500,795 | 592,861 | 92,066 | | 2019 | 327,609 | (729,023) | (1,056,632) |
| 2020 | 399,519 | 132,730 | (266,789) | | 2020 | 74,033 | (857,522) | (931,555) |
| 2021 | 399,519 | (218,456) | (617,975) | | 2021 | 74,033 | (944,461) | (1,018,494) |
| 2022 | 399,519 | (270,481) | (670,000) | | 2022 | 74,033 | (972,122) | (1,046,155) |

First, with the exception of pension expense in 2019, the Company had actual pension and OPEB expense savings compared to authorized, but had no means to preserve and pass back those savings to customers. Second, had the regulatory and accounting treatment which the Company seeks in this case been in place in 2014 and continued through 2022, not only would the Company have been protected in 2019 when actual pension expense was higher than what was authorized in base rates, a net $9,298,846 of savings would have been preserved for pass back to customers. Some of the cost control actions contributing to those net savings include:

- Lowered pension expense by changing the pension benefit formula in 2001.

- Lowered OPEB expense by closing the retiree welfare ("OPEB") plan to new union employees hired on or after January 1, 2006, and to non-union employees hired on or after January 1, 2002.
- Closed the pension plans to new participants in 2006, with the exception of union employees at the two customer service centers, thus beginning the process of shifting investment risk from American Water to the employees.
- Changed the plan design for the retiree medical plan (component of OPEB) in 2011 to promote a consumer-minded philosophy, increase retiree cost sharing, and encourage the use of generic drugs.
- Controlled health and dental administrative fees, life insurance premiums, and trustee fees (components of OPEB) through negotiations and request for proposal ("RFP") process.
- Consolidated fourteen (14) defined benefit plans (due to acquisitions) into one plan, eliminating significant actuarial/auditing and administrative fees.
- Quarterly reviews of pensioners are conducted by the pension trustee by matching to data base of social security recipients.
- Moved Non-Promise Post-65 Retirees from a traditional supplement healthcare plan to a Supplemental Medicare Exchange (component of OPEB). This change was effective January 1, 2017, for Non-Bargaining Retirees and January 1, 2019, for Bargaining Retirees.
- In 2019, American Water partnered with the Health Transformation Alliance ("HTA") to conduct annual market checks to identify best pricing for active and retiree populations with our Pharmacy Benefit Manager ("PBM"), CVS Caremark.

- Pension Administration was outsourced in September 2020 in an effort to streamline administration and reduce risk (i.e. incorrect calculations). Capped the company contribution for Non-Promise retiree medical/dental (component of OPEB) at the 2018 amount. All future increases in the annual plan rates will be paid by the retiree.
- As of January 1, 2022, American Water updated the Retiree Prescription ("Rx") Formulary list producing OPEB savings.
- As of April 1, 2022, American Water engaged PrudentRx to maximize manufacturer coupon savings (OPEB savings) on specialty drugs for retirees.
- As of January 1, 2023, split the Pension Plan into two separate plans (Active and Inactive). The Inactive Plan contains all retirees prior to July 1, 2017. Savings are achieved from the longer amortization period available under the Inactive Plan, which reduces the Amortization of Unrecognized Losses for the year.

To the extent that American Water identifies and takes additional pension and OPEB cost control actions, the Company would like to preserve any potential savings for customers in return for protection from increases to pension and OPEB expenses that are beyond the Company's control.

Lastly, AG/LFUCG witness Meyer made reference to how other state utility commissions approach tracking mechanisms, specifically referencing the Missouri Public Service Commission ("MO PSC"). I would like to point out that in Docket No. WR-2007-0216, MO PSC Staff witness Jeremy Hagemeyer proposed a pension and OPEB expense tracker to "[a]ddress the over and under recovery of pension and OPEB expense" for Missouri-American Water, which the MO PSC adopted. I would like to further point out that in addition to the MO PSC, the state utility commissions in California, New Jersey, and Virginia have also approved similar pension and OPEB expense mechanisms for the regulated American Water subsidiaries in those states.

**Q. Why is it appropriate that the Company be permitted to record the amount of Taxes Other Than Income expense above or below the amount authorized in rates to a regulatory asset or liability?**

A. As stated in my direct testimony, long-standing Commission precedent provides that deferrals may be established when a utility incurs an expense resulting from a statutory or administrative directive. Taxes other than income expenses are an incurred expense resulting from statutory or administrative directive. The change in classification of water pipeline property to tangible personal property, as discussed in my direct testimony, is just one example of how taxes other than income expenses have been impacted by statutory or administrative directive. Also, the Company appeals its property tax assessments to lower its property tax bill on a regular basis. The timing and results of these appeals are uncertain, but the Company believes that its customers should benefit from appeals that are successful and may likely lower actual property tax expense below the level authorized in base rates.

**Q. Are there any considerations that you would like to add as to why it is appropriate that the Company be permitted to record the amount of Taxes Other Than Income expense above or below the amount authorized in rates to a regulatory asset or liability?**

A. Yes. First, as discussed earlier in my rebuttal testimony, the Company's updated proposed revenue requirement and revenue deficiency in this proceeding reflects an updated PSC Fee that decreases General Tax ("taxes other than income") expense. The Company has updated the PSC Fee for the forecasted test year by applying the current PSC Fee rate to the total forecasted revenues, less AFUDC. The PSC Fee, as originally filed, was calculated using the Company's Annual Public Service Commission Assessment for the period July 1, 2022, to June 30, 2023. The updated PSC Fee rate is calculated using the Company's Annual Public Service Commission Assessment for the period July 1, 2023, to June 30, 2024. The PSC Fee rate changes every year and is another example of how taxes other than income expenses have been, and will continue to be, impacted by statutory or administrative directive.

Second, also discussed earlier in rebuttal testimony, the Company's Regulatory and Accounting Treatments proposal with regard to the taxes other than income expense would address actual variation of payroll tax amounts above or below the amount authorized in rates to a regulatory asset or liability, as appropriate, from the effective date of new rates in this proceeding until the Company's next base rate case. As proposed, this taxes other than income expense accounting deferral will protect both customers and the Company against any variation in payroll tax expense, inclusive of any payroll tax savings as result of vacancies.

**Q. Why is it appropriate that the Company be permitted to defer the effect of a federal or state income tax rate change and record the amount, above or below the amount authorized in rates to a regulatory asset or liability?**

A. As stated in my direct testimony, long-standing Commission precedent provides that deferrals may be established when a utility incurs an expense resulting from a statutory or administrative directive. Income Taxes are an incurred expense resulting from statutory or administrative directive. Deferring the effects of a federal or state income tax rate change, whether a material change such as what occurred with the Tax Cuts and Jobs Act in 2017 or a minor change, will allow the Company to accrue the effects of the change between rate case filings and recover from customers or refund to customers that effect in base rates in the next general rate case without the Commission having to initiate a filing requirement.

**Q. Are there any considerations that you would like to add as to why it is appropriate that the Company be permitted to defer the effect of a federal or state income tax rate change and record the amount authorized in rates to a regulatory asset or liability?**

A. Yes. Another example of how federal or state income taxes have been impacted by statutory or administrative directive is the Kentucky corporate income tax rate change in 2018 from a rate of 6 percent, spread across three tax brackets, to a flat rate of 5 percent. Further, Kentucky House Bill 8, enacted in 2022, though focused on reducing the individual income tax rate, indicates a policy of further reductions to income tax rates in the Commonwealth. Allowing the Company to accrue the effects of income tax rate changes between rate case filings and recover from customers or refund to customers that effect in base rates in the next general rate case without the Commission having to initiate a filing requirement, is a proactive step to preserve any potential savings for customers in return for protection from income tax rate increases that are beyond the Company's control and are the result of statutory or administrative directive.

**Q. Would the regulatory accounting treatment sought by the Company disincentivize management to control expenses?**

A. No. As stated in my direct testimony, and illustrated by additional examples of cost control earlier in my rebuttal testimony, the Company is committed to providing safe and reliable water service to its customers at affordable rates. This request does not change that; it simply ensures that customers only pay for the actual expenses incurred, nothing more and nothing less, while allowing the Company to collect the proper revenues to cover these expenses incurred to continue to provide safe and reliable service. This does not grant the Company a "free-pass" to mismanage these expenses. When returning in the next case, the Company will need to show the results of these expense regulatory accounts and ask for recovery or pass back. Those balances, in addition to all other operating costs, would be subject to Commission scrutiny to determine their reasonableness, and the rate case process will ensure rates are fair, just, and reasonable.

## QUALIFIED INFRASTRUCTURE PROGRAM ("QIP")

**Q. Please summarize the AG/LFUCG position as it relates to QIP.**

A. AG/LFUCG witness Meyer opposes the continuation of QIP and recommends a "depreciation offset" if the Commission approves the continuation of QIP. Witness Meyer states the reasons for his opposition are that (1) riders engage in single-issue ratemaking, (2) the Company has not given adequate thought to rate affordability, and (3) the lack of a consumer protection mechanism in the form of a depreciation offset.

**Q. Do you agree with AG/LFUCG witness Meyer's position as it relates to QIP?**

A. No. Company witness Citron has supported not only continuation of QIP but also expansion of the program, and the case record contains substantial evidence regarding the need of both. Similar to Case No. 2018-00358, where the Commission approved QIP, the AG/LFUCG does not address the reasonableness or prudence of the proposed QIP. The first reason for opposition to the continuation QIP that witness Meyer provides, that riders engage in single-issue ratemaking, is one of regulatory principle and ignores both the Commission's authority to consider and decide ratemaking issues such as the infrastructure replacement surcharge proposed by Kentucky-American and the Commission's precedent of establishing and approving riders like QIP. The second reason for opposition that witness Meyer provides, that the Company has not given adequate thought to rate affordability, ignores that alternative cost recovery, such as the infrastructure replacement surcharge proposed by Kentucky-American, balances the Company's demonstrated need to make prudent infrastructure replacement investments to help ensure safe, adequate, and reliable water service, with the need of customer rates that are fair, just, and reasonable, by allowing for smaller, more gradual rate increases between rate cases instead of the rate shock that customers would experience from a large increase due to the rate recovery of several years of infrastructure replacement capital investments all at once in a general rate case. Further, the Company has submitted substantial evidence into the record around affordability, and I would again direct witness Meyer to the direct testimony of Company witness Rea around the affordability of Kentucky-American water service and the Company's Universal Affordability rate design proposal. The third and final reason for opposition that witness Meyer provides, the claim that the Company's QIP lacks a consumer protection mechanism in the form of a depreciation offset, ignores that the QIP already has a depreciation offset where the amount of depreciation expense collected through the QIP mechanism is reduced by removing depreciation expense associated with the utility plant in base rates that is being retired as a result of the infrastructure replacement.

**Q. Does this conclude your rebuttal testimony?**

A. Yes.

**VERIFICATION**

**COMMONWEALTH OF KENTUCKY )**
**) SS:**
**COUNTY OF FAYETTE )**

The undersigned, Jeffrey Newcomb, being duly sworn, deposes and says that he is the Senior Manager Rates and Regulatory for Kentucky-American Water Company, that he has personal knowledge of the matters set forth in the accompanying testimony for which he is identified as the responsible witness, and that the answers contained therein are true and correct to the best of his information, knowledge and belief.

JDN

**Jeffrey Newcomb**

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 19th day of October, 2023.

Molly McCleese Van Over

Notary Public

My Commission Expires:

July 31, 2025

Notary ID: KYNP26988

**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** | **)** | **CASE NO. 2023-00191** |
| **FOR INSTALLATION OF ADVANCED METERING** | **)** | |
| **INFRASTRUCTURE, APPROVAL OF CERTAIN** | **)** | |
| **REGULATORY AND ACCOUNTING** | **)** | |
| **TREATMENTS, AND TARIFF REVISIONS** | **)** | |

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**REBUTTAL TESTIMONY OF SHELLEY W. PORTER, P.E.**

**November 8, 2023**

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**Q. Please state your name and business address.**

A. My name is Shelley Porter. My business address is 2300 Richmond Road, Lexington, Kentucky 40502.

**Q. Did you previously submit direct testimony in this proceeding on behalf of Kentucky-American Water Company, Inc. ("Kentucky-American," "KAWC" or the "Company") in this proceeding?**

A. Yes. I filed direct testimony on June 30, 2023.

**Q. What is the purpose of your rebuttal testimony?**

A. The purpose of my testimony is to support the Company's request that the Commission establish 20 percent unaccounted for water loss ("UFW") as an alternative level of reasonable UFW for KAWC in this case and to respond to Office of the Attorney General of the Commonwealth of Kentucky and the Lexington-Fayette Urban County Government ("AG/LFUCG") witness Meyer's recommendation opposing the alternative standard.

**Q. AG/LFUCG witness Meyers claims that the Company has not met the burden of demonstrating that the alternative level is more reasonable than the Commission's 15% unaccounted-for water loss standard. His reason is that the Company has not demonstrated "…that the special connections represent a significant contributor to the Company's persistent water loss problem." Do you agree with Mr. Meyer's recommendation?**

A. No, I do not. The Company has provided ample evidence that special connections are a significant contributor to Kentucky-American's water losses. Kentucky-American has roughly 270 special connections Multiple Services Agreements with over 90 miles of private mains connected to the KAWC distribution system.[1] A key point is that a special connection does not have a water meter at the connection to the private main. Thus, any loss of water within the private main is reflected as KAWC's water loss. Special connections historically have been used by KAWC on larger water mains (e.g., 4 to 12in.) that were installed by private developers to serve their projects and may also include privately owned fire hydrants and fire line connections that branch off from privately owned mains. Special connections typically have multiple service connections or end users that are supplied by the private main and metered by KAWC. Owners of private mains for special connection established under Multiple Service Agreements are not required to receive approval from KAWC prior to expanding their private system.[2]

Initially, special connections were thought to be favorable to KAWC. KAWC did not have to make a capital contribution and did not have to maintain the private mains. Over time, however, as leaks develop and as private owners started to delay or neglect needed repairs, the advantages of special connections have been outweighed by other intangible factors. The Special Connection customer is not accountable for the water within its private mains

[1] See KAW_R_PSCDR2_NUM082_081823_Attachment showing the location and information on the special connection valves under Special Connection Multiple Services Agreements. The attachment is confidential and provided pursuant to a Petition for Confidential Protection. The attachment shows approximately 270 entities are served by special connection valves, servicing approximately 950 premises with more than 85 miles of private piping being maintained by private entities, mostly in Fayette County, KY. To isolate these locations, a high-level estimate of $18M to $20.5M would be needed for the design and installation of district metering area ("DMA") meter vaults. These would range in size and cost depending on the need to pass fire flows for private mains with private hydrants, the need for check valves to isolate the system, existing topography and available land, and restoration requirements. This cost estimate does not take into account potential system reinforcements required if isolation of the private systems presents hydraulic challenges.

[2] KAW_R_PSCDR3_NUM023_092123

(before the end use customer meters), which allows for real water loss through leaking pipes, unauthorized use of privately owned fire hydrants, and unauthorized connections to be metered between the connection to the KAWC water distribution system and the downstream individual unit meters.

**Q. Please discuss the Company's observations and analysis which further indicate that special connections are a significant contributor to KAWC's water loss.**

A. Based on KAWC's observations, private system facilities are not typically maintained or provided with the same level of capital replacements as KAWC does. Since the private systems are not metered, it is difficult to estimate water loss with accuracy. Having said that, water loss from special connections due to leaks, potential unmetered connections, and potential usage from hydrants for purposes other than fighting fires is a significant contributor to the Company's persistent water loss. Based on the observations during surveys at University of Kentucky ("UK"), Blue Grass Airport, Kentucky Horse Park, and observed major leak events, if we assume leakage and unmetered usage at an average of 5-10 GPM each for each of the 270 special connection systems, the rate of water loss associated with private mains would be approximately 1350-2700 GPM, and the volume of water loss would range from 60.26 MG to 120.53 MG over a 31 day period. This would equate to approximately 18.3 to 36.7% of KAWC water loss attributable to these private systems, based on the total unaccounted for water volume of 328.53 MG reported for July 2023. Major leaks like the 12" cast-iron blow out depicted in the picture below, that occurred from Friday evening to Saturday morning, September 8-9, 2023, along UK's private main could result in a much higher water loss.

In addition, UK located two leaks in August 2023, one on a hydrant lateral (approximately 5-10 GPM) and one on a hydrant (approximately 3-5 GPM) that UK maintenance plans to repair this month (November 2023).[3]

**Q. Please describe what Kentucky-American would need to do to isolate the cause and to measure the amount of water loss within the largest special connections systems**

[3] See KAW_R_PSCDR3_NUM023_092123

**that KAWC serves - Kentucky Horse Park, Blue Grass Airport, and University of Kentucky.**

A. As described in the Company's testimony and discovery responses in this case, KAWC has evaluated various strategies and solutions to isolate the cause and extent of water loss in each special connection system.

1) *Kentucky Horse Park* - To ascertain the water loss attributable to the private main served through two special connection valves at the Kentucky Horse Park, Kentucky-American would need to obtain easements on Commonwealth of Kentucky property to construct two District Metering Area ("DMA") vaults. Each DMA vault will consist of a concrete vault structure housing an 8" ultrasonic flow meter, check valve to prevent the reversal of flow through the meter, and two gate valves. The DMA vaults will be connected to existing piping on the site with 8" ductile iron pipe and associated valves and fittings. Unaccounted for water loss potentially includes leaks, unmetered connections along the private main and hydrant usage for purposes other than fire extinguishment. Installation of AMI metering at the vault location and the individual premises served along the private main would aid in determining whether water loss is attributable to leakage, unmetered connections, or hydrant usage.

Kentucky-American has plans for the construction of two DMA vaults at the Kentucky Horse Park. Onsite meetings have been conducted with Kentucky Horse Park representatives and locations established for the vaults. Due to topography and limited land availability within the right-of-way, these locations require easements from the Commonwealth of Kentucky. These vaults are estimated to cost approximately $125,000 each for expenses related to engineering and design, easement acquisition, materials, construction labor, and studies conducted to evaluate the Kentucky Horse Park's private special connection distribution system. Please see KAW_R_PSCDR2_NUM081_081823_Attachment showing the proposed vault locations and preliminary designs. The attachment is confidential and provided pursuant to a Petition for Confidential Protection. The Company's ability to construct these DMA vaults is dependent upon the ability to obtain necessary easements and the potential transfer of ownership for piping between Kentucky-American's existing main and the new DMA vaults. Kentucky-American completed field work to evaluate this system in 2022.[4]

2) *Blue Grass Airport* - To ascertain the water loss attributable to the private main served through the five special connection valves at Blue Grass Airport, Kentucky-American would need to design and construct five DMA vaults. KAWC does not currently have design plans developed for construction of permanent DMA vaults at Blue Grass Airport. The unaccounted for water loss potentially includes leakage, unmetered connections along the private main, and hydrant usage for purposes other than fire extinguishment. Installation of AMI metering at the vault location and the individual premises served along the private main would aid in determining whether water loss is attributable to leakage, unmetered connections, or hydrant usage.

[4] KAW_R_PSCDR2_NUM081_081823

3) *University of Kentucky* - Based on field work and engagement with UK, Kentucky-American anticipates that approximately twenty-one DMA locations would need to be established. Once DMA locations are identified, additional design evaluations will be required to determine whether main reinforcements are required to isolate UK's facilities from the grided water system without negatively impacting the hydraulics of the water system. Easements on UK property and potential transfer of ownership for piping between Kentucky-American's existing main and the twenty-one DMA vaults would be required.

Definitively locating all points of interconnection between University of Kentucky's facilities and Kentucky-American's system presents difficulties as there are many areas where Kentucky-American piping runs parallel to UK's private mains. It is suspected that over many years there may have been unmetered connections by UK contractors on Kentucky-American's system that were intended to be made on the UK private main. The currently unaccounted for water loss potentially includes leakage, usage from unmetered connections along the private main and hydrant usage for purposes other than fire extinguishment. Installation of AMI metering at the vault locations and the individual premises served along the private main would aid in accurately establishing unaccounted for water due to the complexities of this system and number of premises served.

Kentucky-American has conducted extensive field work and engaged UK to identify the specific meters serving building(s), fire service vaults and detector checks corresponding to locations, and is actively engaging UK representatives in development planning that continually modifies UK's private mains. It is anticipated that establishing DMAs for twenty-one special connection valve points with University of Kentucky facilities will cost approximately $3.5 million. This cost estimate does not include any potential costs associated with system reinforcement required if isolation of the UK facilities have negative hydraulic impacts to the grided water system or locating and addressing unknown points of interconnection. Kentucky-American does not currently have design plans for completion of this work.

**Q. What is another option to address Kentucky-American's unaccounted for water loss from special connections?**

A. Another option is to consider master metering certain special connections. A master meter vault would be of similar construction and cost to a DMA vault and would contain similar metering equipment. With a master meter set up, however, the meter would be the point of service to the customer, and the tariff currently requires the customer to fund the installation of the master meter. The customer would also have an additional expense associated with the installation of a required backflow prevention assembly of similar size to the master meter, located immediately after the master meter vault. The design, installation and additional costs associated with the installation of the required backflow assembly would be established by the customer, as backflow assemblies are customer owned and maintained equipment. KAWC would then cease to meter individual customers past the master meter, and it would be the responsibility of the master metered customer to bill the entities serviced along their private mains.[5]

[5] KAW_R_PSCDR3_NUM022_092123

**Q. Would master metering enable KAWC to isolate the cause and measure the of water loss within the special connections distribution systems that it serves?**

A. No, it would not. While constructing vaults to master meter certain special connections would reduce KAWC's unaccounted for water loss, it would not enable KAWC to isolate the cause and measure the water loss within the special connections distribution systems. It would transfer the cost and responsibility of water loss in private systems from KAWC to the special connection customer. The installation of DMA vaults containing meters at the points of demarcation between KAWC's system and special connections enables KAWC to isolate and accurately measure flow into the area being serviced by the private mains. In contrast to the master metering approach, the construction of DMAs KAWC customers within the special connection private system would still be metered and billed by KAWC. The UFW attributable to leakage or unmetered usage associated with the private main can then be established by determining the difference in water measured by the two DMA meters and usage on individual meters. This would enable KAWC to monitor and verify instances of suspicion of leakage or the installation of unmetered connections and to work with the special connection customer to remediate the source of the verified water loss or bill the owner of the private mains for the verified UFW measured. The use of AMI in the DMA would assist in characterizing the source of UFW leakage versus unauthorized connections through comparison of the usage pattern when measuring flow into the DMA area and reducing the flow sold through individual customer meters with multiple measurements throughout the day.

**Q. What are Kentucky-American's plans to work with special connection customers to isolate causes and measure the water loss within the special connection systems that it serves?**

A. Kentucky-American plans to do the following related to its provision of service to Company's special connection customers:

1) All special connection customers will be requested to provide KAWC detailed information on the location, diameter, and material on all mains and services located upon private property, specifically noting if any lead or galvanized piping or service line exist.

2) All customers with special connection multiple services agreements will be asked to obtain written approval from KAWC for any modifications, including installation, expansion, or demolition of private main or service settings to be installed or eliminated.

3) All customers with a special connection with fire service will be asked to provide a monthly report on water utilized for fire suppression and testing. Failure to provide the report or inaccurate reporting for three consecutive months will allow the utility to permanently convert the special connection to a metered connection. The material and installation costs associated with the new master meter connection including but not limited to the vault (as applicable), check valve, and meter shall be borne by the entity being served by placement of that charge on the customer's water bill. The customer will be required to install backflow prevention immediately after the master meter vault.

4) Upon written notification to a customer with a special connection multiple services agreement, KAWC has the discretion and authority to permanently meter the special connection with a master metered connection or install a DMA with usage billed in accordance with the domestic tariff.

5) Customers not directly connected to KAWC owned piping located in immediately adjacent public right of way or utility easement, shall be treated as new customers for the purposes of main extensions. Where private mains can be reasonably eliminated, the utility is authorized to make a contribution towards the extension of new main and service settings, equal to 3.5 times the annual revenue or the installation 50 feet of main, whichever is greater, per customer presently served along private main installed under a special connection multiple services agreement or to provide individual service to mobile home parks that are of permanent nature, where individual tenants are serviced off of private main.

KAWC respectfully requests that during a six-month period, each documented unauthorized usage event across a special connection for fire service or privately owned main served through a special connection multiple services agreement be considered accounted for water.

**Q. Please summarize why it is appropriate to establish 20 percent UFW as an alternative level of reasonable UFW for KAWC.**

A. KAWC's water loss control program has demonstrated effective utility management and stewardship of water resources but it has limited ability to manage and influence Special Connections' water loss. KAWC has demonstrated that those Special Connections are a significant contributor to Kentucky-American's water losses. As Mr. Lewis demonstrates in his rebuttal testimony, the Company has been able to mitigate water loss increases through its water loss program, including utilization of the Qualified Infrastructure Program among other efforts. Nevertheless, the Company continues to have to deal with the special connections challenges I describe above. For all the foregoing reasons, it is appropriate to for the Commission to establish 20 percent UFW as the reasonable level for KAWC in this case.

**Q. Does this conclude your rebuttal testimony?**

A. Yes.

**VERIFICATION**

**COMMONWEALTH OF KENTUCKY )**
**) SS:**
**COUNTY OF FAYETTE )**

The undersigned, Shelley Porter, being duly sworn, deposes and says that she is the Director of Engineering for Kentucky American Water, that she has personal knowledge of the matters set forth in the accompanying testimony for which she is identified as the responsible witness, and that the answers contained therein are true and correct to the best of her information, knowledge and belief.

Shelley M. Porter
**Shelley Porter**

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 23rd day of October, 2023.

Molly McCleese Van Over
Notary Public

My Commission Expires:

July 31, 2025
Notary ID: KYNP26988

**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** | **)** | **CASE NO. 2023-00191** |
| **FOR INSTALLATION OF ADVANCED METERING** | **)** | |
| **INFRASTRUCTURE, APPROVAL OF CERTAIN** | **)** | |
| **REGULATORY AND ACCOUNTING** | **)** | |
| **TREATMENTS, AND TARIFF REVISIONS** | **)** | |

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**REBUTTAL TESTIMONY OF CHARLES B. REA**

**November 8, 2023**

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**Q. Please state your name and business address.**

A. My name is Charles B. Rea. My business address is 3409 Research Parkway, Davenport, IA 52806.

**Q. Did you previously submit direct testimony in this proceeding on behalf of Kentucky-American Water Company, Inc. ("Kentucky-American," "KAWC" or the "Company") in this proceeding?**

A. Yes. I filed Direct Testimony in this proceeding on June 30, 2023.

**Q. Are you adopting additional direct testimony in this case?**

A. Yes. I am adopting the direct testimony and exhibits of Wesley E. Selinger as they relate to class cost of service.

**Q. What is the purpose of your rebuttal testimony in this proceeding?**

A. The purpose of my Rebuttal Testimony is to address residential revenue forecasting issues raised by Office of the Attorney General of the Commonwealth of Kentucky ("OAG") and the Lexington-Fayette Urban County Government ("LFUCG") witness Greg R. Meyer

**Q. Are you sponsoring any schedules or exhibits with your Rebuttal Testimony?**

A. I am not.

**<u>RESIDENTIAL REVENUES</u>**

**Q. Please review the Company's calculation for its residential revenue forecast in this case.**

A. The Company's forecast of residential revenue in this case is based on two different components. The first component is a forecast of residential use per customer. This forecast is based on the statistical modeling that I presented in my Direct Testimony and considers trends in usage over the last ten years, impacts of weather on residential usage, and impacts of the COVID-19 pandemic on residential usage. The second component is related to the growth in residential customers. To develop customer forecasts, the Company started with customer counts as of March 2023, and average organic growth for the years 2019, 2021, and 2022 was used to project customer additions per month through the forecasted test year.

**Q. Did the Company use the same methodology for developing its commercial revenue forecast as it did for the residential forecast?**

A. Yes. As I describe in my Direct Testimony, the Company used the same statistical modeling and same assumptions regarding customer growth to develop the commercial usage forecasts as it did the residential usage forecast.[1]

**Q. Does Mr. Meyer agree with the Company's residential revenue forecast?**

A. He does not. Mr. Meyer believes that the Company's residential forecast is understated.[2] Mr. Meyer agrees with the Company's forecast of residential customer count but believes that the Company's proposed use per customer forecast is understated.[3]

**Q. What does Mr. Meyer say about the Company's residential customer count forecast?**

A. Mr. Meyer provides Table GRM-6 in his Direct Testimony which is a data set showing the average number of residential customers served by the Company from 2018 through 2022 and for the proposed test year. Mr. Meyer states that KAWC's customer levels <u>reflect the residential customer growth</u> (emphasis added) that has been seen in the recent past and that he therefore believes those levels to be reasonable.

[1] Rea Direct Testimony, p. 51 lines 5-22.
[2] Meyer Direct Testimony, p. 19 lines 2-4.
[3] Meyer Direct Testimony, p. 20 lines 1-3 and p. 20 line 7 through p. 21 line 1.

**Q. Why does Mr. Meyer not agree with the Company's forecast of residential use per customer?**

A. Mr. Meyer provides Table GRM-7 in his Direct Testimony which is a data set showing the annual use per residential customer (not normalized) for the years 2018 through 2022 and for the proposed test year. Mr. Meyer sates that the estimated usage per customer proposed by the Company is significantly lower than the historical residential average for the years of 2018 through 2022 and that the Company's usage per customer of forecast of 45.62[4] is at its lowest level dating back to 2018. He also says that the total proposed residential consumption proposed by the Company is less than actuals every year from 2019 onwards.[5] Mr. Meyer says that the Company "is essentially arguing that Residential customers are using less water per customer than they have over the past four years." He states that the residential use per customer forecast needs to be increased to reflect normal operations to arrive at the correct test year revenue levels.[6]

**Q. Does Mr. Meyer offer an alternative projection of residential use per customer?**

A. He does. Mr. Meyer recommends using a three-year average of usage per customer from 2020-2022. He states that the three-year average from 2020-2022 is 48.59 thousand gallons per customer which increases KAWC's residential usage by forecast by 374,447 gallons in total, and that the resulting billing determinants increases test year residential revenues by

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[4] "45.62" represents 45,620 gallons per year.
[5] Meyer Direct Testimony, p. 21 lines 3-8.
[6] Meyer Direct Testimony, p. 21 line 8 through p. 22 line 2.

$2.2 million and results in a reduction in the Company's revenue requirement of $1.8 million.[7]

**Q. Is Mr. Meyer's analysis of the Company's residential use per customer based on actual use per customer or normalized use per customer?**

A. Mr. Meyer's analysis is based on actual use per customer, not usage data that is normalized for weather or for other external influences such as the COVID-19 pandemic, both of which have been proven to be significant drivers of residential usage as I have shown in my Direct Testimony. Also, Mr. Meyer's analysis is based only on data going back to 2018. This period of time includes both the COVID-19 pandemic which artificially increased residential usage and includes a time period that when weather was hotter and dryer than historical norms which also tended to increase residential usage.

**Q. Why is the distinction between actual use per customer and normalized use per customer important?**

A. Any multi-year analysis of customer usage data needs to be done in a way that removes the impacts of different weather conditions on different data points and removes the impacts on usage of one-time events such as the COVID-19 pandemic. This puts all usage data on the same basis in terms of outside influences so that underlying trends in the data can be analyzed independently from these outside influences.

As Mr. Meyer himself said, residential usage estimates need to reflect normal operations to arrive at the correct test year revenue levels. Recent does not necessarily mean normal. If the underlying data is not weather-normalized, then any underlying weather conditions

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[7] Meyer Direct Testimony p. 22 lines 3-19.

that happen in the timeframe data is analyzed become the de facto standard for weather in the forecast and it is demonstrably true that weather had a significant positive impact on usage in the data that Mr. Meyer relies upon in his analysis. Also, if there were any external events that caused changes in usage such as the COVID-19 pandemic, those changes also become part of the forecast. It is important to normalize out all the known external impacts on usage in order to develop a forecast of usage that reflects normal operations. Mr. Meyer's analysis does not do that.

**Q. Does Mr. Meyer take issue with any of the statistical modeling you used to develop your estimate of residential use per customer or any of the results of that modeling?**

A. He does not. He simply ignores it.

**Q. Does Mr. Meyer suggest in any way that residential usage is not affected by weather or did not increase because of the COVID-19 pandemic?**

A. He does not. He simply ignores those impacts.

**Q. Does Mr. Meyer suggest in any way that normalized residential usage has not been trending downward over time?**

A. He does not.

Q. **How does your statistic modeling appropriately account for unusually dry and hot weather and impacts from events such as COVID-19?**

A. As I explain in my Direct Testimony, statistical linear regression modeling is a commonly used type of mathematical predictive analysis that examines two things: (1) does a set of independent explanatory variables do a good job of predicting an outcome (dependent) variable, and (2) which independent explanatory variables, in particular, are significant predictors of the dependent variable, and in what way do they help predict the results of the dependent variable. There are three typical questions that can be answered by statistical linear regression analysis as it relates to analysis of water consumption:

- "What is the strength of the relationship between summer heat, precipitation, and water sales?"
- "How much water sales can the Company expect to lose for each inch of rainfall above normal in any given period?"
- "Given current trends in water sales, what can we expect water sales to be each month next year assuming normal weather?"

As I also explained in my Direct Testimony, the mathematics of statistical regression analysis results in an equation that describes a historical relationship between use per customer, climate conditions, time trends, and the COVID-19 pandemic. The coefficients produced by this equation which are shown in Exhibit CBR-3 and Tables 12 and 13 in my Direct Testimony describe this relationship. In hot dry summers, precipitation values relative to normal are below zero and cooling degree days relative to normal are above zero. These values multiplied by the coefficients in Tables 12 and 13 result in positive usage related to water, and normalizing for weather reduces usage in these hot dry periods so that a trend of lower usage can be developed that reflects more normal weather. The same is true for the COVID-19 effect. Because the COVID-19 coefficient is positive for residential usage and negative for commercial usage, months that are designated to be COVID-impacted months have positive usage for the residential class and negative usage impacts for the commercial class associated with them,

**Q. Does Mr. Meyer address the Company's commercial usage forecast in his Direct Testimony?**

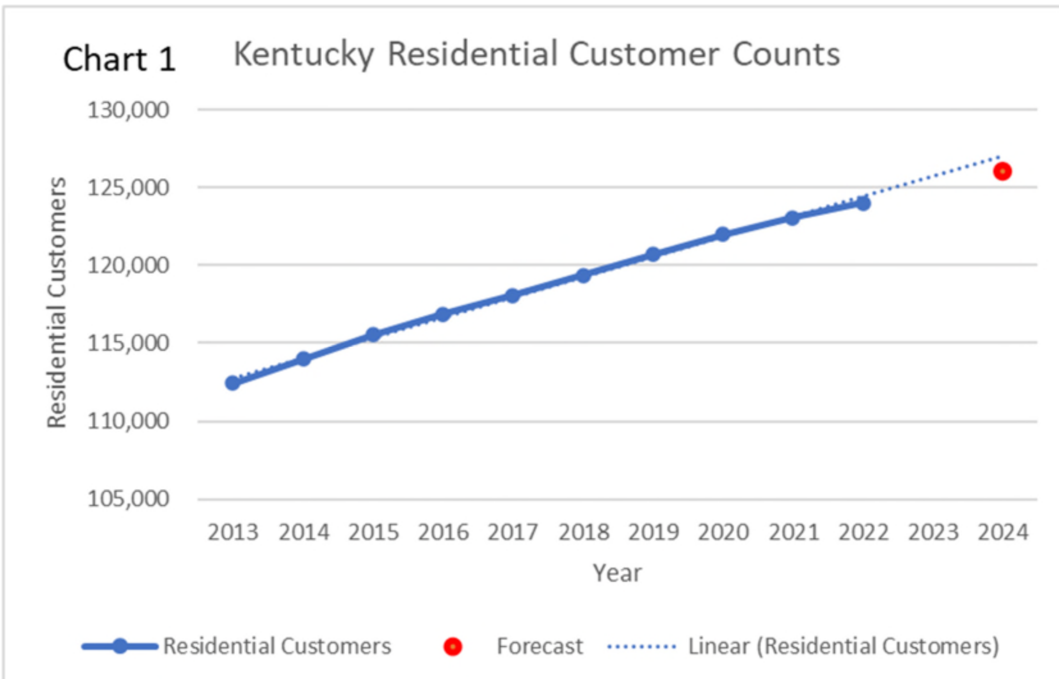
A. Notably, he does not. As I mentioned previously, the same modeling approach was used to develop the commercial usage forecast as the residential usage forecast. Mr. Meyer does not take issue with the commercial usage forecast, but only takes issue with the residential forecast. This implies that Mr. Meyer's concern about the residential usage forecast is not based on the calculations or modeling approach, but only on the result.

**Q. What other comments do you have on Mr. Meyer's analysis on this issue?**

A. As I previously noted, and as Mr. Meyer would agree, the residential usage forecast consists both of a forecast of residential customers and a forecast of usage per customer. There are significant directional trends in both the customer count data and the normalized usage per customer data, but the trends go in different directions with the upward trend in customer counts tending to increase total residential consumption and the downward trend in normalized use per customer tending to decrease total residential consumption. Both of these trends need to be recognized in order to develop a realistic forecast of residential usage. The Company's analysis recognizes both of these significant directional trends. Mr. Meyer's analysis only recognizes one trend, namely the trend associated with customer counts that increase consumption. The Company's analysis is a balanced approach that considers both relevant factors. Mr. Meyer's approach appears to be a cherry-picking approach that only considers factors that tend to maximize residential consumption.

**Q.** **Do you have charts that depict the residential customer forecast and the two competing projections of residential use per customer?**

A. I do. The charts below show annual customer counts, annual normalized use per customer, and total residential usage for the 2013-2022 time period and includes data for the forecast test year for both the Company's estimate of use per customer and total usage, and Mr. Meyer's estimates.



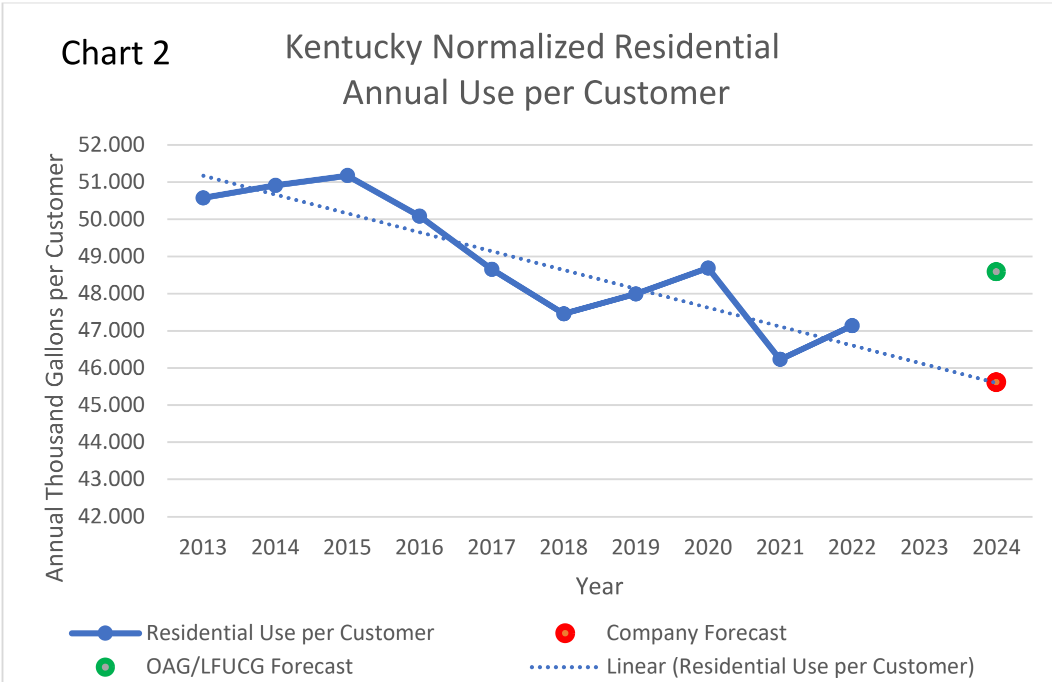



Chart 1 shows that the Company's forecast of residential customers is well in line with historical trends. Chart 2 shows that the Company's forecast of normalized use per customer is well in line with the downward historical trend. Mr. Meyer’s forecast, on the other hand, is well above the normalized trend and in fact is as high as any point since 2016.

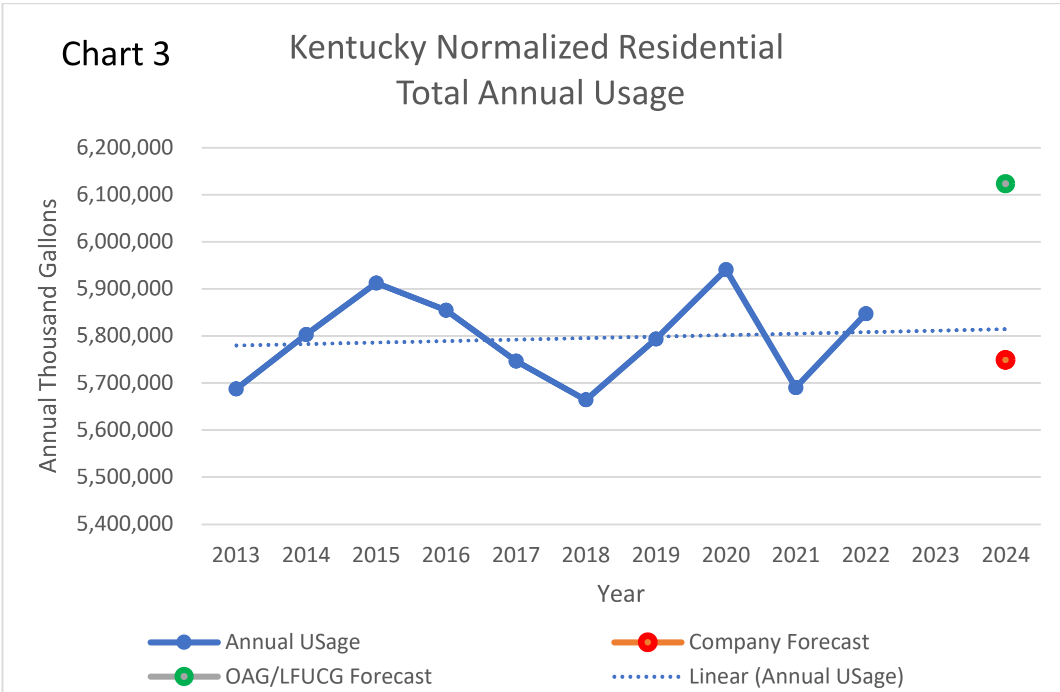



Chart 3 shows the combination of the customer count data and the normalized use per customer data and presents that as total normalized annual usage for the 2013-2022 time period and the forecast test year. The data shows that the upward trend in customer counts and the downward trend in normalized use per customer are largely offsetting and that total normalized usage is relatively flat for the historical period. Chart 3 shows that the Company's forecast of annual usage is slightly below the historical trend but well within the range of historical norms. Here again, however, Mr. Meyer’s forecast is much higher than any normalized historical level of usage the Company has seen in the historical period.

**Q. What are your recommendations in this case regarding residential revenue forecasts?**

A. The Company’s forecast of residential customers, annualized use per customer, and total usage all follow the historical trends and fall within expected levels given the historical data from 2013-2022. Mr. Meyer's forecast of annualized use per customer and particularly his forecast of total residential usage is well outside of the range suggested by the historical data and is simply not reasonable as the data in Chart 3 clearly shows. The Company's methodologies for developing this forecast are sound and were not challenged by Mr. Meyer. The Commission should adopt the Company's methodology for developing the residential usage forecast and should adopt the forecast as presented by the Company for the purpose of developing billing determinants, revenue requirements, and rates in this proceeding.

## CONCLUSION

**Q. Does this conclude your rebuttal testimony?**

A. Yes.

**VERIFICATION**

| | | |
|---|---|---|
| **STATE OF ILLINOIS** | ) | |
| | ) | **SS:** |
| **COUNTY OF ROCK ISLAND** | ) | |

The undersigned, Charles Rea, being duly sworn, deposes and says that he is the Senior Director of Enterprise-Wide Regulatory Pricing and Affordability for American Water Works Service Company, Inc., that he has personal knowledge of the matters set forth in the accompanying testimony for which he is identified as the responsible witness, and that the answers contained therein are true and correct to the best of his information, knowledge and belief.

Charles Rea

**Charles Rea**

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 24th day of October, 2023.

V. Chintalapalli

Notary Public

My Commission Expires:

01-31-2026

VENKATA CHINTALAPALLI
Notarial Seal - Iowa
Commission Number 845602
My Commission Expires Jan 31, 2026

**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** | **)** | **CASE NO. 2023-00191** |
| **FOR INSTALLATION OF ADVANCED METERING** | **)** | |
| **INFRASTRUCTURE, APPROVAL OF CERTAIN** | **)** | |
| **REGULATORY AND ACCOUNTING** | **)** | |
| **TREATMENTS, AND TARIFF REVISIONS** | **)** | |

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**REBUTTAL TESTIMONY OF MELISSA SCHWARZELL**

**November 8, 2023**

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**Q. Please state your name and business address.**

A. My name is Melissa Schwarzell. My business address is 1 Water Street, Camden, New Jersey 08102.

**Q. Did you previously submit direct testimony in this proceeding on behalf of Kentucky-American Water Company, Inc. ("Kentucky-American," "KAWC" or the "Company") in this proceeding?**

A. Yes. I filed direct testimony in this proceeding on June 30, 2023.

**Q. What is the purpose of your rebuttal testimony in this proceeding?**

A. The purpose of my rebuttal is to respond to the direct testimony of Greg Meyer regarding the Company's request for a Certificate of Public Convenience and Necessity ("CPCN") for Advanced Metering Infrastructure ("AMI") deployment. Specifically, I'll be addressing his concerns regarding financial benefits and stranded assets.

**Q. Are you sponsoring any schedules or exhibits with your Rebuttal Testimony?**

A. No.

**Q. Do you agree with Mr. Meyer's assertion that the Cost Benefit Analysis (CBA) does not quantify the financial impact of AMI benefits?**

A. No, this is not accurate. The CBA does indeed quantify the financial impact of many benefits of AMI. The quantified financial benefits include meter reading labor, field service representative labor and associated vehicle costs. These were described broadly on pages 17-18 of Exhibit A to the Company's June 30, 2023 Application and in more depth on pages 6-7 of my direct testimony. The quantified costs and benefits of AMI were also netted and shown in Figure 12 and Figure 13 of Exhibit A of the Company's Application. The Company also provided the native file calculations of these benefits in response to

PSC 2-12 and provided annual cost and benefit quantifications in response to AG 1-39, part c.

**Q. Mr. Meyer expresses concern that if there is no mechanism to reflect financial benefits in customer rates, then they would only benefit shareholders. Is this a valid concern?**

A. Given that the Company is subject to ongoing rate regulation, this is not a valid concern. Both the costs and benefits of AMI will be embedded in the business and operations of the Company as AMI is deployed, and thus will be implicit in the cost of service and customer rates through ongoing rate regulation.

**Q. Mr. Meyer expresses concern about stranded assets related to the Company's AMI proposal. Does the Company anticipate that transitioning to AMI will result in stranded assets?**

A. No, the Company does not anticipate any stranded assets in relation to AMI transition. The Company is planning to install AMI-enabled equipment, rather than AMR enabled equipment, as it completes replacement of metering equipment in the normal course of business over the next decade. In other words, the Company plans to deploy new, AMI-enabled meters and endpoints only when existing meter and endpoint assets would be replaced anyway. Unlike some other proposed AMI deployments in the state, KAWC is <u>not</u> planning to accelerate the replacement of metering infrastructure regardless of age and condition.

**Q. Mr. Meyer cites a discovery response (AG 1-40) in support of his discussion that stranded assets may be a concern related to the CBA. Can you address this?**

A. I can. Discovery question AG 1-40 came in multiple parts (a, a(i), a(ii), and b). Part a(ii) did indeed ask about stranded assets and the CBA. However, it appears that the Company did not specifically address whether any stranded costs were taken into consideration in the CBA. Mr. Meyer construed the answer that was provided to overall part "a" as a response regarding the CBA, but in fact this was not. On November 8, 2023, the Company submitted AG 1-40 Supplemental to specifically respond to this subpart. This response joins AG 1-89 in addressing the notion of stranded assets, and it joins AG 2-47, and AG 2-35b in responding to questions about metering asset depreciation reserves. As stated consistently in discovery responses, as well as in the rebuttal above, the Company does not anticipate any stranded assets in relation to the transition to AMI.

## CONCLUSION

**Q. Does this conclude your rebuttal testimony?**

A. Yes.

## VERIFICATION

**STATE OF NEW JERSEY** )
) **SS:**
**COUNTY OF CAMDEN** )

The undersigned, Melissa Schwarzell, being duly sworn, deposes and says that she is the Senior Principal, Finance, for American Water Works Service Company, Inc., that she has personal knowledge of the matters set forth in the accompanying testimony for which she is identified as the responsible witness, and that the answers contained therein are true and correct to the best of her information, knowledge and belief.

**Melissa Schwarzell**

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 26 day of October, 2023.

Meresa M Yager
Notary Public

My Commission Expires:
10/2/2024

MERESAANN M YAGER
Notary Public - State of New Jersey
My Commission Expires Oct 2, 2024

**KENTUCKY AMERICAN WATER COMPANY, INC.**

**CASE NO. 2023-00191**

**REBUTTAL TESTIMONY**

**OF**

**HAROLD WALKER, III**

**ON BEHALF OF**

**KENTUCKY AMERICAN WATER COMPANY**

**November 8, 2023**

**REBUTTAL TESTIMONY**
**HAROLD WALKER, III**
**KENTUCKY AMERICAN WATER COMPANY**
**CASE NO. 2023-00191**

## TABLE OF CONTENTS

## I. INTRODUCTION, PURPOSE, AND SUMMARY

**Q. Please state your name and address same.**

A. My name is Harold Walker, III. My business address is 1010 Adams Avenue, Audubon, Pennsylvania, 19403.

**Q. Are you the same Harold Walker, III who previously submitted direct testimony in this proceeding on behalf of Kentucky-American Water Company, Inc. ("Kentucky-American," "KAWC" or the "Company") in this proceeding?**

A. Yes. I filed Direct Testimony in this proceeding on June 30, 2023.

**Q. What is the purpose of your Rebuttal Testimony?**

A. The purpose of my testimony is to reply to the direct testimony submitted by Office of the Attorney General of the Commonwealth of Kentucky ("OAG") and the Lexington-Fayette Urban County Government ("LFUCG") witness Greg R. Meyer as it relates to his adjustments to the cash working capital ("CWC") allowances included in the Company's rate base.

**Q. Are there any areas of agreement in the cash working capital testimonies presented in this proceeding?**

A. Yes, Mr. Meyer adopts the majority of the lead/lag days used in my Direct Testimony.

**Q. Are there any updates in the cash working capital as part of your Rebuttal Testimony?**

A. Yes. As referenced in Company's witness Mr. Newcomb's testimony, the Company is filing an update to the proposed revenue requirement for the following: updated rate of return, reduction of Board of Director Fees, updated utility regulatory assessment fee, reduction of miscellaneous expense and corrected customer accounting expense. As a result, the cash working capital for the forecasted period has changed from $3,141,000 to

$3,181,000.

**Q. Please summarize the areas of disagreement between your Direct Testimony and the testimony from Mr. Meyer that you will address in this Rebuttal Testimony.**

A. Mr. Meyer's testimony differs from my testimony in two primary areas: (1) he adjusts the expense lead days for service company charges; and (2) he removes cash generating cost of service items such as regulatory expense; amortization; uncollectibles; depreciation and amortization; deferred income taxes; and net income for the Company.

**Q. Are Mr. Meyer's recommended adjustments to KAWC's cash work capital consistent with the Commission determination in the Company's last rate case, Case No. 2018-00358?**

A. No. Mr. Meyer's recommended adjustments to the Company's CWC are not consistent with the Commission determination in the Company's last rate case. In fact, Mr. Meyer's recommended adjustments to CWC are virtually the same recommendations advocated by OAG and LFUCG in the Company's last rate case that were rejected by the Commission. CWC is the amount of amount of investor supplied capital used to fund the day-to-day operations of the Company and to compensate shareholders for the delay in recovery of certain expenses from ratepayers. The Company's CWC methodology used in this case has been used for numerous prior rates cases and is the same methodology that the Commission has accepted for KAWC since 1983.

In the Company's last rate case, in Case No. 2018-00358, the Commission stated,

> The Commission notes that Kentucky-American's lead/lag study uses the same methodology that we have accepted since 1983. We agree with Kentucky-American that the Attorney General has consistently presented, and the Commission has consistently refused to adopt, the arguments raised here regarding the inclusion of non- cash items in the calculation of working capital. The Attorney General/LFUCG offered no new evidence or

> arguments in the current proceeding to disturb our previous findings or to support a change in our position on this matter. Therefore, consistent with precedent and based upon the evidence in the record, we find the Attorney General/LFUCG's proposal regarding cash working capital should be denied.[1]

I will address the areas of disagreement I have regarding Mr. Meyer's testimony in the remainder of my Rebuttal Testimony.

## II. SERVICE COMPANY CHARGES LEAD DAYS ADJUSTMENT

**Q. Did Mr. Meyer address the expense lead days for Service Company Charges recommended by the Company?**

A. Yes, Mr. Meyer addressed the expense lead days for Service Company Charges recommended by the Company.[2]

**Q. What is Mr. Meyer's recommendation for Service Company Charges in his cash work capital lead-lag study?**

A. Mr. Meyer's recommends changing the expense lead days for Service Company Charges utilized by the Company from -5.30 day (negative) expense lead to 25.60 days expense lead to match the Contracted Services expense lead days.

**Q. Why does Mr. Meyer recommend Service Company Charges be assigned the same expense lead days as Contracted Services?**

A. On page 35 Mr. Meyer states,

> 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

[1] Case No. 2018-00358, Electronic Application of Kentucky-American Water Company for an Adjustment of Rates (Ky. PSC June 27, 2019) at 8-9. (*Footnote refences excluded*).

[2] Direct Testimony of Greg R. Meyer at 35-36.

approximate same expense lead. (*Emphasis added*)

**Q. Are the services, costs, and/or billing terms for Service Company Charges similar to outside services providers?**

A. No. The Service Company exists to provide services to American Water affiliates at cost. The Service Company makes no profit from the provision of these services. Service Company's billing terms are meant to match expenses with the receipt of payments from affiliates which are the beneficiaries of the services. Prepayment of services does not produce a profit on services. However, prepayment of charges reduces the cost of the services provided.

**Q. Are the services that are provided through Service Company Charges the same as the services provided by Contracted Services?**

A. No. The services provided by Service Company Charges and Contract Services expenses are quite different in nature and scope. Further, the cost structure of the services provided by each is very different. The services provided by Service Company Charges are charged at cost. That is, **there is no mark-up or financial gain for any services that the Service Company** or its employees **charge** to the regulated or non-regulated affiliates. Whereas the services and the related expense of Contract Services include entrepreneurial profit (i.e., marked-up for financial gain). Prepayment of Contract Services Charges reduces the cost of the services provided.

**Q. Are expense lead days similar across the Company's various operating expense categories or line items?**

A. No. The lead-lag study used to determine the Company's CWC shows a range of expense lead days of -152.0 (negative) to 238.4 lead days across the Company's various operating expense categories or line items. In a competitive market, the pricing for any service must reflect the invoicing practice of the vendor and payment practice of the customer. There is no reason to expect Service Company Charges and Contract Services expenses to have similar lead days since each provides very different services and have different invoicing practices.

**Q. Did Mr. Meyer conduct a lead-lag study to determine his recommended 25.6 days Service Company Charges expense lead?**

A. No.

**Q. What is the basis for Mr. Meyer's recommended 25.6 days Service Company Charges expense lead?**

A. Mr. Meyer recommends changing the expense lead days for Service Company Charges to match the Contracted Services expense lead days. By doing so, Mr. Meyer is assigning hypothetical expense lead days to Service Company Charges. Essentially, Mr. Meyer cherry-picked data he liked from Contracted Services, and discarded data he did not like for Service Company Charges.

**Q. Did Mr. Meyer find any errors in the Service Company Charges expense lead day analysis used in your lead-lag study?**

A. No.

**Q. Do you have any other comments regarding Mr. Meyer's recommended adjustment to KAWC's Service Company Charges expense lead days?**

A. Yes. KAWC's CWC requirement requested in this case is based on a lead-lag study. A lead-lag study is an accurate and appropriate method of determining CWC because it provides a mathematical picture of the utility's CWC situation, whether large or small. However, lead-lag studies are more costly than other methods of determining CWC. If hypothetical expense lead days are allowed in lieu of the results of a lead-lag study, it defeats the purpose of conducting a lead-lag study and results here in nothing more than the arbitrary confiscation of investor-provided capital. The Commission should not accept Mr. Meyer's adjustment to KAWC's Service Company Charges expense lead days.

## III. ELIMINATED COST OF SERVICE LINE ITEMS

### A. OVERVIEW

**Q. Does Mr. Meyer recommend eliminating cost of service line items from the determination of the Company's cash working capital?**

A. Yes. Mr. Meyer recommends removing six[3] cost of service line items from the determination of the Company's CWC under the pretense that they are "non-cash expenses." On page 32 of his testimony, Mr. Meyer states, "[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." (*Emphasis added*)

The term "non-cash expense" is an accounting term only. It is not a term that has significance from a financial, economic, or regulatory perspective, because something categorized as a "non-cash expense" from an accounting perspective still represents a true expense for a company. Although a company does not write a check to pay "non-cash expense," the CWC only arises due to customers not paying for previous service provided by the Company. When a customer does not pay for the cost of service, it ultimately affects the cash position of the Company – a company does not recover the cost of providing customers services and therefore must finance the cost of providing for uncollected

[3] The six line items include: regulatory expense; amortization; uncollectibles; depreciation and amortization; deferred income taxes; and net income.

customers' services.

Mr. Meyer's testimony overstates the Company's position because it suggests the Company's CWC requirement is required to finance the <u>entire</u> amount of "non-cash expense" line items, which is not the case. In fact, the Company CWC requirement shows, mathematically, that it is only financing 10.3% (37.75 days ÷ 365 days) of the entire "non-cash expense" line items, given that customers have not yet been billed for and have not yet paid for this portion (as evidenced by the existence of a 37.75-day revenue lag based on the lead-lag study).

Accountants show some portion of "non-cash expense" line items as sources of cash on a Statement of Cash Flow contained in financial statements they prepare.[4] However, the portion of the "non-cash expense" items that customers have not yet been billed nor paid for (e.g., 37.75 days) would not be included as a source of cash on a Statement of Cash Flow because you cannot have a source of cash that you never collected due to the 37.75-day revenue lag.

If "non-cash expense" line items are not considered a CWC requirement, then it implies a company would not be impacted if they did not collect that portion of their cost of service comprised of "non-cash expense" line items. Obviously, the collection of the entire cost of service is essential to the operations of a company, otherwise "non-cash expense" items would not be included in the determination of a company's cost of service.

Mr. Meyer's testimony that "non-cash expenses" are not required to operate a utility is incorrect. On Mr. Meyer's Exhibit GRM-2 he shows "net operating funds, or a revenue

[4] A Statement of Cash Flows reports many items including construction expenditures, repayment of long-term debt, repayment of short-term debt, redemption of common stock, redemption of preferred stock and dividend payments that must be funded with funds that are provided by investors to provide service to the customers.

requirement of $142,126,846. However, he only includes $73,846,568 of line items in his CWC determination because he excludes $68,280,278 "non-cash expenses" line items. Therefore, Mr. Meyer excludes 48% ($68,280,278 ÷ $142,126,846) of his revenue requirement from his CWC determination based upon his assumption that "non-cash expenses" line items are not required to operate a utility. If this was a workable theory, it would indicate that the Company would not be harmed or damaged if it was not able to ever collect 48% of its revenues. Since this is not the case, it is a certainty that "non-cash expenses" line items are in fact required to operate a utility and are financed by investors.

### B. REGULATORY EXPENSES

**Q. Does Mr. Meyer recommend excluding regulatory expenses from the determination of KAWC's cash working capital?**

A. Yes. Mr. Meyer recommends excluding regulatory expenses from the determination of the Company's CWC based on his hypothesis that regulatory expenses is a "non-cash expense" and is not required to operate a utility.

**Q. Should regulatory expenses be included in the determination of KAWC's cash working capital?**

A. Yes.

**Q. Why should regulatory expense be included as an operating expense line item when determining cash working capital?**

A. The regulatory expense which I recommend be included as an operating expense line item in the determination of CWC relates to the current cash expenditures the Company is making as part of this current rate case. Since the current regulatory expense is only now occurring, only investor provided capital can be the source of cash funding current regulatory expense. Therefore, the inclusion of current regulatory expense as part of the determination of CWC is the only opportunity to recover the cost of raising cash from its investors that is used in day to day operations related to funding regulatory expenses.

### C. AMORTIZATION EXPENSE

**Q. Does Mr. Meyer recommend excluding amortization expenses from the determination of KAWC's cash working capital?**

A. Yes. Mr. Meyer recommends excluding amortization expense from the determination of the Company's CWC based on his premise that regulatory expenses is a "non-cash expense" and is not required to operate a utility. However, amortization expense is required to operate a utility as evidenced by the fact that is allowable expense line item in the cost of service. Amortization expense is included in a proper lead-lag study to account for the portion (i.e., 10.3%) of amortization expense that has not been collected or paid for by customers because the Company collects cash associated with amortization expense from customers in the same way it collects all other revenues—with a revenue lag.

### D. UNCOLLECTIBLES EXPENSE

**Q. Do you agree with Mr. Meyer's removal of uncollectibles expense from the determination of KAWC's cash working capital?**

A. No. I disagree with Mr. Meyer's recommended removal of uncollectibles expense from the determination of the Company's CWC. Although a company does not write a check to pay uncollectible account expenses, the uncollectible expense only arises due to customers not paying for previous service provided and funded by the Company. When a customer does not pay for the cost of service, it ultimately affects the cash position of the company because a company does not recover the cost of providing customers services and therefore must finance the cost of providing for uncollected customers' services. The uncollectibles expense is part of the write off process, through amortization, of revenues for services provided to customers for which they were never paid. The uncollectibles expense was created the moment the Company determined the customer had defaulted on the promised payment for services.

### E. DEPRECIATION EXPENSE

**Q. Does Mr. Meyer recommend excluding depreciation expense from the determination of KAWC's cash working capital?**

A. Yes. Mr. Meyer, on pages 32 and 33 of his testimony, recommends removing the depreciation expense line item from the Company's CWC because he considers it to be a "non-cash expense." As with all "non-cash expenses" discussed previously, Mr. Meyer overstates the Company's position because he suggests the inclusion of depreciation expense indicates the Company is required to finance the entire amount of depreciation expense, which is not the case. Depreciation expense is included in a proper lead-lag study to account for the portion (i.e., 10.3%) of depreciation expense that has not been collected or paid for by customers because the Company collects cash associated with depreciation expense from customers in the same way it collects all other revenues—with a revenue lag.

Additionally, depreciation expense (accumulated depreciation) is subtracted from gross plant when rate base is determined. Therefore, at any point in time, the amount of depreciation expense (accumulated depreciation) that is subtracted when determining rate base is overstated because it is recorded using accrual accounting while the full cash amount of the expense has yet to be collected because, like all other revenues, it is uncollected from customers for 37.75 days.

If "non-cash expense" line items are not considered a CWC requirement, then it implies a company would not be impacted if it did not collect that portion of its cost of service comprised of "non-cash expense" line items. Obviously, the collection of the entire cost-of-service is essential to the operations of a company, otherwise "non-cash expense" items would not be included in the determination of a company's cost of service.

### F. DEFERRED INCOME TAXES

**Q. Does Mr. Meyer recommend excluding deferred income taxes from KAWC's cash working capital?**

A. Yes. Mr. Meyer recommends removing the deferred income taxes line item from the Company's CWC because he considers it to be a "non-cash expense." However, the reason for including deferred income taxes in a proper lead-lag study is to account for the portion (i.e., 10.3%) of deferred income tax expense that has not been collected or paid for by customers.[5] Specifically, deferred income taxes, or ADIT, are subtracted from net plant in the determination of rate base under the premise that they are "cost free capital" provided by customers **when customers pay their bills**. However, the Company collects cash associated with its deferred tax liability from customers in the same way it collects all other revenues, with a revenue lag of 37.75 days.

Given that the Company's revenues are subject to a revenue lag of 37.75 days, this means that at any point in time, the amount of deferred taxes (ADIT) that is subtracted when determining rate base is overstated because it is recorded using accrual accounting, while the full cash amount (cash accounting) has yet to be collected, because, like all other revenues, it remains uncollected from customers for 37.75 days. Excluding deferred taxes

[5] 10.3% is derived from 37.75 days ÷ 365 days.

from the CWC calculation, as Mr. Meyer proposes, ignores the lag between the Company's recorded deferred tax amount and its cash collection of that amount from customers. The situation begs the question: If 10.3% (37.75 days ÷ 365 days) of the deferred income tax expense has not yet been provided by customers, then who provided the 10.3% of the deferred income tax expense subtracted from net plant when determining rate base? The only possible answer is that investors provide 10.3% of the deferred income tax expense subtracted from net plant when determining rate base, which is the reason for its inclusion in the determination of CWC.

### G. NET INCOME

**Q. Does Mr. Meyer recommend eliminating net income from KAWC's cash working capital?**

A. Yes. Mr. Meyer recommends removing the net income line item from the Company's CWC. However, the net income, or return on invested capital, should be included in the CWC determination because net income is the property of investors when it is earned but, like all other revenues, it is uncollected from customers for 37.75 days.[6] Mathematically, assigning zero lead days to net income in the CWC determination recognizes the portion of the property, 10.3%, that remains uncollected. Unless investors are allowed a return on the uncollected 10.3% of net income through the CWC requirement, they do not have an opportunity to earn a return on this investment.

## IV. MR. MEYER'S PORTRAYAL OF OTHER LEAD-LAG STUDIES

**Q. Mr. Meyer's Exhibit GRM-1 to his testimony contains Schedules from a Missouri-**

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[6] *Bluefield Water Works v. Public Service Comm'n*, 262 U.S. 679 (1923) ("Rates which are not sufficient to yield a reasonable return on the value of the property used at the time it is being used to render the service of the utility to the public are unjust, unreasonable, and confiscatory, and their enforcement deprives the public utility company of its property, in violation of the Fourteenth Amendment." 262 U. S. at 690).

**American Water Company rate case. Does Exhibit GRM-1 support Mr. Meyer's recommended adjustments to KAWC's cash working capital requirement?**

A. No. Mr. Meyer's Exhibit GRM-1 only depicts the policy of only the Missouri Public Service Commission regarding CWC. Had Mr. Meyer provided CWC Schedules from other jurisdictions the Schedules would have depicted a different story that contradicts Mr. Meyer's recommendation in this case. Mr. Meyer's Exhibit GRM-1 does not summarize regulatory policy in the numerous jurisdictions that American Water affiliates operate, nor does it represent my CWC recommendations from many jurisdictions.

Each regulatory jurisdictions have its own unique regulatory policies. For example, some jurisdictions use an end of year rate base, while others use an average rate base. Some regulatory jurisdictions include all "non-cash expense" line items in CWC, others only allow some of the "non-cash expense" line items, while others do not allow any. Some regulatory jurisdictions exclude interest expenses from CWC:

> The return on investment is the property of investors when service is provided. Payment from operating income for long and short term debt, preferred stock and common stock dividends require a zero payment lag because the funds used to render these payments are the property of investors of a utility.[7]

## V. COLUMBIA GAS OF KENTUCKY IN CASE NO. 2021-00183

**Q. On page 34 of Mr. Meyer's testimony he discusses the Commission's Order in Columbia Gas of Kentucky, Case No. 2021-00183. Have you reviewed the Order?**

A. Yes. Columbia Gas of Kentucky ("Columbia Kentucky") has traditionally used the 1/8th

[7] I/M/O Atlantic City Electric Company, BPU Docket No. 8310883, OAL Docket No. 8543-83 (1984). For additional examples see I/M/O Public Service Electric and Gas Company, BPU Docket No. 837-620 (1984); I/M/O Middlesex Water Company for Approval of an Increase in its Rates for Water Service and Other Tariff Changes, OAL Docket No. PUC 4879-00, BPU Docket No. WR00060362 (2001); and I/M/O the Verified Petition of Rockland Electric Company for Approval of Changes in Electric Rates, OAL Docket No. PUC 09366-02, Board Docket No. ER02100724 (2003).

Method for calculating its CWC and may not have been acquainted with lead-lag studies. However, in the Settlement Agreement in Case No. 2016-00162, Columbia Kentucky agreed to perform a lead-lag study in its next rate case (i.e., Case No. 2021-00183) that did not include non-cash expense items.

In Case No. 2021-00183, Columbia Kentucky used both the 1/8th Method, a lead-lag study, which may have included non-cash expense items, and a balance sheet analysis for calculating its cash working capital. In the Joint Stipulation in Case No. 2021-00183, the parties agreed to apply a lead-lag study which excluded non-cash expense items proposed by the OAG for CWC purposes. The Order in Case No. 2021-00183 reflects the Commission acceptance of the Joint Stipulation on CWC.

**Q. Does this conclude your Rebuttal Testimony?**

A. Yes, it does.

## VERIFICATION

**STATE OF NEW JERSEY** )
) **SS:**
**COUNTY OF GLOUCESTER** )

The undersigned, Harold Walker, III, being duly sworn, deposes and says that he is the Manager Financial Studies for Gannett Fleming Valuation and Rate Consultants, LLC, that he has personal knowledge of the matters set forth in the accompanying testimony for which he is identified as the responsible witness, and that the answers contained therein are true and correct to the best of his information, knowledge, and belief.

**Harold Walker, III**

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 18 day of October, 2023.

Notary Public

My Commission Expires:

July 23. 2024

HEATHER L. MARQUETTE
NOTARY PUBLIC OF NEW JERSEY
My Commission Expires 7/23/2024

**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** | **)** | **CASE NO. 2023-00191** |
| **FOR INSTALLATION OF ADVANCED METERING** | **)** | |
| **INFRASTRUCTURE, APPROVAL OF CERTAIN** | **)** | |
| **REGULATORY AND ACCOUNTING** | **)** | |
| **TREATMENTS, AND TARIFF REVISIONS** | **)** | |

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**REBUTTAL TESTIMONY OF JOHN M. WATKINS**

**November 8, 2023**

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**Q. Please state your name and business address.**

A. My name is John M. Watkins. My business address is 1 Water Street, Camden, NJ 08102.

**Q. Did you previously submit direct testimony in this proceeding on behalf of Kentucky-American Water Company, Inc. ("Kentucky-American," "KAWC" or the "Company") in this proceeding?**

A. Yes. I filed Direct Testimony in this proceeding on June 30, 2023.

**Q. What is the purpose of your rebuttal testimony in this proceeding?**

A. The purpose of my rebuttal testimony is to address Mr. Meyer's recommended adjustments to labor expense and Service Company expense filed on the behalf of the Office of the Attorney General of the Commonwealth of Kentucky ("OAG") and the Lexington-Fayette Urban County Government ("LFUCG"). I also present a revised Exhibit 37 G. I will also address an update to the rate base as a result of the impacts to cash working capital from the revenue requirement update addressed by Company witness Mr. Newcomb.

**Q. Are you sponsoring any schedules or exhibits with your Rebuttal Testimony?**

A. Yes. Please see Exhibit JMW-1 attached hereto for an updated Exhibit 37 G.

## <u>LABOR</u>

**Q. Have you reviewed Mr. Meyer's testimony regarding his proposed vacancy adjustment and capitalization adjustment?**

A. Yes, I have.

**Q. What source did Mr. Meyer use for his adjustments?**

A. Mr. Meyers used Exhibit 37 G.

**Q. Was the data in Exhibit 37 G correct as filed?**

A. No, the Company discovered there was an issue with Exhibit 37 G as it was comparing the as filed labor expenses and the charts Mr. Meyer used from the data in Exhibit 37 G.

**Q. Did the Company file a revised Exhibit 37 G?**

A. Yes, the Company is filing a revised Exhibit 37 G concurrently with this rebuttal testimony as Exhibit JMW-1.

**Q. Please show the revised data that should have been used in Mr. Meyer's Table GRM-3.**

A. Below is Table JMW-1 which uses the data from the Revised Exhibit 37 G, attached as Exhibit JMW-1.

Table JMW-1

| Line | Year | Labor Costs(1) |
|---|---|---|
| 1 | 2018 | $9,686,241 |
| 2 | 2019 | $10,162,289 |
| 3 | 2020 | $10,624,639 |
| 4 | 2021 | $9,668,218 |
| 5 | 2022 | $11,767,751 |
| 6 | Base year | $12,020,841 |
| 7 | Test Year | $12,865,109 |

Note (1): Labor base pay and overtime pay from revised Exhibit 37 G.

**Q. Will the data in the chart match the expense the Company requested in the case?**

A. No, the data in Exhibit 37 G only includes base pay, overtime time and the allocation of management salaries to wastewater. The requested amount of labor expense in the revenue requirement would also include compensation related to the Annual Performance Plan ("APP"), Long-Term Performance Plan ("LTPP") and Shift Premiums.

**Q. Can you please detail what is included in the revenue requirement?**

A. Yes, Table JMW-2 details out the labor expense in the first column of the table. The second column shows the capitalized labor expense. The third column shows the total requested and the last column shows the percentage of capitalization by line and in total. I also included a reconciliation at the bottom of the table to tie to the revised Exhibit 37 G to show what is included and excluded.

Table JMW-2

| **Kentucky American Water Company** | | | | |
|---|---|---|---|---|
| **Labor and Labor Related Summary** | | | | |
| | Twelve Months ending January 31, 2025 | | | |
| | **Pro Forma Exp** | **Capital** | **Total** | **% Capitalization** |
| **Salaries & Wages** | | | | |
| **Union** | | | | |
| Base Wages | $3,731,642 | $1,283,758 | $5,015,400 | 25.6% |
| Shift Premiums | 1,460 | 174 | 1,634 | 10.6% |
| Overtime | 634,642 | 253,669 | 888,311 | 28.6% |
| Annual Performance Plan | 111,952 | 38,570 | 150,522 | 25.6% |
| **Subtotal: Union Salaries & Wages** | $4,479,696 | $1,576,171 | $6,055,867 | 26.0% |
| | | | | |
| **Non-Union Hourly** | | | | |
| Base Wages | $1,555,932 | $1,163,090 | $2,719,022 | 42.8% |
| Overtime | 217,349 | 171,782 | 389,131 | 44.1% |
| Annual Performance Plan | 112,468 | 82,291 | 194,759 | 42.3% |
| **Subtotal: Non-Union Hourly Salaries & Wages** | $1,885,749 | $1,417,163 | $3,302,912 | 42.9% |
| | | | | |
| **Non-Union Salaried** | | | | |
| Base Wages | $2,126,690 | $1,750,776 | $3,877,466 | 45.2% |
| Annual Performance Plan | 352,477 | 243,723 | 596,200 | 40.9% |
| Long Term Performance Plan | 136,064 | 29,019 | 165,083 | 17.6% |
| Management Salaries Allocated to Wastewater | (13,055) | (11,166) | (24,221) | 46.1% |
| **Subtotal: Non-Union Salaried Salaries & Wages** | $2,602,176 | $2,012,352 | $4,614,528 | 43.6% |
| | | | | |
| **Total Expensed Salaries & Wages Pro Forma** | $8,967,621 | $5,005,686 | $13,973,307 | 35.82% |
| | | | | |
| Exhibit 37 G (Base Wages, OT, Alloc to WW) | $8,253,200 | $4,611,909 | $12,865,109 | |
| APP, LTPP & Shift Premiums | 714,421 | 393,777 | 1,108,198 | |
| | $8,967,621 | $5,005,686 | $13,973,307 | |

**Q. What was the capitalization rate that the Company used in its filing?**

A. The Company used a three-year average of the actual capitalization by position for the years 2020-2022.

**Q. Please explain the calculation of capitalization rate used in this case?**

A. The Company pulled the total payroll amount and total capitalized portion of the payroll amount for 2020, 2021 and 2022 on a position by position basis. It then divided the total capitalized payroll amount by the total payroll amount by position to determine the weighted three-year average capitalization percentage on a position by position basis. The Company then applied the three-year average capitalization percentage to each position based on that specific position's average capitalization rate.

**Q. What is the capitalization percentage used in the revenue requirement in this case?**

A. Based on the filing, the overall capitalization percentage is 35.84%.

**Q. What was the capitalization percentage for each year included in the three-year average?**

A. The Company calculated the capitalization percentages as 33.14%, 35.23% and 36.13% for 2020, 2021 and 2022, respectively.

**Q. What is the difference between a weighted average and an average of averages?**

A. A weighted average takes the inputs (capitalized labor and total labor) and totals them for the three years which gives a capital percentage for the entire period and is not impacted by year to year swings in capital percentage. In this case, the Company included this information in the Cap% tab of the workpaper entitled KAWC 2023 Rate Case – Labor and Related Exhibit. The weighted average for the years 2020 through 2022 is 34.89%. Mr. Meyer used the average of averages method which will provide a different result due to year to year swings. If the actual capitalization percentages for each year were used the average would be 34.83% ((33.14%+35.23%+36.13%)/3). In this case the difference between the methods is 0.06%.

**Q. Why is there a difference between the weighted average and the average shown in Table JMW-2?**

A. Table JMW-2 shows a capital percentage of 35.84% because the individual averages by position drives the actual capitalization used to determine the deduction in the Company's labor model which determines the expense level included in the revenue requirement. Therefore, the Company's capitalization percentage was 0.95% (35.84%-34.89%) higher than the weighted average and 1.01% (35.84%-34.83%) higher than the average of averages. The actual positions used will impact the capitalization amount that flows through the labor model.

**Q. How did Mr. Meyer calculate his proposed capitalization percentage?**

A. Mr. Meyer used the data filed in the original Exhibit 37 G which reflected the O&M percentage. Mr. Meyer's Table GRM-4 shows the capitalization percentages which he rounded to 42%, 44% and 45% for 2020, 2021 and 2022, respectively. Mr. Meyer then added these three percentages together and rounded the result to 44%. But the actual average should be 43.67% ((42%+44%+45%)/3) based on the information as filed in Exhibit 37 G. Therefore, Mr. Meyer overstated his percentage in his testimony on page 12, line 4 by 0.33% by rounding.

**Q. Did Mr. Meyer use the 44% capitalization percentage in his proposed deduction?**

A. No. Table GRM-5 reflects 56.31% O&M percentage. Therefore, the capitalization percentage used in his calculation is 43.69%.

**Q. Should Exhibit 37 G be used to calculate the capitalization percentage?**

A. No, I do not believe it should as it only reflects base pay, overtime pay and the allocation of management salaries to wastewater.

**Q. What would be the percentage if the revised Exhibit 37 G were used?**

A. Table JMW-3 shows the data based on the revised Exhibit 37 G.

| Table JMW-3 | | | |
|---|---|---|---|
| | | | |
| | | Percent | Percent |
| Line | Year | Capitaled | Expensed |
| | | | |
| 1 | 2018 | 31.17% | 68.83% |
| 2 | 2019 | 31.79% | 68.21% |
| 3 | 2020 | 33.64% | 66.36% |
| 4 | 2021 | 33.79% | 66.21% |
| 5 | 2022 | 36.89% | 63.11% |
| 6 | Base year | 35.67% | 64.33% |
| 7 | Test Year | 35.85% | 64.15% |
| | | | |

**Q. Using Mr. Meyer's average calculation, what would the capitalization percentage be based on the revised Exhibit 37 G?**

A. The three-year average capitalization percentage would be 34.77% ((33.64%+33.79%+36.89%)/3).

**Q. Is the average based on the revised Exhibit 37 G higher or lower than what the Company proposed in the case?**

A. The capitalization percentage based on the three-year average of the revised Exhibit 37 G is lower by 1.07% (35.84%-34.77%) than the Company's proposed capitalization percentage.

**Q. Based on the revised Exhibit 37 G, does the Company agree with the proposed capitalization adjustment?**

A. No, the Company believes the as filed labor expense is properly reflected in the revenue requirement which used a 35.84% capitalization percentage. The Company's calculation was based on the weighted average by position which provides the actual capitalization percentage by position for the three years 2020, 2021 and 2022. The average of averages calculation is swayed by year to year changes and is not based on a position basis but rather a total Company basis. The Company's proposed methodology more accurately reflects the capitalization percentage and expense amount expected for the rate year.

**Q. Did Mr. Meyer make any other adjustments related to labor?**

A. Yes, Mr. Meyer proposes to remove: (1) $617,983 based on the vacancies identified in response to OAG Set 2, question 10, (2) $373,598 in labor costs related to APP and LTPP, and (3) non-labor employee related costs (e.g., payroll tax, benefits, etc.) associated with reducing the overall labor expense.

**Q. Do you agree with these adjustment?**

A. No, I do not. As Company witness Lewis explains, the vacancy adjustment is inappropriate, particularly without any corresponding upwards adjustment to overtime and/or contract services. For example, the Company is projecting 24,677 overtime hours in this case per the updated Exhibit 37, Schedule G-2, even though there were 33,794 overtime hours during the base period and 26,400 overtime hours in 2022. Accordingly, both his vacancy adjustment and associated non-labor related cost adjustment should not be accepted. Mr. Newcomb further addresses the non-labor related adjustment and Mr. Mustich and Mr. Lewis also explain why Mr. Meyer's proposed adjustment to performance compensation should be denied.

## SERVICE COMPANY

**Q. Does Mr. Meyer address KAWC's business development expense?**

A. Yes. Mr. Meyer's recommends an adjustment to remove Service Company business development costs allocated to the Company in the amount of $106,069.

**Q. Do you agree with Mr. Meyer's recommended adjustment to remove business development costs from the Company's test year?**

A. No, I do not. Mr. Meyer's stated reason for removal of the business development costs is that the Company did not detail how the Service Company's business development costs specifically benefitted Kentucky ratepayers, and that disallowing these costs is consistent with the Commission's action in the Company's 2018 rate case, Case No. 2018-00358. However, as the Company explained in its response to OAG 2-15, the Service Company's business development activities benefit customers of Kentucky-American, directly and indirectly, by mitigating the costs to be recovered per customer, enhancing purchasing power, and spurring activities that contribute to their local economies. Its largely through these business development activities that the Company builds relationships with community leaders and businesses that can lead to better communications in emergencies, share best practices, and provide support for their local community needs.

**Q. Please provide additional detail describing how Service Company business development activities benefit customers and the broader communities that KAWC serve.**

A. Business development activities grow our customer base, which enables the Company to spread system investment costs and operating expenses across a larger customer group, thereby mitigating the costs to be recovered per customer.

As we grow in size in Kentucky and nationwide, we intelligently invest in our operating platforms to serve customers more efficiently. American Water's relatively large scale is a great benefit to KAWC customers who receive operational benefits of being part of the 3.5 million metered customers we serve nationally. During the period 2015 through the end of 2024, American Water has added or will add nearly 420,000 customer equivalent connections to our operating platform, which represents ~12% of our customer total. For example, despite the Company's operating expenses increasing by approximately $4 million from 2012 through 2022, due in part to the customer base expanding by approximately 14,000 customers during that time period, operating expense per customer only increased slightly, from $275 per customer in 2012 to $276 per customer in 2022. New customers added in Kentucky or, in fact, anywhere in American Water's national footprint, will absorb a portion of operating expenses from Service Company that would otherwise be shared with KAWC's customer base.

The growing customer base also enhances American Waters purchasing power capabilities, which allows American Water greater negotiating leverage to purchase goods and services in bulk quantities at competitive prices, for the benefit of all customers including Kentucky-American customers. These investments optimize system service and sustainability while leveraging economies of scale to mitigate rate increases.

In addition, through the improvements in the operations of the wastewater and water utilities that the Company acquires, business development activities achieve public policy objectives of improving the quality of the water consumed by customers and the quality of the public bodies of water into which wastewater effluent is discharged.

For these reasons, I recommended the Company's full business development costs be approved as submitted in our case-in-chief.

## RATE BASE

**Q. Are there any updates to rate base as part of your Rebuttal Testimony?**

A. Yes. As referenced in Company's witness Mr. Newcomb's testimony, the Company is filing an update to the proposed revenue requirement for the following: updated rate of return, reduction of Board of Director Fees, updated utility regulatory assessment fee, reduction of miscellaneous expense and corrected customer accounting expense. As a result, the cash working capital for the forecasted period has changed from $3,141,000 to $3,181,000. This results in an increase of the forecasted 13-month average rate base from $588,397,566 to $588,437,566.

## CONCLUSION

**Q. Does this conclude your rebuttal testimony?**

A. Yes.

**VERIFICATION**

**STATE OF NEW JERSEY** )
) **SS:**
**COUNTY OF CAMDEN** )

The undersigned, John M. Watkins, being duly sworn, deposes and says that he is the Senior Director of Regulatory Services for American Water Works Service Company, Inc., that he has personal knowledge of the matters set forth in the accompanying testimony for which he is identified as the responsible witness, and that the answers contained therein are true and correct to the best of his information, knowledge and belief.

John M. Watkins

**John M. Watkins**

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 24 day of October, 2023.

Ann G. Alfano

Notary Public

My Commission Expires:

4/15/2025

ANN G. ALFANO
NOTARY PUBLIC OF NEW JERSEY
COMMISSION # 50014130
MY COMMISSION EXPIRES 4/15/2025

**Kentucky American Water Company**
**Case No. 2023-00191**
**PAYROLL COSTS (WATER SEGMENT ONLY)**
**FOR THE TWELVE MONTHS ENDED: September 30, 2023 (Base Period)**
**FOR THE TWELVE MONTHS ENDED: January 31, 2025 (Forecast Period)**

Data: X Base Period X Forecast Period
Version: X Original _Updated _Revised

Exhibit 37, Schedule G-1
O&M\[KAWC 2023 Rate Case - Labor and Labor Related Exhibit.xlsx]Exh 37 G_Updated
Witness Responsible: John Watkins

| Line No. | Description | Total Company | Jurisdictional % | Jurisdictional Unadjusted | Adjustments | Jurisdictional Adjusted |
|---|---|---|---|---|---|---|
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | **Base Period Expense:** | | | | | |
| 4 | Total Salary | $7,940,929 | 100.00% | $7,940,929 | $0 | $7,940,929 |
| 5 | Other Allowances and Compensation | 992,427 | | 992,427 | 0 | 992,427 |
| 6 | Sub-total | 8,933,356 | | 8,933,356 | 0 | 8,933,356 |
| 7 | | | | | | |
| 8 | Employee Benefits: | | | | | |
| 9 | Pension | 30,661 | | 30,661 | 0 | 30,661 |
| 10 | Group Insurance | 713,817 | | 713,817 | 0 | 713,817 |
| 11 | Defined Contribution Plan | 311,038 | | 311,038 | 0 | 311,038 |
| 12 | 401-K Plan | 226,746 | | 226,746 | 0 | 226,746 |
| 13 | Sub-total | 1,282,261 | | 1,282,261 | 0 | 1,282,261 |
| 14 | | | | | | |
| 15 | Payroll Taxes: | | | | | |
| 16 | F.I.C.A. | 630,823 | | 630,823 | 0 | 630,823 |
| 17 | Federal Unemployment | 6,358 | | 6,358 | 0 | 6,358 |
| 18 | State Unemployment | 29,858 | | 29,858 | 0 | 29,858 |
| 19 | Sub-total | 667,039 | | 667,039 | 0 | 667,039 |
| 20 | | | | | | |
| 21 | Total Compensation & Taxes | $10,882,655 | | $10,882,655 | $0 | $10,882,655 |
| 22 | | | | | | |
| 23 | | | | | | |
| 24 | | | | | | |
| 25 | **Forecasted Period Expense:** | | | | | |
| 26 | Total Salary | $8,254,660 | 100.00% | $8,254,660 | 0 | $8,254,660 |
| 27 | Other Allowances and Compensation | 712,961 | | 712,961 | 0 | 712,961 |
| 28 | Sub-total | 8,967,621 | | 8,967,621 | 0 | 8,967,621 |
| 29 | | | | | | |
| 30 | Employee Benefits: | | | | | |
| 31 | Pension | 136,903 | | 136,903 | 0 | 136,903 |
| 32 | Group Insurance | 972,359 | | 972,359 | 0 | 972,359 |
| 33 | Defined Contribution Plan | 351,464 | | 351,464 | 0 | 351,464 |
| 34 | 401-K Plan | 253,471 | | 253,471 | 0 | 253,471 |
| 35 | Sub-total | 1,714,197 | | 1,714,197 | 0 | 1,714,197 |
| 36 | | | | | | |
| 37 | Payroll Taxes: | | | | | |
| 38 | F.I.C.A. | 659,573 | | 659,573 | 0 | 659,573 |
| 39 | Federal Unemployment | 4,082 | | 4,082 | 0 | 4,082 |
| 40 | State Unemployment | 3,197 | | 3,197 | 0 | 3,197 |
| 41 | Sub-total | 666,852 | | 666,852 | 0 | 666,852 |
| 42 | | | | | | |
| 43 | Total Compensation & Taxes | $11,348,670 | | $11,348,670 | $0 | $11,348,670 |
| 44 | | | | | | |
| 45 | | | | | | |

**Kentucky American Water Company**
**Case No. 2023-00191**
**PAYROLL ANALYSIS BY EMPLOYEE CLASSIFICATION (WATER SEGMENT ONLY)**
**FOR THE TWELVE MONTHS ENDED: September 30, 2023 (Base Period)**
**FOR THE TWELVE MONTHS ENDED: January 31, 2025 (Forecast Period)**

Data: X Base Period X Forecast Period
Version: X Original _Updated _Revised

Exhibit 37, Schedule G-2
O&M\[KAWC 2023 Rate Case - Labor and Labor Related Exhibit.xlsx]Exh 37 G_Updated
Witness Responsible: John Watkins

| Line No. | Description | 2018 | % Change | 2019 | % Change | 2020 | % Change | 2021 | % Change | 2022 | % Change | Base Period | % Change | Forecasted Period |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | |
| 2 | **Total Company (Water Segment)** | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | |
| 4 | Employee Hours: | | | | | | | | | | | | | |
| 5 | Straight-Time Hours | 274,451 | 5.06% | 288,346 | 7.63% | 310,355 | -11.92% | 273,348 | 14.73% | 313,615 | -3.90% | 301,378 | 5.78% | 318,793 |
| 6 | Overtime Hours | 33,460 | -1.27% | 33,034 | -36.91% | 20,841 | -2.41% | 20,340 | 29.80% | 26,400 | 28.01% | 33,794 | -26.98% | 24,677 |
| 7 | | | | | | | | | | | | | | |
| 8 | Total Employee Hours | 307,910 | | 321,381 | | 331,196 | | 293,688 | | 340,015 | | 335,172 | | 343,470 |
| 9 | | | | | | | | | | | | | | |
| 10 | Ratio of Overtime Hours to | | | | | | | | | | | | | |
| 11 | Straight-Time Hours | 12.19% | | 11.46% | | 6.72% | | 7.44% | | 8.42% | | 11.21% | | 7.74% |
| 12 | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | |
| 14 | Labor Dollars: | | | | | | | | | | | | | |
| 15 | Straight-Time Dollars | $8,219,563 | 5.35% | $8,659,555 | 11.26% | $9,634,810 | -9.95% | $8,676,142 | 19.99% | $10,410,250 | -1.77% | $10,225,568 | 13.32% | $11,587,667 |
| 16 | Overtime Dollars | 1,466,678 | 2.46% | 1,502,735 | -34.13% | 989,829 | 0.23% | 992,076 | 36.83% | 1,357,501 | 32.25% | 1,795,273 | -28.84% | 1,277,442 |
| 17 | | | | | | | | | | | | | | |
| 18 | Total Labor Dollars | $9,686,241 | | $10,162,289 | | $10,624,639 | | $9,668,218 | | $11,767,751 | | $12,020,841 | | $12,865,109 |
| 19 | | | | | | | | | | | | | | |
| 20 | Ratio of Overtime Dollars to | | | | | | | | | | | | | |
| 21 | Straight-Time Dollars | 17.84% | | 17.35% | | 10.27% | | 11.43% | | 13.04% | | 17.56% | | 11.02% |
| 22 | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | |
| 24 | O&M Labor Dollars | 6,666,890 | 3.97% | 6,931,660 | 1.71% | 7,050,124 | -9.21% | 6,401,085 | 16.03% | 7,427,197 | 4.12% | 7,733,304 | 6.72% | 8,253,200 |
| 25 | Ratio of Labor Dollars to | | | | | | | | | | | | | |
| 26 | Total Labor Dollars | 68.83% | | 68.21% | | 66.36% | | 66.21% | | 63.11% | | 64.33% | | 64.15% |
| 27 | | | | | | | | | | | | | | |
| 28 | | | | | | | | | | | | | | |
| 29 | Total Employee Benefits | 2,883,176 | -3.65% | 2,778,059 | -9.54% | 2,512,925 | -17.75% | 2,066,845 | 3.69% | 2,143,066 | 27.93% | 2,741,541 | 21.10% | 3,320,048 |
| 30 | Employee Benefits Expensed | 1,842,709 | -5.89% | 1,734,248 | -27.02% | 1,265,687 | -41.52% | 740,152 | 8.06% | 799,785 | 84.82% | 1,478,131 | 27.54% | 1,885,169 |
| 31 | Ratio of Employee Benefits Expensed | | | | | | | | | | | | | |
| 32 | to Total Employee Benefits | 63.91% | | 62.43% | | 50.37% | | 35.81% | | 37.32% | | 53.92% | | 56.78% |
| 33 | | | | | | | | | | | | | | |
| 34 | | | | | | | | | | | | | | |
| 35 | Total Payroll Taxes | 769,464 | 10.46% | 849,934 | -2.12% | 831,928 | 3.04% | 857,198 | 12.20% | 961,788 | 7.46% | 1,033,564 | 1.43% | 1,048,387 |
| 36 | Payroll Taxes Expensed | 529,257 | 12.27% | 594,201 | -5.25% | 563,026 | -0.17% | 562,066 | 10.85% | 623,038 | 7.06% | 667,039 | -0.03% | 666,852 |
| 37 | Ratio of Payroll Taxes Expensed | | | | | | | | | | | | | |
| 38 | to Total Payroll Taxes | 68.78% | | 69.91% | | 67.68% | | 65.57% | | 64.78% | | 64.54% | | 63.61% |
| 39 | | | | | | | | | | | | | | |
| 40 | | | | | | | | | | | | | | |
| 41 | Average Employee Levels | 136 | 4.41% | 142 | 1.41% | 144 | -0.69% | 143 | 4.90% | 150 | 1.33% | 152 | 2.63% | 156 |
| 42 | | | | | | | | | | | | | | |
| 43 | Year-End Employee Levels | 141 | 0.71% | 142 | 0.70% | 143 | 0.70% | 144 | 4.86% | 151 | 3.31% | 156 | 0.00% | 156 |

**Kentucky American Water Company**
**Case No. 2023-00191**
**PAYROLL ANALYSIS BY EMPLOYEE CLASSIFICATION (WATER SEGMENT ONLY)**
**FOR THE TWELVE MONTHS ENDED: September 30, 2023 (Base Period)**
**FOR THE TWELVE MONTHS ENDED: January 31, 2025 (Forecast Period)**

Data: X Base Period X Forecast Period
Version: X Original _Updated _Revised

Exhibit 37, Schedule G-2
O&M\[KAWC 2023 Rate Case - Labor and Labor Related Exhibit.xlsx]Exh 37 G_Updated
Witness Responsible: John Watkins

| Line No. | Description | 2018 | % Change | 2019 | % Change | 2020 | % Change | 2021 | % Change | 2022 | % Change | Base Period | % Change | Forecasted Period |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | |
| 2 | **Production** | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | |
| 4 | Employee Hours: | | | | | | | | | | | | | |
| 5 | Straight-Time Hours | 76,779 | -2.45% | 74,898 | 12.16% | 84,003 | 2.60% | 86,186 | 4.27% | 89,862 | -1.97% | 88,090 | -3.40% | 85,095 |
| 6 | Overtime Hours | 7,556 | 8.40% | 8,190 | -18.07% | 6,710 | -3.52% | 6,474 | 12.98% | 7,314 | 1.65% | 7,435 | -11.82% | 6,556 |
| 7 | | | | | | | | | | | | | | |
| 8 | Total Employee Hours | 84,334 | | 83,088 | | 90,713 | | 92,660 | | 97,177 | | 95,525 | | 91,651 |
| 9 | | | | | | | | | | | | | | |
| 10 | Ratio of Overtime Hours to | | | | | | | | | | | | | |
| 11 | Straight-Time Hours | 9.84% | | 10.93% | | 7.99% | | 7.51% | | 8.14% | | 8.44% | | 7.70% |
| 12 | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | |
| 14 | Labor Dollars: | | | | | | | | | | | | | |
| 15 | Straight-Time Dollars | $2,314,292 | -2.74% | $2,250,980 | 13.02% | $2,543,956 | 3.04% | $2,621,227 | 5.38% | $2,762,284 | 0.90% | $2,787,183 | 10.60% | $3,082,660 |
| 16 | Overtime Dollars | 366,036 | 16.93% | 428,007 | -17.00% | 355,267 | -2.77% | 345,439 | 17.09% | 404,490 | 8.13% | 437,365 | -17.13% | 362,442 |
| 17 | | | | | | | | | | | | | | |
| 18 | Total Labor Dollars | $2,680,328 | | $2,678,987 | | $2,899,223 | | $2,966,667 | | $3,166,774 | | $3,224,548 | | $3,445,102 |
| 19 | | | | | | | | | | | | | | |
| 20 | Ratio of Overtime Dollars to | | | | | | | | | | | | | |
| 21 | Straight-Time Dollars | 15.82% | | 19.01% | | 13.97% | | 13.18% | | 14.64% | | 15.69% | | 11.76% |
| 22 | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | |
| 24 | O&M Labor Dollars | 2,680,328 | -0.05% | 2,678,987 | 8.22% | 2,899,223 | 2.33% | 2,966,667 | 6.75% | 3,166,774 | 1.82% | 3,224,548 | 6.84% | 3,445,102 |
| 25 | Ratio of Labor Dollars to | | | | | | | | | | | | | |
| 26 | Total Labor Dollars | 100.00% | | 100.00% | | 100.00% | | 100.00% | | 100.00% | | 100.00% | | 100.00% |
| 27 | | | | | | | | | | | | | | |
| 28 | | | | | | | | | | | | | | |
| 29 | Total Employee Benefits | 740,835 | -9.53% | 670,262 | -22.35% | 520,489 | -34.09% | 343,033 | -0.59% | 341,008 | 80.74% | 616,335 | 27.68% | 786,919 |
| 30 | Employee Benefits Expensed | 740,835 | -9.53% | 670,262 | -22.35% | 520,489 | -34.09% | 343,033 | -0.59% | 341,008 | 80.74% | 616,335 | 27.68% | 786,919 |
| 31 | Ratio of Employee Benefits Expensed | | | | | | | | | | | | | |
| 32 | to Total Employee Benefits | 100.00% | | 100.00% | | 100.00% | | 100.00% | | 100.00% | | 100.00% | | 100.00% |
| 33 | | | | | | | | | | | | | | |
| 34 | | | | | | | | | | | | | | |
| 35 | Total Payroll Taxes | 212,780 | 7.93% | 229,650 | 0.82% | 231,533 | 12.51% | 260,497 | 1.98% | 265,648 | 4.70% | 278,134 | 0.08% | 278,362 |
| 36 | Payroll Taxes Expensed | 212,780 | 7.93% | 229,650 | 0.82% | 231,533 | 12.51% | 260,497 | 1.98% | 265,648 | 4.70% | 278,134 | 0.08% | 278,362 |
| 37 | Ratio of Payroll Taxes Expensed | | | | | | | | | | | | | |
| 38 | to Total Payroll Taxes | 100.00% | | 100.00% | | 100.00% | | 100.00% | | 100.00% | | 100.00% | | 100.00% |
| 39 | | | | | | | | | | | | | | |
| 40 | | | | | | | | | | | | | | |
| 41 | Average Employee Levels | 42 | 2.38% | 43 | -2.33% | 42 | 0.00% | 42 | 4.76% | 44 | -4.55% | 42 | 7.14% | 45 |
| 42 | | | | | | | | | | | | | | |
| 43 | Year-End Employee Levels | 42 | 2.38% | 43 | -4.65% | 41 | 7.32% | 44 | -4.55% | 42 | 7.14% | 45 | 0.00% | 45 |
| 44 | | | | | | | | | | | | | | |

**Kentucky American Water Company**
**Case No. 2023-00191**
**PAYROLL ANALYSIS BY EMPLOYEE CLASSIFICATION (WATER SEGMENT ONLY)**
**FOR THE TWELVE MONTHS ENDED: September 30, 2023 (Base Period)**
**FOR THE TWELVE MONTHS ENDED: January 31, 2025 (Forecast Period)**

Data: X Base Period X Forecast Period
Version: X Original _Updated _Revised

Exhibit 37, Schedule G-2
O&M\[KAWC 2023 Rate Case - Labor and Labor Related Exhibit.xlsx]Exh 37 G_Updated
Witness Responsible: John Watkins

| Line No. | Description | 2018 | % Change | 2019 | % Change | 2020 | % Change | 2021 | % Change | 2022 | % Change | Base Period | % Change | Forecasted Period |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | |
| 2 | **Distribution** | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | |
| 4 | Employee Hours: | | | | | | | | | | | | | |
| 5 | Straight-Time Hours | 88,645 | 12.70% | 99,899 | -4.22% | 95,688 | -18.99% | 77,517 | 18.77% | 92,070 | -5.96% | 86,579 | -0.51% | 86,136 |
| 6 | Overtime Hours | 11,958 | 4.72% | 12,523 | -45.28% | 6,853 | -33.50% | 4,557 | 36.44% | 6,218 | 89.23% | 11,765 | -19.81% | 9,434 |
| 7 | | | | | | | | | | | | | | |
| 8 | Total Employee Hours | 100,603 | | 112,422 | | 102,541 | | 82,074 | | 98,288 | | 98,344 | | 95,570 |
| 9 | | | | | | | | | | | | | | |
| 10 | Ratio of Overtime Hours to | | | | | | | | | | | | | |
| 11 | Straight-Time Hours | 13.49% | | 12.54% | | 7.16% | | 5.88% | | 6.75% | | 13.59% | | 10.95% |
| 12 | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | |
| 14 | Labor Dollars: | | | | | | | | | | | | | |
| 15 | Straight-Time Dollars | $2,399,393 | 13.70% | $2,728,091 | 0.28% | $2,735,613 | -18.33% | $2,234,122 | 22.74% | $2,742,064 | -5.66% | $2,586,823 | 6.26% | $2,748,648 |
| 16 | Overtime Dollars | 498,547 | 9.36% | 545,218 | -43.14% | 309,989 | -32.26% | 209,978 | 46.27% | 307,133 | 103.19% | 624,073 | -26.09% | 461,279 |
| 17 | | | | | | | | | | | | | | |
| 18 | Total Labor Dollars | $2,897,939 | | $3,273,309 | | $3,045,602 | | $2,444,100 | | $3,049,198 | | $3,210,896 | | $3,209,927 |
| 19 | | | | | | | | | | | | | | |
| 20 | Ratio of Overtime Dollars to | | | | | | | | | | | | | |
| 21 | Straight-Time Dollars | 20.78% | | 19.99% | | 11.33% | | 9.40% | | 11.20% | | 24.13% | | 16.78% |
| 22 | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | |
| 24 | O&M Labor Dollars | 1,702,413 | 92.27% | 3,273,309 | -6.96% | 3,045,602 | -19.75% | 2,444,100 | 24.76% | 3,049,198 | 5.30% | 3,210,896 | -0.03% | 3,209,927 |
| 25 | Ratio of Labor Dollars to | | | | | | | | | | | | | |
| 26 | Total Labor Dollars | 100.00% | | 100.00% | | 100.00% | | 100.00% | | 100.00% | | 100.00% | | 100.00% |
| 27 | | | | | | | | | | | | | | |
| 28 | | | | | | | | | | | | | | |
| 29 | Total Employee Benefits | 470,542 | 74.05% | 818,957 | -33.24% | 546,768 | -48.31% | 282,609 | 16.18% | 328,347 | 86.91% | 613,725 | 19.47% | 733,201 |
| 30 | Employee Benefits Expensed | 470,542 | 74.05% | 818,957 | -33.24% | 546,768 | -48.31% | 282,609 | 16.18% | 328,347 | 86.91% | 613,725 | 19.47% | 733,201 |
| 31 | Ratio of Employee Benefits Expensed | | | | | | | | | | | | | |
| 32 | to Total Employee Benefits | 100.00% | | 100.00% | | 100.00% | | 100.00% | | 100.00% | | 100.00% | | 100.00% |
| 33 | | | | | | | | | | | | | | |
| 34 | | | | | | | | | | | | | | |
| 35 | Total Payroll Taxes | 135,148 | 107.62% | 280,597 | -13.32% | 243,223 | -11.76% | 214,611 | 19.19% | 255,785 | 8.28% | 276,957 | -6.35% | 259,360 |
| 36 | Payroll Taxes Expensed | 135,148 | 107.62% | 280,597 | -13.32% | 243,223 | -11.76% | 214,611 | 19.19% | 255,785 | 8.28% | 276,957 | -6.35% | 259,360 |
| 37 | Ratio of Payroll Taxes Expensed | | | | | | | | | | | | | |
| 38 | to Total Payroll Taxes | 100.00% | | 100.00% | | 100.00% | | 100.00% | | 100.00% | | 100.00% | | 100.00% |
| 39 | | | | | | | | | | | | | | |
| 40 | | | | | | | | | | | | | | |
| 41 | Average Employee Levels | 63 | 6.35% | 67 | 0.00% | 67 | -2.99% | 65 | 3.08% | 67 | 7.46% | 72 | 1.39% | 73 |
| 42 | | | | | | | | | | | | | | |
| 43 | Year-End Employee Levels | 69 | -4.35% | 66 | 1.52% | 67 | -4.48% | 64 | 10.94% | 71 | 2.82% | 73 | 0.00% | 73 |
| 44 | | | | | | | | | | | | | | |

**Kentucky American Water Company**
**Case No. 2023-00191**
**PAYROLL ANALYSIS BY EMPLOYEE CLASSIFICATION (WATER SEGMENT ONLY)**
**FOR THE TWELVE MONTHS ENDED: September 30, 2023 (Base Period)**
**FOR THE TWELVE MONTHS ENDED: January 31, 2025 (Forecast Period)**

Data: X Base Period X Forecast Period
Version: X Original _Updated _Revised

Exhibit 37, Schedule G-2
O&M\[KAWC 2023 Rate Case - Labor and Labor Related Exhibit.xlsx]Exh 37 G_Updated
Witness Responsible: John Watkins

| Line No. | Description | 2018 | % Change | 2019 | % Change | 2020 | % Change | 2021 | % Change | 2022 | % Change | Base Period | % Change | Forecasted Period |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | |
| 2 | **Commercial** | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | |
| 4 | Employee Hours: | | | | | | | | | | | | | |
| 5 | Straight-Time Hours | 7,461 | -33.17% | 4,986 | 52.42% | 7,600 | -25.64% | 5,651 | -7.88% | 5,206 | 13.26% | 5,896 | 38.39% | 8,160 |
| 6 | Overtime Hours | 46 | -89.07% | 5 | -80.12% | 1 | 0.00% | 1 | 0.00% | 1 | 300.00% | 4 | 3937.21% | 161 |
| 7 | | | | | | | | | | | | | | |
| 8 | Total Employee Hours | 7,507 | | 4,991 | | 7,601 | | 5,652 | | 5,207 | | 5,900 | | 8,322 |
| 9 | | | | | | | | | | | | | | |
| 10 | Ratio of Overtime Hours to | | | | | | | | | | | | | |
| 11 | Straight-Time Hours | 0.00% | | 0.00% | | 0.01% | | 0.00% | | 0.02% | | 0.07% | | 1.98% |
| 12 | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | |
| 14 | Labor Dollars: | | | | | | | | | | | | | |
| 15 | Straight-Time Dollars | $228,962 | -24.29% | $173,344 | 48.98% | $258,243 | -37.76% | $160,734 | 0.14% | $160,952 | 37.72% | $221,670 | 9.30% | 242,287 |
| 16 | Overtime Dollars | 2,129 | -80.94% | 406 | -83.41% | 67 | -1.95% | 66 | -60.12% | 26 | 677.06% | 205 | 747.02% | 1,733 |
| 17 | | | | | | | | | | | | | | |
| 18 | Total Labor Dollars | $231,090 | | $173,750 | | $258,310 | | $160,800 | | $160,978 | | $221,874 | | $244,020 |
| 19 | | | | | | | | | | | | | | |
| 20 | Ratio of Overtime Dollars to | | | | | | | | | | | | | |
| 21 | Straight-Time Dollars | 0.00% | | 0.00% | | 0.03% | | 0.04% | | 0.02% | | 0.09% | | 0.72% |
| 22 | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | |
| 24 | O&M Labor Dollars | 231,090 | -24.81% | 173,750 | 48.67% | 258,310 | -37.75% | 160,800 | 0.11% | 160,978 | 37.83% | 221,874 | 9.98% | 244,020 |
| 25 | Ratio of Labor Dollars to | | | | | | | | | | | | | |
| 26 | Total Labor Dollars | 100.00% | | 100.00% | | 100.00% | | 100.00% | | 100.00% | | 100.00% | | 100.00% |
| 27 | | | | | | | | | | | | | | |
| 28 | | | | | | | | | | | | | | |
| 29 | Total Employee Benefits | 63,873 | -31.94% | 43,471 | 6.68% | 46,374 | -59.91% | 18,593 | -6.77% | 17,335 | 144.65% | 42,409 | 31.43% | 55,738 |
| 30 | Employee Benefits Expensed | 63,873 | -31.94% | 43,471 | 6.68% | 46,374 | -59.91% | 18,593 | -6.77% | 17,335 | 144.65% | 42,409 | 31.43% | 55,738 |
| 31 | Ratio of Employee Benefits Expensed | | | | | | | | | | | | | |
| 32 | to Total Employee Benefits | 100.00% | | 100.00% | | 100.00% | | 100.00% | | 100.00% | | 100.00% | | 100.00% |
| 33 | | | | | | | | | | | | | | |
| 34 | | | | | | | | | | | | | | |
| 35 | Total Payroll Taxes | 18,345 | -18.81% | 14,894 | 38.50% | 20,629 | -31.55% | 14,120 | -4.36% | 13,504 | 41.72% | 19,138 | 3.02% | 19,717 |
| 36 | Payroll Taxes Expensed | 18,345 | -18.81% | 14,894 | 38.50% | 20,629 | -31.55% | 14,120 | -4.36% | 13,504 | 41.72% | 19,138 | 3.02% | 19,717 |
| 37 | Ratio of Payroll Taxes Expensed | | | | | | | | | | | | | |
| 38 | to Total Payroll Taxes | 100.00% | | 100.00% | | 100.00% | | 100.00% | | 100.00% | | 100.00% | | 100.00% |
| 39 | | | | | | | | | | | | | | |
| 40 | | | | | | | | | | | | | | |
| 41 | Average Employee Levels | 7 | 0.00% | 7 | 14.29% | 8 | 0.00% | 8 | -12.50% | 7 | -14.29% | 6 | 0.00% | 6 |
| 42 | | | | | | | | | | | | | | |
| 43 | Year-End Employee Levels | 6 | 33.33% | 8 | 0.00% | 8 | 0.00% | 8 | -37.50% | 5 | 20.00% | 6 | 0.00% | 6 |
| 44 | | | | | | | | | | | | | | |

**Kentucky American Water Company**
**Case No. 2023-00191**
**PAYROLL ANALYSIS BY EMPLOYEE CLASSIFICATION (WATER SEGMENT ONLY)**
**FOR THE TWELVE MONTHS ENDED: September 30, 2023 (Base Period)**
**FOR THE TWELVE MONTHS ENDED: January 31, 2025 (Forecast Period)**

Data: X Base Period X Forecast Period
Version: X Original _Updated _Revised

Exhibit 37, Schedule G-2
O&M\[KAWC 2023 Rate Case - Labor and Labor Related Exhibit.xlsx]Exh 37 G_Updated
Witness Responsible: John Watkins

| Line No. | Description | 2018 | % Change | 2019 | % Change | 2020 | % Change | 2021 | % Change | 2022 | % Change | Base Period | % Change | Forecasted Period |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | |
| 2 | **Administrative & General** | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | |
| 4 | Employee Hours: | | | | | | | | | | | | | |
| 5 | Straight-Time Hours | 21,589 | -10.19% | 19,389 | 0.20% | 19,429 | -6.66% | 18,135 | 1.49% | 18,405 | -2.09% | 18,022 | 27.01% | 22,889 |
| 6 | Overtime Hours | 51 | -75.69% | 13 | 66.40% | 21 | -75.63% | 5 | -29.39% | 4 | -72.07% | 1 | 47482.29% | 476 |
| 7 | | | | | | | | | | | | | | |
| 8 | Total Employee Hours | 21,640 | | 19,402 | | 19,450 | | 18,140 | | 18,409 | | 18,023 | | 23,365 |
| 9 | | | | | | | | | | | | | | |
| 10 | Ratio of Overtime Hours to | | | | | | | | | | | | | |
| 11 | Straight-Time Hours | 0.24% | | 0.06% | | 0.11% | | 0.03% | | 0.02% | | 0.01% | | 2.08% |
| 12 | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | |
| 14 | Labor Dollars: | | | | | | | | | | | | | |
| 15 | Straight-Time Dollars | $855,300 | -5.88% | $804,972 | 5.12% | $846,180 | -2.01% | $829,171 | 26.64% | $1,050,102 | 2.46% | $1,075,909 | 23.39% | $1,327,614 |
| 16 | Overtime Dollars | 2,232 | -71.25% | 642 | 26.00% | 809 | -57.18% | 346 | -58.07% | 145 | -46.97% | 77 | 34363.64% | 26,537 |
| 17 | | | | | | | | | | | | | | |
| 18 | Total Labor Dollars | $857,533 | | $805,614 | | $846,989 | | $829,517 | | $1,050,247 | | $1,075,986 | | $1,354,151 |
| 19 | | | | | | | | | | | | | | |
| 20 | Ratio of Overtime Dollars to | | | | | | | | | | | | | |
| 21 | Straight-Time Dollars | 0.26% | | 0.08% | | 0.10% | | 0.04% | | 0.01% | | 0.01% | | 2.00% |
| 22 | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | |
| 24 | O&M Labor Dollars | 857,533 | -6.05% | 805,614 | 5.14% | 846,989 | -2.06% | 829,517 | 26.61% | 1,050,247 | 2.45% | 1,075,986 | 25.85% | 1,354,151 |
| 25 | Ratio of Labor Dollars to | | | | | | | | | | | | | |
| 26 | Total Labor Dollars | 100.00% | | 100.00% | | 100.00% | | 100.00% | | 100.00% | | 100.00% | | 100.00% |
| 27 | | | | | | | | | | | | | | |
| 28 | | | | | | | | | | | | | | |
| 29 | Total Employee Benefits | 237,020 | -14.96% | 201,558 | -24.56% | 152,057 | -36.92% | 95,916 | 17.91% | 113,094 | 81.85% | 205,662 | 50.40% | 309,311 |
| 30 | Employee Benefits Expensed | 237,020 | -14.96% | 201,558 | -24.56% | 152,057 | -36.92% | 95,916 | 17.91% | 113,094 | 81.85% | 205,662 | 50.40% | 309,311 |
| 31 | Ratio of Employee Benefits Expensed | | | | | | | | | | | | | |
| 32 | to Total Employee Benefits | 100.00% | | 100.00% | | 100.00% | | 100.00% | | 100.00% | | 100.00% | | 100.00% |
| 33 | | | | | | | | | | | | | | |
| 34 | | | | | | | | | | | | | | |
| 35 | Total Payroll Taxes | 68,076 | 1.44% | 69,059 | -2.05% | 67,641 | 7.68% | 72,838 | 20.95% | 88,101 | 5.34% | 92,810 | 17.89% | 109,414 |
| 36 | Payroll Taxes Expensed | 68,076 | 1.44% | 69,059 | -2.05% | 67,641 | 7.68% | 72,838 | 20.95% | 88,101 | 5.34% | 92,810 | 17.89% | 109,414 |
| 37 | Ratio of Payroll Taxes Expensed | | | | | | | | | | | | | |
| 38 | to Total Payroll Taxes | 100.00% | | 100.00% | | 100.00% | | 100.00% | | 100.00% | | 100.00% | | 100.00% |
| 39 | | | | | | | | | | | | | | |
| 40 | | | | | | | | | | | | | | |
| 41 | Average Employee Levels | 24 | 4.17% | 25 | 8.00% | 27 | 3.70% | 28 | 14.29% | 32 | 0.00% | 32 | 0.00% | 32 |
| 42 | | | | | | | | | | | | | | |
| 43 | Year-End Employee Levels | 24 | 4.17% | 25 | 8.00% | 27 | 3.70% | 28 | 17.86% | 33 | -3.03% | 32 | 0.00% | 32 |
| 44 | | | | | | | | | | | | | | |

**Kentucky American Water Company**
**Case No. 2023-00191**
**PAYROLL ANALYSIS BY EMPLOYEE CLASSIFICATION (WATER SEGMENT ONLY)**
**FOR THE TWELVE MONTHS ENDED: September 30, 2023 (Base Period)**
**FOR THE TWELVE MONTHS ENDED: January 31, 2025 (Forecast Period)**

Data: X Base Period X Forecast Period
Version: X Original _Updated _Revised

Exhibit 37, Schedule G-2
O&M\[KAWC 2023 Rate Case - Labor and Labor Related Exhibit.xlsx]Exh 37 G_Updated
Witness Responsible: John Watkins

| Line No. | Description | 2018 | % Change | 2019 | % Change | 2020 | % Change | 2021 | % Change | 2022 | % Change | Base Period | % Change | Forecasted Period |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | | | | | |
| 2 | **Construction & Other** | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | |
| 4 | Employee Hours: | | | | | | | | | | | | | |
| 5 | Straight-Time Hours | 79,977 | 11.50% | 89,173 | 16.22% | 103,635 | -17.15% | 85,859 | 25.87% | 108,071 | -4.89% | 102,791 | 13.35% | 116,513 |
| 6 | Overtime Hours | 13,849 | -11.15% | 12,304 | -41.03% | 7,256 | 28.20% | 9,303 | 38.28% | 12,864 | 13.41% | 14,589 | -44.83% | 8,049 |
| 7 | | | | | | | | | | | | | | |
| 8 | Total Employee Hours | 93,826 | | 101,477 | | 110,892 | | 95,162 | | 120,935 | | 117,380 | | 124,563 |
| 9 | | | | | | | | | | | | | | |
| 10 | Ratio of Overtime Hours to | | | | | | | | | | | | | |
| 11 | Straight-Time Hours | 17.32% | | 13.80% | | 7.00% | | 10.83% | | 11.90% | | 14.19% | | 6.91% |
| 12 | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | |
| 14 | Labor Dollars: | | | | | | | | | | | | | |
| 15 | Straight-Time Dollars | $2,421,617 | 11.59% | $2,702,168 | 20.30% | $3,250,819 | -12.92% | $2,830,887 | 30.52% | $3,694,849 | -3.81% | $3,553,983 | 17.80% | $4,186,458 |
| 16 | Overtime Dollars | 597,734 | -11.59% | 528,462 | -38.75% | 323,697 | 34.77% | 436,246 | 48.01% | 645,706 | 13.60% | 733,554 | -42.00% | 425,451 |
| 17 | | | | | | | | | | | | | | |
| 18 | Total Labor Dollars | $3,019,351 | | $3,230,630 | | $3,574,516 | | $3,267,133 | | $4,340,554 | | $4,287,537 | | $4,611,909 |
| 19 | | | | | | | | | | | | | | |
| 20 | Ratio of Overtime Dollars to | | | | | | | | | | | | | |
| 21 | Straight-Time Dollars | 24.68% | | 19.56% | | 9.96% | | 15.41% | | 17.48% | | 20.64% | | 10.16% |
| 22 | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | |
| 24 | O&M Labor Dollars | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 |
| 25 | Ratio of Labor Dollars to | | | | | | | | | | | | | |
| 26 | Total Labor Dollars | 0.00% | | 0.00% | | 0.00% | | 0.00% | | 0.00% | | 0.00% | | 0.00% |
| 27 | | | | | | | | | | | | | | |
| 28 | | | | | | | | | | | | | | |
| 29 | Total Employee Benefits | 1,040,467 | 0.32% | 1,043,811 | -33.99% | 689,046 | -11.06% | 612,810 | 6.09% | 650,160 | 94.32% | 1,263,410 | 10.16% | 1,391,775 |
| 30 | Employee Benefits Expensed | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 |
| 31 | Ratio of Employee Benefits Expensed | | | | | | | | | | | | | |
| 32 | to Total Employee Benefits | 0.00% | | 0.00% | | 0.00% | | 0.00% | | 0.00% | | 0.00% | | 0.00% |
| 33 | | | | | | | | | | | | | | |
| 34 | | | | | | | | | | | | | | |
| 35 | Total Payroll Taxes | 240,207 | 6.46% | 255,733 | -57.72% | 108,111 | 26.78% | 137,064 | -6.44% | 128,240 | 185.81% | 366,526 | 4.10% | 381,535 |
| 36 | Payroll Taxes Expensed | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 |
| 37 | Ratio of Payroll Taxes Expensed | | | | | | | | | | | | | |
| 38 | to Total Payroll Taxes | 0.00% | | 0.00% | | 0.00% | | 0.00% | | 0.00% | | 0.00% | | 0.00% |
| 39 | | | | | | | | | | | | | | |
| 40 | | | | | | | | | | | | | | |
| 41 | Average Employee Levels | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 |
| 42 | | | | | | | | | | | | | | |
| 43 | Year-End Employee Levels | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | | 0 |
| 44 | | | | | | | | | | | | | | |

**Kentucky American Water Company**
**Case No. 2023-00191**
**EXECUTIVE COMPENSATION**
**FOR THE TWELVE MONTHS ENDED: September 30, 2023 (Base Period)**
**FOR THE TWELVE MONTHS ENDED: January 31, 2025 (Forecast Period)**

Data: X Base Period X Forecast Period
Version: X Original _Updated _Revised

Exhibit 37, Schedule G-3
O&M\[KAWC 2023 Rate Case - Labor and Labor Related Exhibit.xlsx]Exh 37 G_Updated
Witness Responsible: John Watkins

| Line No. | Description | Total Company | Jurisdictional % | Jurisdictional Unadjusted | Adjustments | Jurisdictional Adjusted |
|---|---|---|---|---|---|---|
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | Title of Executive: President | | | | | |
| 4 | | | | | | |
| 5 | **Base Period:** | | | | | |
| 6 | Total Salary | $274,362 | 100.00% | $274,362 | $0 | $274,362 |
| 7 | Other Allowances and Compensation | 233,207 | | 233,207 | 0 | 233,207 |
| 8 | Sub-total | 507,569 | | 507,569 | 0 | 507,569 |
| 9 | | | | | | |
| 10 | Employee Benefits: | | | | | |
| 11 | Pension | 0 | | 0 | 0 | 0 |
| 12 | Group Insurance | 1,233 | | 1,233 | 0 | 1,233 |
| 13 | Defined Contribution Plan | 14,404 | | 14,404 | 0 | 14,404 |
| 14 | 401-K Plan | 10,144 | | 10,144 | 0 | 10,144 |
| 15 | Sub-total | 25,781 | | 25,781 | 0 | 25,781 |
| 16 | | | | | | |
| 17 | Payroll Taxes | 16,492 | | 16,492 | 0 | 16,492 |
| 18 | | | | | | |
| 19 | Total Compensation and Taxes | $549,842 | | $549,842 | $0 | $549,842 |
| 20 | | | | | | |
| 21 | | | | | | |
| 22 | **Forecasted Period:** | | | | | |
| 23 | Total Salary | $228,594 | 100.00% | $228,594 | $0 | $228,594 |
| 24 | Other Allowances and Compensation | 200,575 | | 200,575 | 0 | 200,575 |
| 25 | Sub-total | 429,169 | | 429,169 | 0 | 429,169 |
| 26 | | | | | | |
| 27 | Employee Benefits: | | | | | |
| 28 | Pension | 0 | | 0 | 0 | 0 |
| 29 | Group Insurance | 956 | | 956 | 0 | 956 |
| 30 | Defined Contribution Plan | 15,043 | | 15,043 | 0 | 15,043 |
| 31 | 401-K Plan | 14,900 | | 14,900 | 0 | 14,900 |
| 32 | Sub-total | 30,899 | | 30,899 | 0 | 30,899 |
| 33 | | | | | | |
| 34 | Payroll Taxes: | | | | | |
| 35 | F.I.C.A. | 16,995 | | 16,995 | 0 | 16,995 |
| 36 | Federal Unemployment | 42 | | 42 | 0 | 42 |
| 37 | State Unemployment | 33 | | 33 | 0 | 33 |
| 38 | Sub-total | 17,070 | | 17,070 | 0 | 17,070 |
| 39 | | | | | | |
| 40 | Total Compensation and Taxes | $477,138 | | $477,138 | $0 | $477,138 |
| 41 | | | | | | |
| 42 | | | | | | |
| 43 | | | | | | |
| 44 | | | | | | |
| 45 | | | | | | |

**Kentucky American Water Company**
**Case No. 2023-00191**
**EXECUTIVE COMPENSATION**
**FOR THE TWELVE MONTHS ENDED: September 30, 2023 (Base Period)**
**FOR THE TWELVE MONTHS ENDED: January 31, 2025 (Forecast Period)**

Data: X Base Period X Forecast Period
Version: X Original _Updated _Revised

Exhibit 37, Schedule G-3
O&M\[KAWC 2023 Rate Case - Labor and Labor Related Exhibit.xlsx]Exh 37 G_Updated
Witness Responsible: John Watkins

| Line No. | Description | Total Company | Jurisdictional % | Jurisdictional Unadjusted | Adjustments | Jurisdictional Adjusted |
|---|---|---|---|---|---|---|
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | Title of Executive: Vice President Operations | | | | | |
| 4 | | | | | | |
| 5 | **Base Period:** | | | | | |
| 6 | Total Salary | $186,058 | 100.00% | $186,058 | $0 | $186,058 |
| 7 | Other Allowances and Compensation | 55,817 | | 55,817 | 0 | 55,817 |
| 8 | Sub-total | 241,875 | | 241,875 | 0 | 241,875 |
| 9 | | | | | | |
| 10 | Employee Benefits: | | | | | |
| 11 | Pension | 0 | | 0 | 0 | 0 |
| 12 | Group Insurance | 21,467 | | 21,467 | 0 | 21,467 |
| 13 | Defined Contribution Plan | 9,768 | | 9,768 | 0 | 9,768 |
| 14 | 401-K Plan | 7,442 | | 7,442 | 0 | 7,442 |
| 15 | Sub-total | 38,677 | | 38,677 | 0 | 38,677 |
| 16 | | | | | | |
| 17 | Payroll Taxes | 18,958 | | 18,958 | 0 | 18,958 |
| 18 | | | | | | |
| 19 | Total Compensation | $299,510 | | $299,510 | $0 | $299,510 |
| 20 | | | | | | |
| 21 | | | | | | |
| 22 | **Forecasted Period:** | | | | | |
| 23 | Total Salary | $228,594 | 100.00% | $228,594 | $0 | $228,594 |
| 24 | Other Allowances and Compensation | 80,008 | | 80,008 | 0 | 80,008 |
| 25 | Sub-total | 308,602 | | 308,602 | 0 | 308,602 |
| 26 | | | | | | |
| 27 | Employee Benefits: | | | | | |
| 28 | Pension | 0 | | $0 | 0 | 0 |
| 29 | Group Insurance | 25,263 | | 25,263 | 0 | 25,263 |
| 30 | Defined Contribution Plan | 12,001 | | 12,001 | 0 | 12,001 |
| 31 | 401-K Plan | 10,973 | | 10,973 | 0 | 10,973 |
| 32 | Sub-total | 48,237 | | 48,237 | 0 | 48,237 |
| 33 | | | | | | |
| 34 | Payroll Taxes: | | | | | |
| 35 | F.I.C.A. | 14,407 | | 14,407 | 0 | 14,407 |
| 36 | Federal Unemployment | 42 | | 42 | 0 | 42 |
| 37 | State Unemployment | 33 | | 33 | 0 | 33 |
| 38 | Sub-total | 14,482 | | 14,482 | 0 | 14,482 |
| 39 | | | | | | |
| 40 | Total Compensation | $371,321 | | $371,321 | $0 | $371,321 |
| 41 | | | | | | |
| 42 | | | | | | |
| 43 | | | | | | |
| 44 | | | | | | |
| 45 | | | | | | |