KENTUCKY AMERICAN WATER COMPANY, INC.

DOCKET NO. 2018-00358

REBUTTAL TESTIMONY

OF

ANN E. BULKLEY

ON

(Authorized Return on Equity and Capital Structure)

SPONSORING ATTACHMENTS AEB-1-R THROUGH AEB-7-R

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1 ## I. INTRODUCTION

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

3 A. My name is Ann E. Bulkley. I am a Senior Vice President of Concentric Energy
4 Advisors, Inc. ("Concentric"). My business address is 293 Boston Post Road West,
5 Suite 500, Marlborough, Massachusetts 01752.

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

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

9 **Q. Did you previously provide Direct Testimony in this proceeding?**

10 A. Yes, I did.

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

12 A. The purpose of my Rebuttal Testimony is to respond to the Direct Testimony of
13 Richard A. Baudino and the Direct Testimony of Lane Kollen on behalf of the Office
14 of Attorney General ("AG") and the Lexington-Fayette Urban County Government
15 ("LFUCG") as it relates to the appropriate return on common equity in the
16 Company's base rate proceeding.

Q. Are you sponsoring any Attachments in support of your Rebuttal Testimony?

A. Yes. I am sponsoring Attachments AEB-1-R through AEB-7-R. These attachments were prepared by me or under my direction and supervision.

II. EXECUTIVE SUMMARY

Q. Please summarize your key conclusions regarding the Direct Testimony of Mr. Baudino.

A. My key conclusions are as follows:

1) Although Mr. Baudino claims to recognize the comparable return and capital attraction standards that are established by the United States Supreme Court in the *Hope* and *Bluefield* cases, he abandons these standards when establishing his range and Rate of Return on Equity ("ROE") recommendation. These decisions determined that the authorized ROE must meet all three standards: financial integrity, capital attraction, and comparable returns. Mr. Baudino's ROE recommendation of 9.15 percent does not provide a return on equity that is comparable to those available to investors in companies with commensurate risk and is not sufficient to allow KAWC to compete for capital with other similar risk firms.

2) This apparent disconnect arises because, while Mr. Baudino investigated many ROE methodologies, he disregards most of those estimates without cause and set his ROE range and recommendation at

1 the low end of his analytical results based entirely on the mean and
2 median result of his Constant Growth DCF analysis using the
3 Combined Utility Proxy Group ("CUPG"). Although Mr. Baudino's
4 Discounted Cash Flow ("DCF") ROE analyses establish an ROE that
5 is within a range from 8.38 percent to 11.49 percent using the CUPG,
6 Mr. Baudino, arrived at an ROE recommendation of only 9.15%. As
7 discussed in my Direct Testimony, recent market conditions have
8 affected the results of the ROE estimation models. As such, it is
9 important to consider the results of multiple ROE estimation models in
10 determining the appropriate ROE.
11 3) Mr. Baudino's simple reliance on the mean and median Constant
12 Growth DCF results is inconsistent with recent determinations of
13 many regulatory agencies that have been working to develop
14 reasonable estimates of the investor expected return on equity. Utility
15 commissions across the nation are struggling with this issue. Even
16 though the DCF model is currently producing return estimates that are
17 below 8.5 percent, utility regulators recognize that such low returns are
18 not compensatory for investors. As discussed in my Direct Testimony,
19 many regulatory commissions have considered the results of other
20 ROE estimation models in addition to the DCF model to establish
21 equity returns that more likely reflect investor expectations.

1 For example, the FERC has recently begun applying equal weight to
2 four ROE estimation methodologies; the DCF, CAPM, Risk Premium
3 and Expected Earnings methodology. Simply applying the FERC
4 methodology to the proxy groups that have been considered in this
5 case results in a mean return of 10.72 percent which is within the range
6 established in my Direct Testimony.[1] In addition, the result from the
7 FERC methodology is consistent with the range of authorized ROEs
8 for water distribution companies for the period from 2016-2018,
9 suggesting that regulators recognize that the DCF model may not
10 produce reliable results in the current capital market environment and
11 are relying on multiple ROE estimation methodologies.
12 4) Mr. Baudino's recommendation is below most of the authorized ROEs
13 for water utilities from 2012 to the end of 2018 and Mr. Baudino has
14 presented no evidence in this case to demonstrate that the risk profile
15 of KAWC is lower than the vast majority of water utilities that have
16 been authorized ROEs from 2012-2018.
17 5) When other methodologies are considered the fact that Mr. Baudino's
18 recommended ROE is unreasonably low becomes readily apparent.
19 For example, even reasonable modifications to Mr. Baudino's own

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[1] Range is developed by relying on the mean results for the DCF, CAPM and Expected Earnings analyses for the WPG and CUPG excluding AWK as developed in my Direct Testimony.

1 Capital Asset Pricing Model ("CAPM") analysis demonstrate that the
2 investor required return is substantially higher than the mean Constant
3 Growth DCF analysis, suggesting that the appropriate range for the
4 ROE is between the mean and mean high results of Mr. Baudino's
5 Constant Growth DCF analysis. As I will show, using investor
6 expectations for the market return to estimate the Market Risk
7 Premium, the range of results of the CAPM for the CUPG is between
8 9.67 percent and 11.13 percent with median results between 9.98
9 percent and 10.21 percent. Moreover, using the average of the
10 modified versions of Mr. Baudino's DCF and CAPM analyses as well
11 as the expected earnings and risk premium approaches, as has been
12 recommended by the FERC, results in a range of 9.96 percent to 10.29
13 percent. These results are all well above the range of DCF results
14 established by Mr. Baudino.

15 6) The recommendations of Messrs. Baudino and Kollen, taken together,
16 also fail to consider the overall risk related to the Tax Cuts and Jobs
17 Act ("TCJA") for utilities in general and KAWC, in particular, and
18 demonstrate that Mr. Baudino's recommended ROE will adversely
19 affect the financial risk of KAWC. Throughout 2018, the rating
20 agencies identified the risks of tax reform on the cash flow metrics of
21 specific utilities and the industry overall and downgraded the credit
22 ratings of several companies based on the financial risk created by the

TCJA. In January 2019, Moody's noted credit challenges for AWK based on increased leverage and cash flow leakage resulting from tax reform. In April, Moody's downgraded AWK from A3 to Baa1 citing to concerns about increased leverage and cash flow leakage resulting from tax reform. Mr. Baudino's overall recommendation ignores this risk. At a time when the rating agencies have identified the need for constructive regulation that helps to stabilize cash flow for the utilities, including higher equity ratios and rates of return on equity, following the effects of the TCJA, Mr. Baudino is, inconsistently, recommending a reduction in the ROE. Mr. Kollen's recommendation to amortize the unprotected Excess Accumulated Deferred Income Tax (EADIT) over a three-year period would further exacerbate the cash flow concerns identified by rating agencies.

7) Furthermore, the recommendations of Messrs. Baudino and Kollen undermine two important strengths that were identified for AWK in the Moody's downgrade. Moody's indicated that one credit strength for AWK was the supportive regulatory environments that provide timely cost recovery mechanisms. In addition, Moody's projected that AWK would be able to maintain cash flow coverage ratios in excess of 15 percent. The proposals offered by Messrs. Baudino and Kollen cannot be viewed as constructive regulation at a time when the AWK cash flow metrics are projected to be the weakest. Acceptance of Mr.

1 Baudino's low recommended ROE, rejecting the proposed QIP and
2 accelerating the amortization of EADIT would further weaken the
3 KAWC cash flow metrics, would be viewed as credit negative, and
4 would likely limit the discretionary capital that is allocated to KAWC.

5 8) Taking into consideration the results of all of the ROE estimation
6 methodologies that have been presented by Mr. Baudino in his Direct
7 Testimony, the results presented in my Rebuttal Testimony and
8 recently authorized ROEs for water utilities, and the significant risk
9 factors that have been identified for KAWC, in particular related to
10 cash flow stability, I conclude that Mr. Baudino's overall
11 recommended ROE of 9.15 percent is inconsistent with the
12 fundamental principles of capital attraction and comparability on
13 which he claims to base his testimony.

14 9) I continue to support the analyses and recommendations contained in
15 my Direct Testimony. Specifically, I conclude that the range of
16 reasonable ROE results for KAWC is between 10.00 percent and 10.80
17 percent. While the analytical results of ROE estimation models
18 provide a starting point, my recommendation also considers other
19 factors, including company-specific risk factors, capital market
20 conditions and the capital attraction standard. As discussed in more
21 detail in my response to Mr. Baudino, applying equal weight to each of
22 the ROE estimation models results in a range of returns that is within

1 this range and represents a reasonable return for KAWC. Further, the
2 Company's proposed common equity ratio of approximately 48.654
3 percent common equity is reasonable if not conservative given that it
4 is at the low end of equity ratios of the operating utility companies
5 held by my proxy groups and the views of the credit rating agencies
6 regarding the effect of the TCJA on cash flow metrics.

7 Mr. Baudino's proposed ROE of 9.15 percent, when combined with the Company's
8 equity ratio of 48.654 percent, results in an equity rate of 4.45% which is well below
9 the average equity rate established for the operating subsidiaries of the parent
10 company. As shown in Attachment AEB-7-R, it would certainly be reasonable for
11 the parent company to consider this low equity rate when allocating discretionary
12 capital among its operating subsidiaries especially considering two-thirds of the
13 operating subsidiaries would have a higher authorized equity rate.

14 **III. FAIR RETURN STANDARD**

15 **Q. In your opinion, is Mr. Baudino's recommended ROE consistent with the fair**
16 **return standard?**

17 A. No, it is not. As discussed in my Direct Testimony, the Hope and Bluefield decisions
18 form the legal basis for determining whether a return is just and reasonable.[2] These

[2] *Bluefield Water Works Co.* v. Publ. Serv. Comm'n., 262 U.S. 679 (1923); Federal Power Comm'n. v. *Hope Natural Gas Co*., 320 U.S. 591 (1944).

1 decisions set forth three standards,[3] each of which must be met in order for the return
2 to be considered just and reasonable:

3 1) Comparable return standard

4 2) Financial integrity standard

5 3) Capital attraction standard

6 Mr. Baudino fails to demonstrate that his ROE recommendation of 9.15 percent offers
7 equity investors a return that is comparable to those returns available to investors in
8 alternative investments with commensurate risk. Furthermore, Mr. Baudino fails to
9 demonstrate that his ROE recommendation would allow KAWC to raise equity
10 capital on reasonable terms. It is important to recognize that equity investors face
11 different risks associated with ownership of common equity including: 1) the risk that
12 dividends on the common stock are not guaranteed, and 2) that they are the residual
13 claimants on the Company's net income in the event of bankruptcy. Furthermore, it
14 is important to recognize that investors make rational decisions regarding investments
15 of comparable risk and therefore if an investment does not receive a comparable
16 return to other investments of similar risk, it will be difficult to attract capital. While
17 KAWC is an operating subsidiary of AWK, this principle is still upheld in that
18 operating companies compete for discretionary capital from the parent company. A

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[3] *Bluefield*, 262 U.S. at 692-93; *Hope*, 320 U.S., at 603.

1 return for KAWC that is substantially below the returns of other operating companies
2 could disadvantage KAWC in the allocation of that discretionary capital.

3 **Q. Does Mr. Baudino's ROE recommendation meet the comparable return**
4 **standard?**

5 A. No, it does not. Mr. Baudino's recommended ROE range and final ROE
6 recommendation are below recently authorized ROEs and therefore do not meet the
7 comparable return standard. Figure 1, shows the range of authorized ROEs in the
8 period 2012-2018 as well as Mr. Baudino's recommended ROE. As shown in this
9 figure, Mr. Baudino's final recommended range of between 9.02 percent to 9.27
10 percent, and his ultimate recommended ROE of 9.15 percent are at the low end of the
11 range of authorized ROEs and does not meet the comparable return standard.

12 It is also important to note that the authorized returns in California and New York
13 represent all but one of the returns that are equal to or below Mr. Baudino's
14 recommendation of 9.15 percent.[4] The authorized returns in California are
15 established based on a formulaic approach that is directly linked to interest rates and
16 therefore is affected by market conditions and monetary policy. Moreover, the
17 utilities in California have a number of automatic recovery mechanisms and are
18 permitted to use forecasted rate years. The returns that are set in New York were

[4] The only other return equal to or below Mr. Baudino's recommended ROE was an authorized ROE of 9.00 percent for Washington Water which was approved by the Washington Utilities and Transportation Commission in December 2018.

1 historically lower than the average authorized ROE because New York also
2 implemented many of the cost recovery mechanisms prior to the rest of the regulatory
3 jurisdictions. However, while it is no longer the case that New York has more
4 recovery mechanisms than other jurisdictions, the regulatory commission has
5 consistently authorized the lowest ROEs based on a methodology that gives primary
6 weight to the DCF. As I demonstrate later in my testimony, there are important
7 reasons why the results of the DCF model should be viewed with caution and weight
8 placed on other ROE estimation methodologies as well given current market
9 conditions. It is also important to note that New York has not differentiated the risk
10 profiles of the utilities that it regulates, applying the same authorized ROE and equity
11 ratio across the state without regard for the risk differences between the utilities that
12 operate in the state. Therefore, the authorized returns from these jurisdictions should
13 not be considered as reasonable benchmarks of investors' expected return on equity in
14 this proceeding.

1 **Figure 1: Authorized ROEs from 2012-2018[5]**

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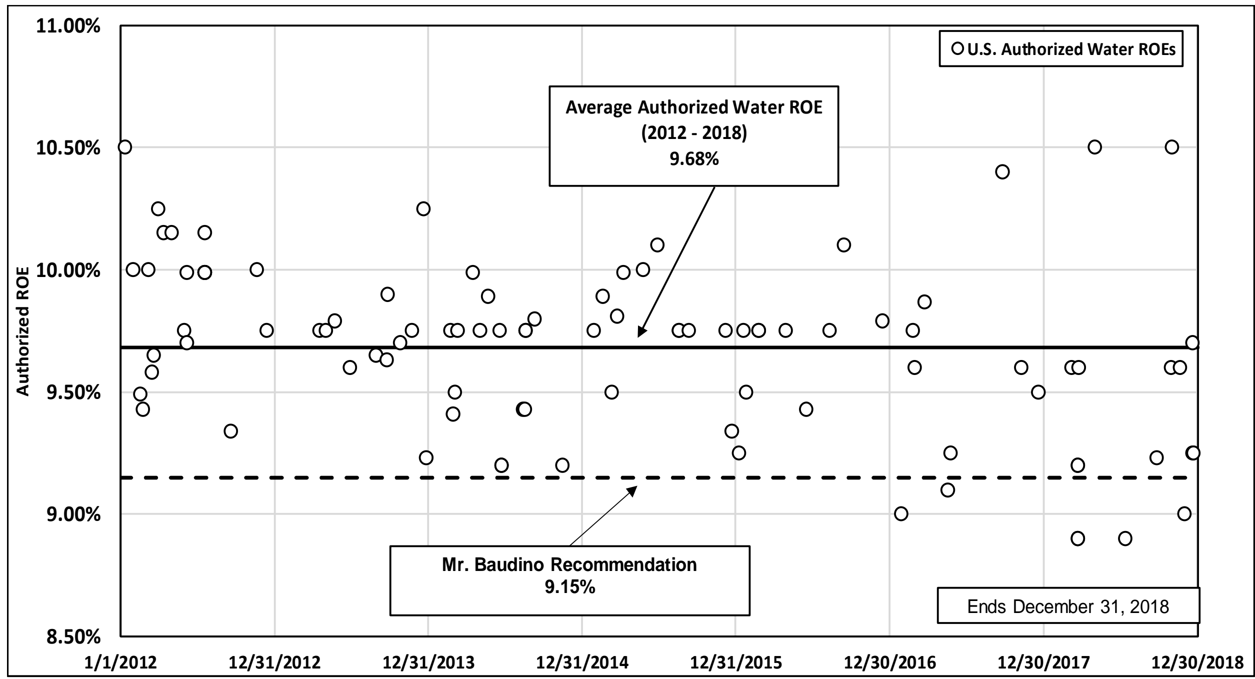


3

4 **Q. Is it also important to consider Mr. Baudino's recommended ROE in**
5 **conjunction with KAWC's equity ratio to determine if he has met the**
6 **comparable return standard?**

7 A. Yes. As discussed above, a fundamental aspect of the financial regulation of utilities
8 is assuring that the subject utility has a reasonable opportunity to earn a return on
9 capital consistent with the return available on investments of similar risk. While this
10 principle is most often discussed in terms of the allowed ROE, it is equally applicable
11 to all aspects of overall Rate of Return ("ROR"). The equity return, the product of
12 the ROE and the equity ratio, (i.e., the Weighted Return on Equity ("WROE")),

[5] Source: SNL Financial.

1 ultimately defines the return to shareholders and the product of the cost of debt and
2 the debt ratio ensures that a company's debt obligations are met. Therefore, it is
3 necessary to consider both the rates that are applied to debt and equity and the
4 composition of the capital structure to determine the reasonableness of the ROR. Mr.
5 Baudino has recommended that the Company's proposed common equity ratio of
6 48.654 percent be approved. Taken together, the Company's proposed common
7 equity ratio of 48.654 percent and Mr. Baudino's recommended ROE of 9.15 percent,
8 results in a WROE of only 4.45 percent.

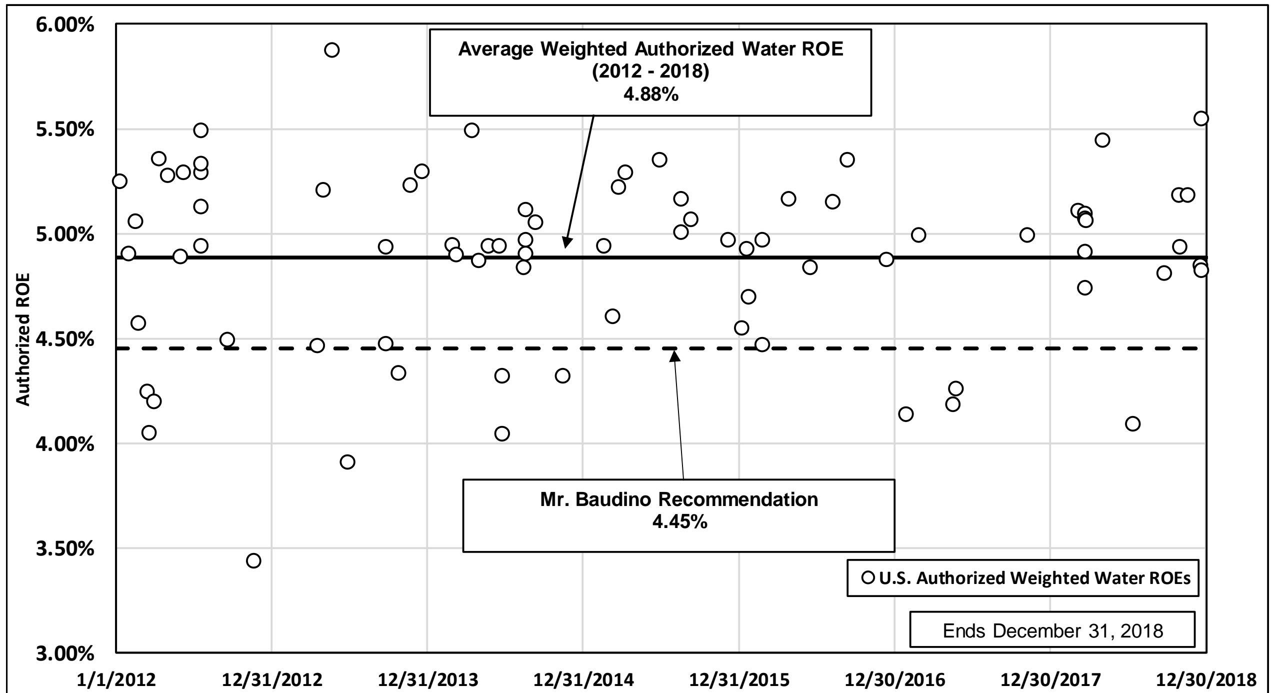
9 **Q. Have you conducted an analysis to compare Mr. Baudino's proposed WROE to**
10 **the recently authorized WROEs in other jurisdictions?**

11 A. Yes. As shown in Figure 2 below, I compared Mr. Baudino's recommended WROE
12 to the authorized WROEs for water utilities in other jurisdictions since January 2012.
13 As shown in Figure 2, Mr. Baudino's recommended WROE is at the low-end of the
14 range of authorized WROEs for water utilities and significantly below average
15 authorized WROE. The average authorized WROE for water utilities since 2012 is
16 4.88 percent. Given that Mr. Baudino and I both support the Company's proposed
17 common equity ratio of 48.654 percent, in order for the Company to achieve a WROE
18 of 4.88 percent, this would require an authorized ROE of at least 10.00 percent. This
19 provides further support that Mr. Baudino's recommended ROE of 9.15 percent is
20 unreasonably low and does not meet the comparable return standard.

1 Additionally, is important to consider the WROE given the effect that the TCJA has
2 had on utility cash flows specifically KAWC's parent company, AWK. As will be
3 discussed below, AWK was recently downgrade by Moody's for reasons that
4 included the effects of the TCJA. Moreover, a downgrade for the effects of the TCJA
5 is not unique to AWK. Several other utilities and utility holding companies have also
6 been downgraded due to the effects of tax reform on utility ratemaking. Therefore, it
7 is important that the Commission authorize a WROE that is comparable to
8 investments of similar risk so as to not be viewed as viewed as credit negative by the
9 ratings agencies.

1 **Figure 2: Comparison of Mr. Baudino's recommend WROE and U.S.**

2 **Authorized Weighted Equity Ratios for Water Utilities**[6]



3

4 **Q. Have you also considered how Mr. Baudino's proposed WROE compares with**
5 **the authorized WROEs for the remainder of the utility operating subsidiaries of**
6 **the parent company?**

7 A. Yes, I have. As shown in Attachment AEB-7-R, the average WROE of the operating
8 subsidiaries of the parent company, excluding KAWC is 4.83 percent and the first
9 quartile ranking is 4.39 percent. Mr. Baudino's proposed WROE, is below the

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6 Rate cases in Arkansas, Florida, Indiana, and Michigan have been excluded from Figure 2 since the authorized capital structure approved in the cases includes deferred taxes and other credits at zero or low cost. The additional items have the effect of reducing both the equity and debt ratios used to establish the rate of return which, in turn, produces results that are not comparable to allowed equity ratios in other states.

1 WROE established for ten of the operating subsidiaries of AWK. Based on this, it
2 would be reasonable for the parent company to allocate discretionary capital to two-
3 thirds of the operating subsidiaries before considering discretionary spending for
4 KAWC.

5 **IV. CAPITAL MARKET CONDITIONS AND EFFECT ON MODELS**

6 **Q. Please summarize Mr. Baudino's testimony regarding current capital market**
7 **conditions and the impact on the cost of equity for KAWC.**
8 A. Mr. Baudino's testimony purports to provide a summary of monetary policy since the
9 Great Recession. In that summary, Mr. Baudino acknowledges federal market
10 intervention and the fact that the Federal Reserve has increased the target range for
11 the federal funds rate over the period of time from March 2016 through December
12 2018. Finally, Mr. Baudino summarizes the statements made by Federal Reserve
13 Chairman Powell in his January 2019 press conference where he noted that the
14 Federal Reserve would take a wait and see approach on further increases in the
15 federal funds rate.[7]

16 **Q. What is Mr. Baudino's view with respect to interest rates?**
17 A. While Mr. Baudino recognizes the increases in the federal funds rate, he suggests that
18 investor expectations regarding higher interest rates are factored into current prices

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[7] Direct Testimony of Richard A. Baudino, at 7-9.

1 and therefore advises utility regulators not to raise ROEs in anticipation of higher
2 interest rates.[8] Furthermore, Mr. Baudino reviews the Federal Funds rate, the 30-
3 year Treasury yield and the average utility bond yield over the period from January
4 2016 through February 2019. Mr. Baudino concludes that several increases in the
5 Federal Funds Rate have had little medium-term impact on long-term interest rates as
6 measured by the yield on 30-year Treasury Bonds and the average public utility
7 bond.[9]

8 **Q. Do you agree with Mr. Baudino's views on the effect of Federal monetary policy**
9 **on long-term government bonds?**

10 A. No, I do not. While the Federal Reserve has recently indicated that it will be patient
11 in determining future adjustments the federal funds rate; they have not indicated that
12 they will not raise interest rates over the coming year. In fact, Bloomberg recently
13 noted that some officials saw higher rates as appropriate later this year if economic
14 growth continued above its longer-run trend rate, according to the minutes.[10]

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[8] *Id.*, at 11.

[9] Direct Testimony of Richard A. Baudino, Table 1, and p. 11-13.

[10] FOMC, Federal Reserve press release, March 20, 2019. *See also*, Torres, Craig. "Fed Minutes Show Some Rate Flexibility During Year of Patience." Bloomberg.com, Bloomberg, 10 Apr. 2019, www.bloomberg.com/news/articles/2019-04-10/fed-minutes-show-some-rate-flexibility-during-year-of-patience.

1 The decision to be measured in their approach is not unusual. As Mr. Baudino
2 agrees, monetary policy has a lagged effect on the economy.[11] Furthermore, the
3 Federal Reserve Bank of San Francisco notes:

4 It can take a fairly long time for a monetary policy action to affect the
5 economy and inflation. And the lags can vary a lot, too. For example,
6 the major effects on output can take anywhere from three months to
7 two years. And the effects on inflation tend to involve even longer
8 lags, perhaps one to three years, or more.[12]

9 Since December 2015, the Federal Reserves has increased the federal funds rate nine
10 times, four of which occurred in 2018 and three in 2017. Therefore, given recent
11 market volatility and the lagged effect that monetary policy has on the economy, it is
12 reasonable to expect the Federal Reserve to be patient with future increases. Even
13 given that patience, however, it is important to note, that the Federal Reserve is
14 continuing to reduce the size of its balance sheet by no longer reinvesting the
15 proceeds of the bonds it holds over the near-term. This policy in conjunction with the
16 lagged effect of past increases in the federal funds rate suggests that the yields on
17 long-term government bonds should continue to increase over the near-term which is
18 consistent with investors' expectations.

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[11] Attorney General and LFUCG's Response to KAW Data Requests, Case No. 2018-00358, Question 4.

[12] Federal Reserve Bank of San Francisco, "U.S. Monetary Policy: An Introduction - How does monetary policy affect the U.S. economy?", February 6, 2004. https://www.frbsf.org/education/teacher-resources/us-monetary-policy-introduction/real-interest-rates-economy/

1 **Q. Have you examined the effect of the Federal Reserve's monetary policy on the**
2 **yields of long-term government bonds over the past few years?**
3 A. Yes. As shown in Figure 5 of my Direct Testimony, yields on long-term government
4 bonds have increased since the Federal Reserve started to raise the federal funds rate
5 in 2016. However, the increase in long-term government bond yields has not been as
6 pronounced as the rise in short-term interest rates. This is due to a shift in the supply
7 and demand of long-term government bonds that has occurred since 2009. For
8 example, since the Great Recession of 2008-2009, federal debt has increased
9 significantly which has resulted in an increase in the supply of Treasury bonds in the
10 market. In general, an increase in supply should result in a decrease in the price of
11 Treasury bonds and an increase in yield. Long-term government bonds yields,
12 however, have not increased as fast as expected given the increase in supply. This is
13 because the demand for Treasury bonds has also increased since 2009. As noted in a
14 recent article published by the St. Louis Federal Reserve, the demand for government
15 bonds increased for a number of reasons; some of which included increased holdings
16 by foreign governments as countries in Europe and Asia faced their own economic
17 uncertainty, and increased holdings from commercial banks due to new regulations
18 that required banks to hold a larger portion of high-quality liquid assets.[13] This has

[13] David Andolfatto and Andrew Spewak, Federal Reserve Bank of St. Louis, "On the Supply of, and Demand for, U.S. Treasury Debt," Economic Synopses, No. 5, 2018. https://doi.org/10.20955/es.2018.5.

1 resulted in a more gradual increase in the yields on long-term government bonds over
2 the past few years.

3 **Q. Is the demand for long-term government bonds currently increasing?**

4 A. No, it is not. As noted in the Federal Reserve article:

> 5 Some evidence suggests that the growth in demand for Treasuries has
> 6 already begun to soften. Returning to Figures 1 and 2, foreign
> 7 holdings have remained more or less constant since 2014, largely
> 8 because of declining holdings in Japan and China. Likewise,
> 9 regulation and policy changes such as the Dodd-Frank Act and new
> 10 rules for prime money market funds may have only transitory effects
> 11 on the demand for Treasuries. For example, the pace of growth of the
> 12 ratio of commercial bank Treasury security holdings to private loans
> 13 has slowed since 2014 (see Figure 3), as has the growth of investment
> 14 in government money market funds since 2017 (Figure 4).[14]

15 Furthermore, another indicator of the demand for Treasury bonds is the bid-to-cover
16 ratio, which represents the dollar amount of bids received versus the dollar amount
17 sold in a Treasury security auction. Therefore, a higher bid-to-cover ratio is
18 indicative of an increase in the demand for government bonds. As shown in Figure 3,
19 the bid-to-cover ratio for the 10-year U.S. Treasury bond is currently at its lowest
20 point since 2009, which indicates that the demand for long-term government bonds
21 has declined. The decline in demand is occurring at a time when the supply of
22 Treasury bonds is expected to increase as the Federal Reserve continues its balance
23 sheet unwind over the near-term and the federal government issues bonds to offset the
24 reduced tax revenue associated with the implementation of the TCJA. As a result,

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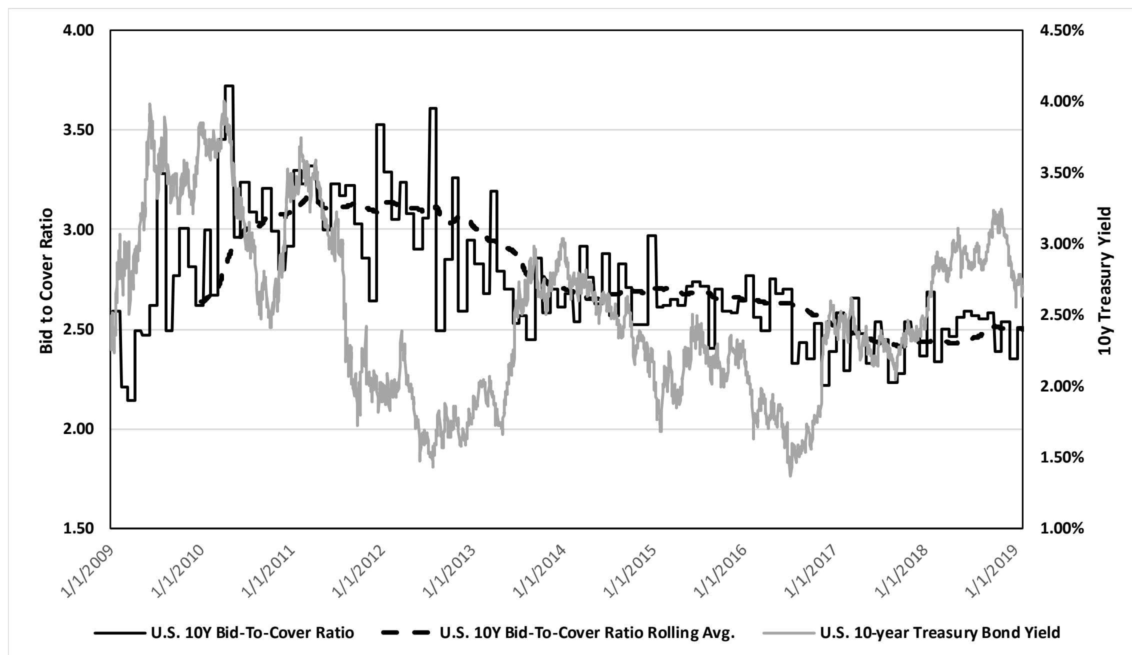
[14] *Ibid.*

1 yields on long-term government bonds are expected to continue to increase over the
2 near-term which is consistent with investors' expectations shown in Figure 5 of my
3 Direct Testimony.

4 **Figure 3: U.S. 10-year Treasury Bond Bid-to-Cover-Ratio**



5

6 **Q. How do equity investors view the utilities sector based on these recent market**
7 **conditions?**

8 A. Investment advisors have suggested that utility stocks may underperform as a result
9 of market conditions. Barron's recently published its seventh annual review of
10 income-producing investments in which Barron's ranked eleven different sectors
11 based on projected performance in 2019. The utility sector ranked ninth out of the
12 eleven sectors with Barron's noting that:

13 Utilities, however, aren't cheap; they are valued at an average of 17
14 times projected 2019 earnings, a premium to the S&P 500, at about 14.

1 That may make it hard for utilities to best the index in 2019, barring a
2 market collapse. Earnings growth is running at a mid-single-digits
3 yearly pace.[15]

4 Similarly, a recent report on the market outlook for 2019 from J.P. Morgan Asset
5 Management noted that because of rising interest rates the utilities sector is not their
6 current focus for investment:

7 As prospects for slower economic growth become clearer in the
8 middle of next year, the Fed may signal it will pause. Such a signal, or
9 a trade agreement with China, could lead multiples to expand, pushing
10 the stock market higher and potentially adding years to this already old
11 bull market. However, even if the bull market does end in the next few
12 years, it is important to remember that late-cycle returns have typically
13 been quite strong.

14 This leaves investors in a tough spot – should they focus on a
15 fundamental story that is softening, or invest with an expectation that
16 multiples will expand as the bull market runs its course? The best
17 answer is probably a little bit of each. We are comfortable holding
18 stocks as long as earnings growth is positive, but do not want to be
19 over-exposed given an expectation for higher volatility. As such,
20 higher-income sectors like financials and energy look more attractive
21 than technology and consumer discretionary, and we would lump the
22 new communication services sector in with the latter names, rather
23 than the former. However, given our expectation of still some further
24 interest rate increases, it does not yet seem appropriate to fully rotate
25 into defensive sectors like utilities and consumer staples. Rather, a
26 focus on cyclical value should allow investors to optimize their
27 upside/downside capture as this bull market continues to age.[16]

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[15] Bary, Andrew. "Best Income Investments for 2019." Barron's, Barron's, 4 Jan. 2019, www.barrons.com/articles/the-best-income-ideas-for-2019-51546632171.

[16] J.P. Morgan Asset Management, "The investment outlook for 2019: Late-cycle risks and opportunities", November 30, 2018, at 5.

1 **Q. How has the period of abnormally low interest rates affected the valuations and**
2 **dividend yields of utility shares?**
3 A. As discussed in my Direct Testimony, the Federal Reserve's accommodative
4 monetary policy has caused investors to seek alternatives to the historically low
5 interest rates available on Treasury bonds.[17]

6 **Q. Have regulatory commissions recognized that conditions in the capital markets**
7 **have had an effect on the ROE estimation models?**
8 A. Yes, as discussed in my Direct Testimony, several regulatory commissions have
9 addressed the effect of capital market conditions on the DCF model. The FERC has
10 addressed this issue and has moved away from its sole reliance on the DCF model in
11 favor of equal weightings on multiple ROE estimation models, including the models
12 presented in my Direct Testimony. In addition, the Illinois Commerce Commission
13 ("ICC"), and the Pennsylvania Public Utility Commission ("PPUC") have considered
14 this factor in recent decisions.

15 **Q. Are you aware of any other regulatory commissions that have recognized the**
16 **effect that capital market conditions have on the ROE estimation models?**
17 A. Yes, the Michigan Public Service Commission ("Michigan PSC") issued a decision in
18 September 2018 in DTE Gas Company's 2017 Rate Case where that commission
19 authorized DTE Gas a ROE of 10 percent. In the decision, the Michigan PSC agreed

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[17] Direct Testimony of Ann E. Bulkley, at 14.

with DTE Gas that consideration should be given to the recent volatility and uncertainty in the market in determining the authorized ROE.[18]

Q. What are your conclusions regarding the effect of market conditions on the cost of capital for KAWC?

A. My primary conclusion is that recent market conditions have affected the assumptions used in the ROE estimation models. For that reason, it is important to rely on multiple models and forward-looking assumptions where possible to more accurately estimate investors' expected cost of equity. As discussed in my Direct Testimony, this conclusion is supported by recent FERC decisions, where the FERC recognized that the inputs to the DCF model, specifically, the dividend yield, has been affected by market conditions. The FERC has determined that it is appropriate and necessary to also consider the results of alternative models such as the CAPM, Risk Premium and Expected Earnings analyses.[19]

Furthermore, while the ROE estimation models use some historical data, (i.e., stock prices and dividends in the DCF model, and bond yields in the CAPM) based on the expected change in market conditions, it is also appropriate to consider near-term projections in the ROE estimation models.

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[18] Michigan Public Service Commission Order, Cause No. U-18999, DTE Gas Company, September 13, 2018, at 52-53.

[19] Direct Testimony of Ann E. Bulkley, at 19-21.

1 **V. ROE ESTIMATION METHODOLOGIES**

2 **Q. Please provide your overall assessment of Mr. Baudino's recommended ROE of**
3 **9.15 percent.**

4 A. Mr. Baudino's recommended ROE is set mechanically at the midpoint of the mean
5 and median results of his Constant Growth DCF model results for the CUPG. There
6 are many factors that an analyst should consider in the final determination of the ROE
7 that do not appear to have been considered by Mr. Baudino. For example, Mr.
8 Baudino does not consider:

9 1. The full range of the results of his CUPG DCF models;
10 2. The mean and median results of the WUPG, both of which are
11 higher than his CUPG results;
12 3. The range of returns that result from other ROE estimation
13 methodologies;
14 4. The financial risks that the utility industry and AWK, the parent
15 company of KAWC are exposed to as a result of tax reform; and
16 5. The overall comparability of this return or the ability to attract
17 capital, as established in *Hope* and *Bluefield*.

18 **Q. Do you believe it is appropriate to rely solely on the Constant Growth DCF in**
19 **setting the ROE in this proceeding, as Mr. Baudino has done?**

20 A. No, I do not. As discussed previously in my Rebuttal Testimony, recent market
21 conditions have affected the dividend yields in the DCF model such that the results of

1 this model understate the cost of equity at this time. Other jurisdictions, such as the
2 FERC have recognized that it is not appropriate to only rely on the results of the DCF
3 model. Therefore, while the results of the DCF model should be considered, these
4 results must be considered along with the results of other ROE models.

5 **Q. Please summarize the principal difference between the ROE estimation analysis**
6 **prepared in your Direct Testimony and Mr. Baudino's ROE analysis.**

7 A. The principal differences are: (1) the use of dividend growth rates in the DCF model;
8 (2) the use of the mean Constant Growth DCF results given the variation in the
9 company specific growth rates; (3) the inputs and assumptions used in the CAPM
10 analysis; (4) the relevance of the Expected Earnings analysis; and (5) the effect of
11 company-specific risks on the authorized ROE for KAWC. I discuss each of these
12 issues in the following sections of my Rebuttal Testimony.

13
A. Constant Growth DCF Analysis

14 **Q. Please summarize Mr. Baudino's Constant Growth DCF analysis.**

15 A. Mr. Baudino performs a Constant Growth DCF analysis using both the CUPG that
16 includes water and natural gas distribution companies and the Water Utility Proxy
17 Group ("WUPG") that are relied on in my Direct Testimony. Mr. Baudino applies
18 equal weight to projected earnings growth rates from Yahoo! Finance, Zacks and

1 Value Line and the projected dividend growth rate reported by Value Line.[20] Mr.
2 Baudino indicates that he excludes the Value Line earnings growth rate for Northwest
3 Natural Holding Company ("NWN"). According to Mr. Baudino, the Value Line
4 earnings growth rate of 25.50 percent is an "obvious outlier" that would inflate the
5 average growth rate for the proxy group if included.[21] In his analysis, Mr. Baudino
6 uses both the mean ("Method 1") and median ("Method 2") growth rates for the
7 proxy group. Mr. Baudino develops the dividend yield using 6-month average stock
8 prices and the current annual dividend. He adjusts the dividend yield for growth
9 using one-half of the expected growth rate.[22]

10 **Q. What are the results of Mr. Baudino's analysis?**

11 A. The results of Mr. Baudino's Constant Growth DCF model are summarized in Figure
12 4. As shown in that figure, although the results of Mr. Baudino's analyses range from
13 7.92 percent to 11.49 percent, he establishes his range of investor required ROEs
14 based simply on the mean and median results of the CUPG from 9.02 percent to 9.27
15 percent.[23]

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[20] Direct Testimony of Richard A. Baudino, at 27, Exhibit _(RAB-4) and Exhibit _(RAB-6).
[21] Direct Testimony of Richard A. Baudino at 27.
[22] Direct Testimony of Richard A. Baudino, at 27-28.
[23] Direct Testimony of Richard A. Baudino, at 35.

1 **Figure 4: Baudino Constant Growth DCF results**[24]

Method 1	Low	Mean	High
WPG	8.25%	9.33%	10.65%
CUPG	8.38%	9.02%	10.29%
Method 2	Low	Median	High
WPG	7.92%	9.44%	10.95%
CUPG	8.45%	9.27%	11.49%

2

3 **Q. Please comment on the results of Mr. Baudino's Constant Growth DCF analysis.**

4 A. Similar to the results of the DCF analyses presented in my Direct Testimony, the low
5 DCF results are inconsistent with the range that is established by recently authorized
6 ROEs and are too low to be considered reasonable estimates of the cost of equity.
7 Therefore, these results should be excluded from the analysis. The range that is set
8 by the mean and high end of the DCF results is a more reasonable range to be
9 considered and is consistent with the results of the other ROE estimation models that
10 were developed in my Direct Testimony. The mean and median results are at the low
11 end of the range of results presented in my Direct Testimony, whereas the high end of
12 Mr. Baudino's DCF results are generally consistent with the results of my CAPM and
13 Expected Earnings analysis. As shown in my Direct Testimony, the results of the
14 CAPM for the Combined Utility Proxy Group ranged from 11.47 percent to 11.91
15 percent including AWK and from 11.51 percent to 11.98 percent excluding AWK[25]
16 and the Expected Earnings analysis resulted in return estimates of 10.50 percent for

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[24] Direct Testimony of Richard A. Baudino, at 35, Table 3.
[25] Direct Testimony of Ann E. Bulkley, Figure 12.

1 AWK and a WPG median return of 11.00 percent in 2019 including and excluding
2 AWK.[26] These results support the high-end results of Mr. Baudino's Constant
3 Growth DCF analysis.

4 **Q. Do you have any other concerns with Mr. Baudino's Constant Growth DCF**
5 **analysis?**

6 A. Yes, I do. Mr. Baudino has calculated his recommended ROE of 9.15 percent for
7 KAWC as the midpoint between the mean and median results of his Constant Growth
8 DCF analysis for the CUPG. However, his mean results exclude the Value Line
9 earnings growth rate for NWN. Therefore, Mr. Baudino has artificially lowered his
10 recommendation by 1) removing the Value Line earnings growth rate forecast for
11 NWN from his DCF result for Method 1 and 2) selecting the midpoint between the
12 mean and median results. As I will discuss in more detail below, I believe that it is
13 more appropriate to rely on the median as the measure of central tendency as opposed
14 to the mean when it is determined that a data set has outliers. In general, the median
15 is not affected to a large degree by the presence of outliers on both the high and the
16 low end. It is incorrect to exclude the Value Line earnings growth rate for NWN. An
17 outlier should only be excluded if it is determined that the data point is the result of
18 an error. Furthermore, there are a few companies that have growth rates less than
19 three percent which could be considered unreasonably low. Mr. Baudino has not

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[26] Direct Testimony of Ann E. Bulkley, Figure 11.

1 excluded these growth rates from his analysis. Therefore, it is more appropriate to
2 include all of the growth rate estimates and rely on the median as the measure of
3 central tendency if outliers are identified. For this reason, Mr. Baudino should have
4 relied only on the median Constant Growth DCF results for his CUPG which would
5 have increased his recommendation 12 basis points to 9.27 percent. While the ROE
6 for KAWC should be developed using multiple methodologies given recent market
7 conditions, I believe it is still important to note that Mr. Baudino has artificially
8 reduced the results of his own Constant Growth DCF analysis and thus his
9 recommendation by calculating the average results of his DCF analysis excluding the
10 Value Line earnings growth rate for NWN.

11 **Q. Mr. Baudino suggests that you should have removed high end outliers from your**
12 **DCF analysis. Are your DCF results materially affected by removing low end**
13 **outliers from your analysis?**

14 A. No. First, it is important to note that the results that Mr. Baudino summarizes in Table
15 5 of his testimony that are from Attachment AEB-2 to my Direct Testimony are the
16 mean results for the 30-, 90- and 180-day averaging periods as well as the mean
17 results from the projected DCF analysis. As shown in those attachments to my Direct
18 Testimony, I did not exclude any low-end outliers from the results of those

1 scenarios.[27] Therefore, Mr. Baudino's suggestion that I removed low-end outliers

2 from the data summarized in his testimony is a misrepresentation of my testimony.

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[27] Direct Testimony of Ann E. Bulkley, Attachments AEB-1 through AEB-4.

1 Next, it is important to recognize that the results that I presented in my testimony
2 relied on the median as the measure of central tendency, not the mean which is
3 presented in Mr. Baudino's Table 5. Based on his testimony in this proceeding, Mr.
4 Baudino and I agree that the median is the appropriate measure of central tendency to
5 rely on when there are outliers.[28] Therefore, it would not be appropriate to remove the
6 high-end outliers from the analysis as proposed by Mr. Baudino.

7 Finally, it is also appropriate for an analyst to consider the reasonableness of the data.
8 It is clear that the results that were removed from the low DCF analysis presented in
9 my Direct Testimony did not provide a return that is commensurate with the risk of
10 equity. As shown in Attachment AEB-2, the low-end results that were removed from
11 the analysis were in the range of 4.64 percent to 6.86 percent. Furthermore, the results
12 of the low DCF results, without the exclusion of the outliers were 7.53 percent to 7.80
13 percent including AWK and 7.21 percent to 7.48 percent excluding AWK. These
14 results fall well below the low end of the results of Mr. Baudino's analyses, which he
15 did not rely on in setting his final recommended range or ROE. Therefore, it appears
16 that Mr. Baudino and I agree that returns in the range of 7.0 percent are too low to be
17 meaningful representations of the cost of equity.

18 **Q. Does Mr. Baudino rely on earnings and dividend growth rates in the DCF**
19 **model?**

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[28] Direct Testimony of Richard A. Baudino, at 32.

1 A. Yes. Mr. Baudino relied on projected earnings and dividend growth rates in his
2 Constant Growth DCF analysis, indicating that these growth rates provide better
3 proxies for the expected growth component in the DCF model than historical growth
4 rates. Mr. Baudino states that the use of dividend growth rates is important because
5 the DCF model calls for forecasted cash flow received by the investor.

6 **Q. Do you agree with Mr. Baudino's use of dividend growth rates in the Constant**
7 **Growth DCF analysis?**

8 A. No, I do not. As discussed in my Direct Testimony, over the long-term, dividend
9 growth can only be sustained by earnings growth.[29] Management decisions to
10 conserve cash for capital investments, to manage the dividend payout for the purpose
11 of minimizing future dividend reductions, or to signal future earnings prospects can
12 influence dividend growth rates in near-term periods. Over the long-run, however,
13 dividends are dependent on and will increase as a function of earnings. Since the
14 DCF model assumes cash flows in perpetuity and a constant dividend payout ratio,
15 earnings are the appropriate measure of growth, not dividends. In addition, Value
16 Line is the only investment service that provides dividend growth projections. To the
17 extent that the earnings growth projections are based on consensus estimates from
18 Zacks or Thompson (growth rates reported by Yahoo! Finance) rather than the views

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[29] Direct Testimony of Ann E. Bulkley, at 56.

1 of an individual analyst at Value Line, the results are less likely to be biased in one
2 direction or another.

3 Furthermore, it is important to note that in some prior cases, while Mr. Baudino's
4 analysis has considered dividend growth rates he has ultimately relied on the results
5 of the DCF model using projected earnings growth rates.[30]

6 **Q. Is there additional evidence indicating that investment analysts primarily report**
7 **and rely on earnings growth estimates?**

8 A. Yes, investment analysts predominantly report EPS growth projections. In a survey
9 completed by 297 members of the Association for Investment Management and
10 Research, the majority of respondents ranked earnings as the most important variable
11 in valuing a security (more important than cash flow, dividends, or book value).[31]

12 Academic research also supports the use of EPS growth estimates. A 2002 study in
13 the *Journal of Accounting Research* examined "the valuation performance of a
14 comprehensive list of value drivers" and found that "forward earnings explain stock
15 prices remarkably well" and were generally superior to other value drivers analyzed.[32]
16 A 2012 study from the journal *Contemporary Accounting Research* found that sell-

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[30] Vermont Public Service Department, Docket No. 8710, Direct Testimony of Richard A. Baudino, August 22, 2016, p. 28. *See also,* Public Service Commission of the Commonwealth of Kentucky, Docket No. 2015-00343, Direct Testimony of Richard A. Baudino, August 22, 2016, p. 28.

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

[32] Liu, Jing, et al., "Equity Valuation Using Multiples," Journal of Accounting Research, Vol. 40 No. 1, March 2002.

1 side analysts with the most accurate stock price targets were those whom the
2 researchers found to have more accurate earnings forecasts.[33]

3 **Q. Have you adjusted Mr. Baudino's DCF analysis to rely only on earnings growth**
4 **rates?**

5 A. Yes, and when I adjust his analysis, his median DCF result for the CUPG increases
6 by 40 basis points. Specifically, I adjusted the results of Mr. Baudino's Constant
7 Growth DCF results for the CUPG using Method 2 to exclude the projected dividend
8 growth rates. I did not adjust the results for the WPG since Mr. Baudino has relied
9 exclusively on the results of the CUPG to develop his recommendation. Additionally,
10 I did not adjust the results for the CUPG using Method 1 since as discussed above it
11 is more appropriate to use the median if an outlier growth rate is identified than to
12 exclude the outlier growth rate and calculate the mean. As shown in Attachment
13 AEB-1-R, I have recalculated Mr. Baudino's Constant Growth DCF analysis, relying
14 on projected earnings growth rates for the CUPG using Method 2 which resulted in an
15 increase of 28 basis points from 9.27 percent to 9.55 percent. Therefore, had Mr.
16 Baudino correctly relied only on the median results and more appropriately specified
17 his DCF model to rely on earnings growth rates, his overall recommendation would
18 have increased 40 basis points from 9.15 percent to 9.55 percent.

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[33] Gleason, C.A., et al., "Valuation Model Use and the Price Target Performance of Sell-Side Equity Analysts," Contemporary Accounting Research.

1 However, while a more appropriate specification of the DCF model would have
2 increased Mr. Baudino's recommendation to 9.55 percent, as discussed in my Direct
3 Testimony and in my Rebuttal Testimony above, the DCF model still understates the
4 cost of equity because it has been affected by current market conditions specifically
5 the low interest rate environment. Therefore, it is important to rely on the results of
6 multiple ROE estimation models when developing the cost of equity for KAWC.

7 **Q. Has Mr. Baudino recognized the effect changes in market conditions can have on**
8 **the results of the ROE estimation models?**

9 A. Yes. Mr. Baudino calculated his CAPM analysis using a forward-looking and
10 historical market risk premium. For the historical market risk premium, Mr. Baudino
11 relied on three separate estimates using data from Duff and Phelps.[34] One of the
12 estimates was an adjusted version of the arithmetic historical market risk premium
13 from 1926 to 2017. According to Mr. Baudino, Duff and Phelps adjusted the
14 arithmetic historical market risk premium to remove the "substantial" upward growth
15 in the price to earnings ratio for stocks from 1980 through 2001 because Duff and
16 Phelps concluded the level of growth was not sustainable in the future.[35] As a result,
17 Mr. Baudino developed a version of his CAPM analysis using the adjusted arithmetic
18 historical risk premium.[36] Therefore, Mr. Baudino has acknowledged that the inputs

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[34] Direct Testimony of Richard A. Baudino, at 33.
[35] Ibid.
[36] *Id.,* at 34.

1 to the ROE estimation models can be affected by market conditions which could
2 require seeking alternative inputs or making adjustments.

3 **Q. Does Mr. Baudino acknowledge the effect current market conditions are having**
4 **on the results of the DCF model?**

5 A. No, he has not. Mr. Baudino has noted the effect high P/E ratios for stocks can have
6 on the market risk premium; however, he has not reviewed the current P/E ratios for
7 the companies in the CUPG to determine how those P/E ratios could be affecting the
8 results of his DCF model. As shown in Figure 4 of my Direct Testimony, in 2017, the
9 average P/E ratio for the CUPG was at the highest level since 2000 which Mr.
10 Baudino acknowledges.[37] While the average P/E ratio for the CUPG declined in
11 2018, it is still at a level that is unsustainably high. Moreover, investment advisors
12 have noted the currently high P/E ratios for utilities. As Barron's recently noted:

> 13 Utilities, by contrast, have returned about 19% in the past year.
> 14 Investors view them as a safer bet and more-reliable dividend plays.
> 15 Higher share prices have pushed down their yields, which have
> 16 averaged about 3.8% over the past 10 years, according to FactSet.
>
> 17 Nancy Tengler, chief investment strategist at Tengler Wealth
> 18 Management, is avoiding utility stocks, which in her view offer "high
> 19 multiples for no growth."[38]

20 Since the P/E ratios of the companies contained in the CUPG are expected to decline
21 over the near-term or the period when KAWC's rates are expected to be in effect, the

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37 Attorney General and LFUCG's Response to KAW Data Requests, Case No. 2018-00358, Question 15.

38 Strauss, Lawrence C. "Dividends Can Tell You a Lot About a Sector's Strength." *Barron's*, Barron's, 5 Apr. 2019, www.barrons.com/articles/this-dividend-metric-can-help-you-understand-an-industry-51554463800.

1 results of the DCF model calculated with current market data are likely to understate
2 the cost of equity for KAWC over the near-term. Therefore, it is not appropriate to
3 rely solely on the results of the DCF model to estimate the cost of equity for KAWC.
4 As such, it is important to consider the results of multiple ROE estimation models in
5 determining the appropriate ROE and use forward-looking inputs where possible to
6 account for changing market conditions.

7 **Q. What are your conclusions regarding Mr. Baudino's Constant Growth DCF**
8 **analysis?**

9 A. Mr. Baudino's Constant Growth DCF analysis results in a narrow range of mean and
10 median results that are unreasonably low. As discussed above, this is due to two main
11 differences between the DCF analysis presented in my Direct testimony and the DCF
12 analysis developed by Mr. Baudino: 1) the reliance on Method 1 excluding the Value
13 Line earnings growth rate for NWN; and 2) the use of dividend growth rates in the
14 calculation of the DCF results. As shown in Attachment AEB-1-R, making the
15 appropriate changes to Mr. Baudino's Constant Growth DCF analysis, results in an
16 ROE estimate of 9.55 percent. Nevertheless, and despite the changes, given the effect
17 that current market conditions have had on the results of the DCF model, it remains
18 important to consider the revised results of Mr. Baudino's Constant Growth DCF
19 results in conjunction with the results of additional ROE estimate models such as the
20 CAPM, Risk Premium and Expected Earnings Analysis in order to produce a more
21 reasonable ROE estimation.

1 **B. CAPM Analysis**

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

3 A. Mr. Baudino's CAPM analysis relies on the 6-month average yield on 5-year and 30-
4 year Treasury bonds as the risk-free rate, Value Line betas for the companies in his
5 proxy group, and both a historical and forward-looking market risk premium. Using
6 these assumptions and inputs, Mr. Baudino derives CAPM results ranging from 9.22
7 percent to 9.35 percent (based on a forward-looking market risk premium) and 6.74
8 percent to 8.05 percent (based on a historical market risk premium).[39]

9 **Q. Please comment on the reasonableness of the results of Mr. Baudino's CAPM**
10 **analysis.**

11 A. First, it should be apparent that Mr. Baudino's CAPM results of between 6.74 percent
12 and 8.05 percent using the historical market risk premium are so low as to be entirely
13 inconsistent with the returns required by equity investors for companies with
14 commensurate risk. To place these results in context, they are 84 to 215 basis points
15 above the company's cost of long-term debt and 143 to 274 basis points below the
16 average authorized ROE for water utilities of 9.48 percent in 2017-2018.

17 In fact, it appears that Mr. Baudino recognizes that the results of his historical CAPM
18 are unreasonably low because he does not rely on the results of this analysis in

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[39] Direct Testimony of Richard A. Baudino, at 34.

1 determining his ROE.[40] As discussed previously, Mr. Baudino's recommendation is
2 simply the midpoint of the mean and median DCF results for the CUPG.[41]

3 **Q. What are your concerns with the inputs and assumptions that Mr. Baudino has**
4 **used to develop his CAPM estimate?**

5 A. I disagree with two other aspects of Mr. Baudino's CAPM analysis: 1) the use of
6 only the current Treasury bond yield as the risk-free rate; and 2) the use of an under-
7 stated market risk premium that is, in part, based on historical returns and which does
8 not reflect the inverse relationship between interest rates and the equity risk premium.

9 **Q. Why do you believe that an analyst should consider more than just current**
10 **interest rates in the CAPM?**

11 A. Like all models used to estimate the cost of equity, the CAPM should be forward-
12 looking. While Mr. Baudino has used a forward-looking market risk premium based
13 on the projected total return on the Value Line universe, his risk-free rate is based on
14 the current average yield on 30-year and 5-year Treasury bonds. My concern with the
15 use of the current average yield is that yields on government bonds have been
16 suppressed by the accommodative monetary policy of the Federal Reserve and do not
17 reflect unfettered market forces. Under these market conditions, it is especially
18 appropriate to also consider the use of forecast Treasury bond yields, which reflect

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[40] Attorney General and LFUCG's Responses to KAW Data Requests, Question No. 17.
[41] Direct Testimony of Richard A. Baudino, at 35.

1 the market's view that interest rate policy will normalize to some degree over the next
2 several years, and that corporate bond yields will also increase.

3 **Q. Does Mr. Baudino agree that the use of projected Treasury bond yields is**
4 **appropriate in the CAPM?**

5 A. No. Mr. Baudino suggests that current bond yields embody all relevant market data
6 and investor expectations including expectations of future interest rates while
7 forecasted bond yields are "speculative at best".[42] Furthermore, it is Mr. Baudino's
8 position that current interest rates are the best indicators of investor expectations.[43]

9 **Q. How do you respond to Mr. Baudino's suggestion that projected bond yields**
10 **introduce a greater element of risk and that current interest rates are the best**
11 **indicator of investor expectations?**

12 A. Mr. Baudino's suggestion that projected yields are somehow less accurate than
13 relying on current yields on Treasury bonds is unsupported. In fact, in a recent article
14 on projecting interest rates, the San Francisco Federal Reserve reviewed the forecast
15 error resulting from relying on a "random walk", which is essentially current yields
16 and the use of projections from the Blue Chip Financial Forecast.[44] As shown in that
17 article, reviewing the longest time periods available for each data set demonstrates

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42 Direct Testimony of Richard A. Baudino, at 47.

43 Attorney General and LFUCG's Responses to KAW Data Requests, Question No. 5.

44 FRBSF Economic Letter, "Bridging the Gap: Forecasting Interest Rates with Macro Trends", Michael D. Bauer, July 31, 2017, Figure 2, at 4. The comparison is the forecast error resulting from the Blue Chip over the entire time period for which it is available, 1988-2016 and the "No Change" scenario for the period from 1971 through 2016.

1 that the forecasting error for a random walk and the Blue Chip forecast were
2 essentially the same. Therefore, since there is no incremental bias introduced by
3 relying on investors' expectations of interest rates, I believe that it is important to
4 consider CAPM scenarios that include these expectations.

5 **Q. Does Mr. Baudino also rely on forecasted market data in his ROE analysis?**

6 A. Yes. Mr. Baudino has no objection to the use of forecasted data in his DCF analysis
7 where he considers projected dividend and earnings per share growth rates in the
8 Constant Growth DCF model. Mr. Baudino also uses Value Line forecasts in his
9 development of the projected market risk premium. It is unclear why Mr. Baudino
10 finds these projected market data reasonable and yet suggests that the use of projected
11 Treasury bond yields, such as those available from Blue Chip Financial Forecasts,
12 should not be considered.

13 **Q. How does Mr. Baudino calculate the market risk premium used in his CAPM?**

14 A. Mr. Baudino uses both historical and forward-looking market risk premiums in his
15 CAPM analysis. Mr. Baudino calculates the CAPM result using three estimates of
16 the historical market risk premium based on: 1) the geometric mean return on the
17 market, 2) the arithmetic mean return on the market, and 3) an adjusted market risk
18 premium calculated by Duff and Phelps. In each case, Mr. Baudino subtracts the
19 historical long-term income return on government bonds to estimate the market risk
20 premium. His historical estimates of the market risk premium range from 5.20 percent

1 to 7.10 percent.[45] Mr. Baudino admits that he has not conducted any analysis on the
2 historical market return data or the historical market risk premium to determine
3 whether or not the methodology he has relied on to estimate the market risk premium
4 produced reasonable results.[46]

5 Mr. Baudino's forward-looking market risk premium is calculated using a Constant
6 Growth DCF model and the three to five- year projected earnings and book value
7 growth rates for the Value Line universe of companies that it covers and an estimated
8 average dividend yield on the market. The range of projected market returns is
9 between 13.00 percent and 11.32 percent.[47]

10 **Q. Do you agree with the historical market risk premiums that Mr. Baudino has**
11 **used in his CAPM analysis?**

12 A. First, I do not agree with the use of a historical market risk premium to establish the
13 forward-looking ROE. Furthermore, I do not agree that the geometric mean return on
14 the market is appropriate for this purpose. The geometric mean is the compound rate
15 that equates a beginning value to its ending value. It is used to determine the exact
16 rate of compounded return between a specific starting and ending point. The
17 arithmetic mean is the simple average of individual period rates of return and best
18 approximates the uncertainty associated with returns from year to year. The

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45 Direct Testimony of Richard A. Baudino, Exhibit___(RAB-8).
46 Attorney General and LFUCG response to KAW Question 14.
47 Direct Testimony of Richard A. Baudino, Exhibit___(RAB-7), p. 2.

1 important distinction between the two methods is that the arithmetic mean assumes
2 that each periodic return is an independent observation and, therefore, incorporates
3 uncertainty into the calculation of the long-term average. By contrast, the geometric
4 mean does not incorporate the same degree of uncertainty because it assumes that
5 returns remain constant from year to year. In his review of literature on the topic,
6 Cooper noted the following rationale for using the arithmetic mean:

> 7 Note that the arithmetic mean, not the geometric mean is the relevant
> 8 value for this purpose. The quantity desired is the rate of return that
> 9 investors expect over the next year for the random annual rate of return
> 10 on the market. The arithmetic mean, or simple average, is the
> 11 unbiased measure of the expected value of repeated observations of a
> 12 random variable, not the geometric mean.…[The] geometric mean
> 13 underestimates the expected annual rate of return.[48]

14 Therefore, Mr. Baudino's market risk premium of 5.20 percent, calculated using the
15 geometric average, is not meaningful.

16 **Q. Is there evidence that the use of a historical market risk premium may produce**
17 **counter-intuitive results?**

18 A. Yes. While the use of the arithmetic market return to estimate the historical risk
19 premium is mathematically correct, the use of any historical market risk premium
20 may produce results that are not consistent with investor sentiment and current
21 conditions in capital markets. For example, Morningstar has observed:

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[48] Ian Cooper, Arithmetic versus geometric mean estimators: Setting discount rates for capital budgeting, European Financial Management 2.2, (1996): 158.

1 It is important to note that the expected equity risk premium, as it is
2 used in discount rates and the cost of capital analysis, is a forward-
3 looking concept. That is, the equity risk premium that is used in the
4 discount rate should be reflective of what investors think the risk
5 premium will be going forward.[49]

6 In addition, Duff & Phelps, the publisher of the data that Mr. Baudino relied on,
7 specifically addresses the risk of relying on the historical market risk premium that
8 includes the negative market returns that were the result of the financial market
9 collapse in 2008.

10 If one simply added an estimate of the ERP taken from commonly
11 used sources before the Financial Crisis to the spot yield on 20-year
12 U.S. government bonds at month-end December 2008, one would have
13 arrived at an estimate of the cost of equity capital that was too low.

14 For example, as illustrated in Exhibit 3.11, at December 2007 the yield
15 on the 20-year U.S. government bonds equaled 4.5%, and the realized
16 risk premium reported based on the average realized risk premiums for
17 1926-2007 was 7.1%. But at December 2008, the yield on 20-year
18 U.S. government bonds was 3.0%, and the realized risk premium
19 reported based on the average realized risk premiums for 1926-2008
20 was 6.5%.

21 So just at the time that the risk in the economy increased to arguably
22 the highest point, the base cost of equity capital using realized risk
23 premiums decreased from 11.6% (4.5% plus 7.1%) to 9.5% (3.0% plus
24 6.5%). [50]

25 Figure 5 illustrates the problem with relying on a historical market risk premium.
26 From 2007-2009, for example, when market volatility had increased significantly and

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[49] Morningstar Inc., 2010 Ibbotson Stocks, Bonds, Bills and Inflation, Valuation Yearbook at 55.
[50] Duff & Phelps, 2017 Valuation Handbook, U.S. Guide to Cost of Capital, at 3-37; 3-38.

1 in 2008 in particular, when the market returned the largest negative return since the

2 Great Depression, the historical market risk premium *decreased.*

3 **Figure 5: Historical Market Risk Premium and Market Volatility**

	Historical Market Risk Premium[51]	**Market Volatility**
2009	6.70%	31.48
2008	6.50%	32.69
2007	7.10%	17.54

4

[51] Morningstar Inc., 2008 Ibbotson Stocks, Bonds, Bills, and Inflation, Valuation Yearbook, at 28. Morningstar Inc., 2009 Ibbotson Stocks, Bonds, Bills, and Inflation, Valuation Yearbook, at 23. Morningstar Inc., 2010 Ibbotson Stocks, Bonds, Bills, and Inflation, Valuation Yearbook, at 23. Historical Market Risk Premium equals total return on large company stocks less income only return on long-term government securities.

1 The assumption that investors would expect or require a lower risk premium during
2 periods of increased volatility is counter-intuitive and leads to unreliable analytical
3 results. The relevant issue in the application of the CAPM is to ensure that all three
4 components of the model (i.e., the risk-free rate, Beta, and the market risk premium)
5 are consistent with market conditions and investor perceptions. Assuming a lower
6 market risk premium during periods of increased risk aversion is at odds with that
7 premise. Therefore, because the historical market risk premium, calculated as Mr.
8 Baudino has done, can produce meaningless results, as demonstrated in Figure 5 and
9 as cautioned by the publishers of the data, the use of this methodology for estimating
10 the market risk premium should be rejected.

11 **Q. Do you agree with the forward-looking market risk premium that Mr. Baudino**
12 **has used in his CAPM analysis?**

13 A. Not entirely. Mr. Baudino uses two approaches to estimate the market return, then
14 averages those estimates to develop his projected market return. The first market
15 return estimate is based on the median of Value Line's 3-5 year projected total return
16 on the universe of companies covered. The second is a DCF approach using the
17 average of book value and earnings growth rates and an estimated dividend yield.

18 While I agree that the Value Line three to five-year projections of returns are
19 something that investors would consider, Mr. Baudino's use of this information to
20 calculate the market return is inconsistent with Mr. Baudino's criticism of the
21 Expected Earnings analysis that I prepared in my Direct Testimony. In response to

1 Attachment AEB-5, where I provided a summary of the Value Line projected returns
2 for the companies in the WPG, Mr. Baudino says that the Commission should
3 "definitely not" consider Value Line's projected returns on book equity because
4 recently allowed ROEs and DCF ROE estimates using today's stock prices are all
5 much lower than Value Line's forecasted ROEs.[52] Based on this view, it seems
6 unreasonable that he would rely on the same data to develop his estimate of the
7 overall return on the market return.

8 Mr. Baudino's second approach to estimating the market return is using a DCF
9 methodology. The methodology that Mr. Baudino relies on in this analysis is
10 inconsistent with the Constant Growth DCF that he develops for the CUPG and
11 WUPG. Mr. Baudino relied on projected earnings and dividend growth rates in his
12 Constant Growth DCF analysis, indicating that these growth rates provide better
13 proxies for the expected growth component in the DCF model than historical growth
14 rates. Mr. Baudino further states that the use of dividend growth rates is important
15 because the DCF model calls for forecasted cash flow received by the investor.
16 However, in the estimate of the market return, Mr. Baudino relies on projected
17 earnings and book value growth rates, excluding dividend growth rates.

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[52] Direct Testimony of Richard A. Baudino, at 46.

1 **Q. How would Mr. Baudino's market risk premium and CAPM analysis change if**
2 **he had relied on the median earnings growth rate for the universe of Value Line**
3 **companies?**
4 A. As shown on Attachment AEB-2-R, relying on the earnings growth rate of 12.00
5 percent and the dividend yield of 1.02 percent shown in Exhibit ___(RAB-7), the
6 market risk premium would be 9.91 percent using the 30-year Treasury bond yield
7 and the CAPM result would be 9.98 percent.
8 **Q. Do you agree with Mr. Baudino's calculation of the average dividend yield of**
9 **1.02 percent?**
10 A. No, I do not. As shown in Attachment AEB-2-R, Standard and Poor's calculates the
11 dividend yield on the S&P 500 to be approximately 1.97 percent, which is
12 considerably higher than Mr. Baudino's estimate. Relying on the dividend yield
13 published by S&P and an average growth rate of 12 percent results in a market return
14 of 14.09 percent. As shown in Attachment AEB-2-R, relying on Mr. Baudino's
15 estimate of the risk-free rate and average beta for the CUPG, the resulting ROE is
16 10.68 percent.
17 **Q. Does Mr. Baudino agree with your CAPM analysis?**
18 A. No. Mr. Baudino suggests that my "lone" market return estimate of 15.19 percent is
19 extraordinarily high compared with historical returns and is far higher than the

1 forward-looking return presented in his testimony.[53] In addition, Mr. Baudino
2 criticizes the use of the 30-year Treasury bond yield without consideration of a
3 shorter-duration instrument and also does not agree with the use of projected yields
4 on Treasury bonds.[54]

5 **Q. Is there support for the use of a forward-looking market risk premium**
6 **calculated using the methodology that you relied on in your Direct Testimony?**

7 A. Yes. The FERC has stated:

> 8 A CAPM analysis is backward-looking if its market risk premium
> 9 component is determined based on historical, realized returns. A
> 10 CAPM analysis is forward-looking if its market risk premium
> 11 component is based on a DCF study of a large segment of the market.
> 12 In a forward-looking CAPM analysis, the market risk premium is
> 13 calculated by subtracting the risk-free rate from the result produced by
> 14 the DCF study.[55]

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[53] Direct Testimony of Richard A. Baudino, at 49.
[54] Direct Testimony of Richard A. Baudino, at 48-49.
[55] 150 FERC ¶ 61,165, Docket Nos. EL11-66-002, Opinion No. 531-B, para. 108.

1 Additionally, as discussed in my Direct Testimony, the Staff in Maine has also
2 endorsed the use of a forward-looking market risk premium.[56]

3 **Q. What is the appropriate methodology that should be used to calculate the**
4 **market risk premium?**

5 A. The forward-looking market premium is calculated by subtracting a measure of the
6 projected risk-free rate from a projected return on the overall market. This
7 methodology has also been endorsed by the FERC, which stated:

> 8 In this proceeding, the NETOs submitted a forward-looking CAPM
> 9 study, using 30-year Treasury bonds for the risk-free rate, betas
> 10 published by Value Line, and a market risk premium based on a DCF
> 11 study of all S&P 500 companies that were paying dividends. The
> 12 NETOs' CAPM approach is a generally accepted methodology
> 13 routinely relied upon by investors and, therefore, one appropriately
> 14 used to corroborate our own analysis.[57]

15 **Q. Is there additional support for the reasonableness of the market return you have**
16 **used to calculate the forward-looking market risk premium?**

17 A. Yes, other alternative sources provide reputable forecasts of market returns that are
18 significantly higher than the historical and projected returns relied on by Mr.
19 Baudino. In Figure 6 (*see also* Attachment AEB-3-R), I provide the return on the
20 S&P 500 calculated using earnings growth projections from Bloomberg Professional,
21 Yahoo! Finance, and Standards and Poor's. The calculated returns for the S&P 500
22 range from 12.63 percent (Bloomberg Professional) to 14.42 percent (Standard and

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[56] Direct Testimony of Ann E. Bulkley, at 67-68.
[57] *Id.*, at 109.

1 Poor's). By contrast, the average forward-looking market return that Mr. Baudino
2 relied on is 12.16 percent, which is significantly below any of the market return
3 estimates provided by these reputable sources. As a result, his estimates of the market
4 risk premium are also well below the implied market risk premiums resulting from
5 the estimates provided by Bloomberg, Yahoo! Finance and S&P.

6 **Figure 6: S&P 500 Return Estimates**[58]

Source	Estimate Date	Dividend Yield	Growth Estimate	S&P 500 Return
Bloomberg Professional	February 28, 2019	1.97%	10.55%	12.63%
Yahoo! Finance	February 28, 2019	1.97%	11.00%	13.08%
Standard and Poor's	February 28, 2019	1.97%	12.33%	14.42%

7

8 **Q. How would the use of these market risk premium estimates change the results of**
9 **Mr. Baudino's CAPM analysis?**

10 A. As shown in Attachment AEB-4-R and Figure 7 below, updating Mr. Baudino's
11 CAPM analysis for the CUPG to rely on the projected market risk premium estimates
12 summarized above results in the high end of the range of returns being equal to 11.13
13 percent. The median results ranged from 9.98 percent to 10.21 percent which are
14 approximately 83 to 106 basis points higher than Mr. Baudino's recommended ROE.

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[58] Bloomberg and Yahoo! Finance do not report a dividend yield for the S&P 500; therefore, the most recent 12-month average dividend yield as of February 2019 reported in the February 28, 2019 S&P 500 Earnings and Estimate Report was used to calculate the total return.

1 **Figure 7: Summary of Adjusted CAPM Results**

Summary of CAPM Result			
Rf Rate	**Current**	**CUPG Q2 2020**	**2024**
	3.17%	3.28%	3.90%
Market Return Scenario			
S&P	10.91%	10.94%	11.13%
Bloomberg	9.67%	9.70%	9.90%
Yahoo! Finance	9.98%	10.02%	10.21%
Median	9.98%	10.02%	10.21%

2

3 **Q. What is your conclusion regarding Mr. Baudino's CAPM analysis?**

4 A. While I recognize that Mr. Baudino places no weight on his CAPM results,
5 reasonable changes to his methodology produce a CAPM result that is at least 83
6 basis points higher than his recommendation of 9.15 percent. For the reasons
7 discussed, Mr. Baudino's CAPM analyses using historical market risk premiums are
8 not appropriate to estimate the forward-looking ROE for KAWC. Considering Mr.
9 Baudino's forward-looking ROE analysis, simply relying on a Constant Growth DCF
10 model that is consistent with methodologies that Mr. Baudino has relied on in prior
11 cases to estimate the market return used in the CAPM results in an ROE of 9.98
12 percent. Considering forward looking estimates of the market return that are
13 published by S&P, Bloomberg and Yahoo! Finance, the range of returns is higher
14 still, supporting a return in the range of 10.00 percent to 10.21 percent.

1 ## C. Expected Earnings Analysis

2 **Q. Please summarize the expected earnings analysis.**

3 A. The expected earnings approach is based on the principle that rates of return available
4 from alternative investments of comparable risk can provide a meaningful
5 comparison to establish what alternative returns are available to investors. This
6 approach is highly consistent with the standards established in the *Hope* and *Bluefield*
7 cases for determining the fairness or reasonableness of a regulated company's
8 allowed ROE. The approach that I developed in my Direct Testimony for the WUPG
9 is based on Value Line's projected ROE for the proxy group companies.

10 **Q. Does Mr. Baudino agree that it is reasonable to consider an expected earnings**
11 **analysis?**

12 A. No, he does not. Mr. Baudino claims that recently allowed ROEs and DCF results
13 using current stock prices are much lower than the expected earnings and therefore
14 investors are more likely to be influenced by this data in determining the expected
15 returns for the companies in the proxy group.[59] Mr. Baudino's DCF results are based
16 on Value Line's projected earnings and dividend growth rates that are intended to
17 reflect the same time period as Value Line's expected earned returns that are used in
18 the expected earnings analysis. Mr. Baudino's suggestion that investors would rely

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[59] Direct Testimony of Richard A. Baudino, at 46.

1 only on Value Line's estimates of growth rates to calculate a DCF result but ignore
2 the return that Value Line's estimates seems inconsistent and insupportable.

3 **Q. Have other regulatory jurisdictions considered expected earnings as a**
4 **reasonable methodology for estimating the ROE?**

5 A. Yes. Various jurisdictions have looked at expected earnings over the years. Recently
6 the FERC issued an Order in October 2018 in response to the remand from the U.S.
7 Court of Appeals for the District of Columbia indicating plans to establish ROEs
8 based on an equal weighting of the results of four financial models: the DCF, CAPM,
9 Expected Earnings and Risk Premium. FERC explains its reasons for moving away
10 from sole reliance on the DCF model as follows:

> 11 Our decision to rely on multiple methodologies in these four complaint
> 12 proceedings is based on our conclusion that the DCF methodology
> 13 may no longer singularly reflect how investors make their decisions.
> 14 We believe that, since we adopted the DCF methodology as our sole
> 15 method for determining utility ROEs in the 1980s, investors have
> 16 increasingly used a diverse set of data sources and models to inform
> 17 their investment decisions. Investors appear to base their decisions on
> 18 numerous data points and models, including the DCF, CAPM, Risk
> 19 Premium, and Expected Earnings methodologies. As demonstrated in
> 20 Figure 2 below, which shows the ROE results from the four models
> 21 over the four test periods at issue in this proceeding, these models do
> 22 not correlate such that the DCF methodology captures the other
> 23 methodologies. In fact, in some instances, their cost of equity
> 24 estimates may move in opposite directions over time. Although we
> 25 recognize the greater administrative burden on parties and the
> 26 Commission to evaluate multiple models, we believe that the DCF
> 27 methodology alone no longer captures how investors view utility
> 28 returns because investors do not rely on the DCF alone and the other

> methods used by investors do not necessarily produce the same results as the DCF. Consequently, it is appropriate for our analysis to consider a combination of the DCF, CAPM, Risk Premium, and Expected Earnings approaches.[60]

Q. Have you calculated the expected earnings analysis for the CUPG?

A. Yes. As shown in Attachment AEB-5-R, I calculated the expected earnings analysis for the CUPG using the Value Line projected earned returns for 2019 and 2021-2023. As shown in that attachment, the median returns for the CUPG proxy group including AWK range from 10.50 percent in 2019 to 11.25 percent for 2021-2023 while the median returns excluding AWK percent range from 10.50 percent in 2019 to 11.50 percent for 2021-2023.

D. Bond Yield Plus Risk Premium Analysis

Q. Did either you or Mr. Baudino perform a Bond Yield Plus Risk Premium analysis?

A. No, we did not. However, as discussed above, the FERC issued an Order in October 2018 indicating plans to establish ROEs based on an equal weighting of the results of four financial models: the DCF, CAPM, Expected Earnings and Risk Premium. Regarding the Risk Premium Analysis, FERC noted the following:

> The risk premium methodology, in which interest rates are also a direct input, is "based on the simple idea that since investors in stocks take greater risk than investors in bonds, the former expect to earn a return on a stock investment that reflects a 'premium' over and above

[60] Federal Energy Regulatory Commission, Docket No. EL 11-66-001, et al., Order Directing Briefs, issued October 16, 2018, at para. 40. [Figure 2 was omitted]

1 the return they expect to earn on a bond investment." As the
2 Commission found in Opinion No. 531, investors' required risk
3 premiums expand with low interest rates and shrink at higher interest
4 rates. The link between interest rates and risk premiums provides a
5 helpful indicator of how investors' required rate of return have been
6 impacted by the interest rate environment.

7 Multiple approaches have been advanced to determine the equity risk
8 premium for a utility. For example, a risk premium can be developed
9 directly, by conducting a risk premium analysis for the company at
10 issue, or indirectly by conducting a risk premium analysis for the
11 market as a whole and then adjusting that result to reflect the risk of
12 the company at issue.129 Another approach for the utility context is to
13 "examin[e] the risk premiums implied in the returns on equity allowed
14 by regulatory commissions for utilities over some past period relative
15 to the contemporaneous level of the long-term U.S. Treasury bond
16 yield."[61]

17 **Q. Have other regulators considered the results of the Bond Yield Plus Risk**
18 **Premium Analysis when determining the authorized ROE?**

19 A. Yes. In its most recent orders for both Minnesota Power (Docket No. E-015/GR-16-
20 664) and Otter Tail Power Company (Docket No. E-017/GR-15-1033), the Minnesota
21 Public Utilities Commission ("MPUC") relied on the results of the Risk Premium
22 analysis in addition to the CAPM to check the reasonableness of the results of the
23 DCF model.[62] In its order for Minnesota Power, the MPUC concluded that:

24 [I}t is appropriate to establish an ROE toward the higher end of the
25 DCF-supported results to adjust for the divergence between ROEs
26 supported by the DCF models and the models the Commission has

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[61] Federal Energy Regulatory Commission, Docket No. EL 11-66-001, et al., Order Directing Briefs at 41-42 (Oct. 16, 2018).

[62] Docket No. E-015/GR-16-664, Findings of Fact, Conclusions, and Order, at 61;(Mar. 12, 2018); Docket No. E-017/GR-15-1033, Findings of Fact, Conclusions, and Order, at 54 (May 1, 2017).

1 historically relied upon for confirmation of reasonableness—the
2 CAPM and Bond Yield Plus Risk Premium models.[63]

3 In Docket No. E-015/GR-16-664 for Minnesota Power, the DCF results presented by
4 the ROE witnesses tended to support an ROE towards the lower end of the range of
5 ROE results, while the CAPM and Risk Premium models tended to support an ROE
6 towards the higher end of the range.[64] The MPUC recognized the divergence
7 between the ROE results produced by the DCF, CAPM and Risk Premium models
8 and approved an ROE toward the higher end of the DCF-supported ROE results.

9 **Q. Have you performed a Bond Yield Plus Risk Premium analysis as part of your**
10 **Rebuttal Testimony?**

11 A. Yes, I developed a risk premium analysis that is based on the natural gas utility
12 sector.

13 **Q. Please describe the Bond Yield Plus Risk Premium approach.**

14 A. In general terms, this approach is based on the fundamental principle that equity
15 investors bear the residual risk associated with equity ownership and therefore require
16 a premium over the return they would have earned as a bondholder. That is, because
17 returns to equity holders have greater risk than returns to bondholders, equity
18 investors must be compensated to bear that risk. Risk premium approaches,
19 therefore, estimate the cost of equity as the sum of the equity risk premium and the

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[63] Docket No. E-015/GR-16-664, Findings of Fact, Conclusions, and Order at 61 (Mar. 12, 2018).
[64] *Id*. at 60.

1 yield on a particular class of bonds. In my analysis, I used actual authorized returns
2 for natural gas utility companies as the historical measure of the cost of equity to
3 determine the risk premium.

4 **Q. Is the Bond Yield Plus Risk Premium analysis relevant to investors?**

5 A Yes. Investors are aware of ROE awards in other jurisdictions, and they consider
6 those awards as a benchmark for a reasonable level of equity returns for utilities of
7 comparable risk operating in other jurisdictions. Furthermore, the FERC has recently
8 included this analysis in its weighting to determine the ROE specifically because
9 investors rely on it. Because my Bond Yield Plus Risk Premium analysis is based on
10 authorized ROEs for utility companies relative to corresponding Treasury yields, it
11 provides relevant information to assess the return expectations of investors.

12 **Q. Why did you conduct this analysis based on the natural gas utility authorized**
13 **ROEs?**

14 A. The data set that is available for the water utilities begins in 2012, which is not a
15 sufficient time period for a time series study such as the Bond Yield Risk Premium
16 analysis. Both Mr. Baudino and I have relied on a proxy group that includes natural
17 gas utilities under the premise that the risks of these two industry segments are
18 sufficiently similar that the results of the ROE estimation methodologies could be
19 used for a water utility. Therefore, I believe it is reasonable and appropriate to rely on
20 this time series analysis of the natural gas utility industry segment.

1 **Q. What did your Bond Yield Plus Risk Premium analysis reveal?**

2 A. As shown in Figure 8 below, from 1992 through February 2019, there was a strong
3 negative relationship between risk premia and interest rates. To estimate that
4 relationship, I conducted a regression analysis using the following equation:

$$RP = a + b(T)$$

5 Where:

6 RP = Risk Premium (difference between allowed ROEs and the yield on 30-
7 year U.S. Treasury bonds)

8 a = intercept term

9 b = slope term

10 T = 30-year U.S. Treasury bond yield

11 Data regarding allowed ROEs were derived from 612 natural gas utility rate cases
12 from 1992 through February 2019 as reported by Regulatory Research Associates
13 ("RRA").[65] This equation's coefficients were statistically significant at the 99.00
14 percent level.

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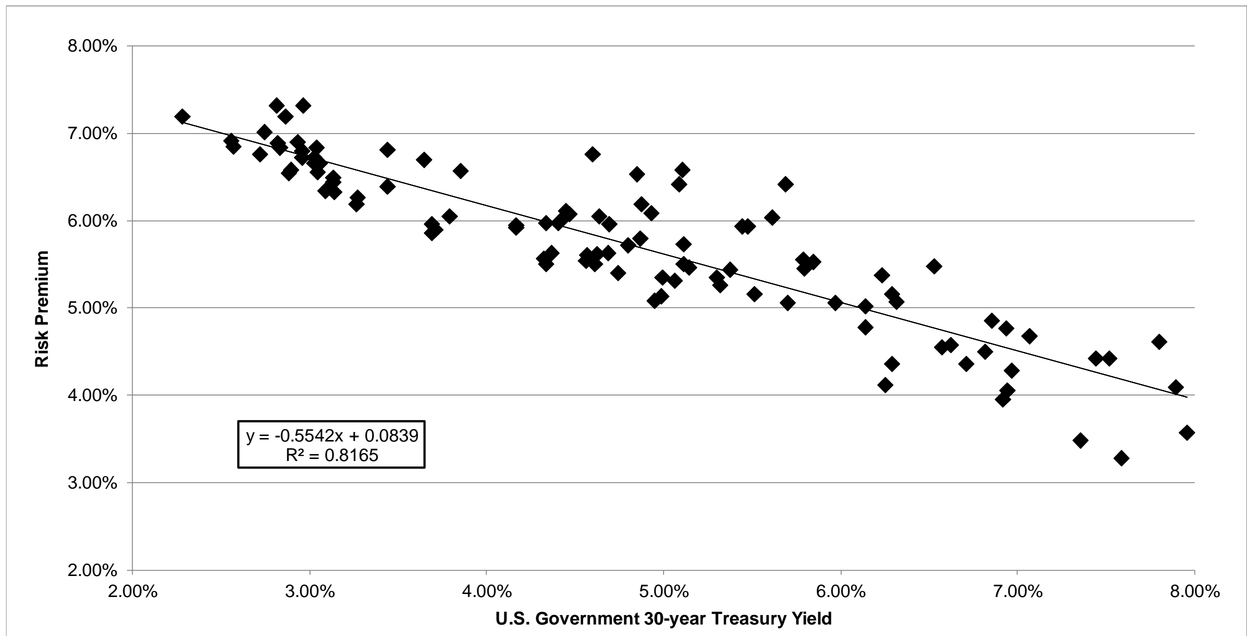
[65] This analysis began with a total of 959 cases and was screened to eliminate limited issue rider cases, transmission-only cases, and cases that were silent with respect to the authorized ROE. After applying those screening criteria, the analysis was based on data for 612 cases.

1 **Figure 8: Risk Premium Results**



2

3 As shown on Attachment AEB-6-R, based on the six month average of the 30-year
4 U.S. Treasury bond yield that Mr. Baudino used in his Direct Testimony[66] (i.e., 3.17
5 percent), the risk premium would be 6.63 percent, resulting in an estimated ROE of
6 9.80 percent. Based on the near-term (Q2 2019 – Q2 2020) projections of the 30-
7 year U.S. Treasury bond yield (i.e., 3.28 percent), the risk premium would be 6.57
8 percent, resulting in an estimated ROE of 9.85 percent. Based on longer-term (2020-
9 2024) projections of the 30-year U.S. Treasury bond yield (i.e., 3.90 percent), the risk
10 premium would be 6.23 percent, resulting in an estimated ROE of 10.13 percent.[67]

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[66] Direct Testimony of Richard A. Baudino, Exhibit___(RAB-7), p. 1.

[67] The time period used for this analysis is market data through February 28, 2019 to be consistent with the analytical time period relied on by Mr. Baudino.

1 **Q. Have you conducted an analysis to determine what the ROE would be if you**
2 **were to follow the FERC methodology?**
3 A. Yes, I have. As shown in Figure 8 below, I applied the FERC averaging convention
4 and weighted equally the updated results to Mr. Baudino's DCF and CAPM results
5 that I have discussed in my Rebuttal Testimony as well as the results of the risk
6 premium and expected earnings analysis. As shown in this figure, the FERC approach
7 results in a range of 9.96 percent to 10.29 percent.

8 **Figure 8: FERC Averaging Convention from October 2018 Order**[68]

Methodology	Median Low	Median High
DCF	9.55%	9.55%
CAPM	9.98%	10.21%
Expected Earnings	10.50%	11.25%
Risk Premium	9.80%	10.13%
Average	**9.96%**	**10.29%**

9

10 **VI. <u>THE EFFECT OF THE TCJA</u>**

11 **Q. Did Mr. Baudino consider the effects of the TCJA on KAWC's ROE?**
12 A. No, he did not. Mr. Baudino suggests that because KAWC does not have a credit
13 rating, it is reasonable to consider that it has a similar rating as the parent company.
14 Mr. Baudino assumes that since the parent company credit rating is within the range

[68] Federal Energy Regulatory Commission, Docket No. EL 11-66-001, et al., Order Directing Briefs, issued October 16, 2018.

1 established by the proxy group, it is not necessary to consider the effect of the TCJA
2 on KAWC's ROE.[69]

3 **Q. Did Mr. Baudino comment on how the rating agencies viewed tax reform for**
4 **AWK, the parent company of KAWC?**

5 A. No, he did not. As discussed in my Direct Testimony, the rating agencies have
6 considered the effect of tax reform on AWK over the past year. As discussed above,
7 Moody's downgraded the outlook for American Water to negative in January 2018
8 along with several other utilities in response to the TCJA. In February 2018,
9 Moody's noted that AWK's credit was constrained in part by the need for significant
10 capex, debt funded growth and the effects of tax reform on financial metrics.[70]

11 In June 2018, S&P noted that AWK's consolidated financial metrics will weaken
12 over the next few years due to tax reform, the loss of bonus depreciation and capital
13 spending.[71] At that same time, Moody's cast that negative outlook across the entire
14 utilities sector followed by several downgrades for utilities related to concerns
15 regarding degrading financial metrics. Moreover, in a January 2019 report, Moody's
16 noted credit challenges for AWK based on increased leverage and cash flow leakage

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[69] Direct Testimony of Richard W. Baudino, at 43.

[70] Moody's Investor Services, American Water Works Company, Inc. Update following negative outlook February 16, 2018.

[71] Standard and Poor's RatingsDirect, "American Water Works Co. Inc. and Subsidiaries 'A' Ratings affirmed; Outlooks Remain Stable," June 11, 2018.

1 resulting from tax reform.[72] Consequently, in an April 2019 report, Moody's
2 downgraded the long-term issuer rating of AWK from A3 to Baa1. Specifically,
3 Moody's noted:

> 4 The financial profile of the company has steadily declined since 2014
> 5 with free cash flow deficits and debt issuance having outpaced cash
> 6 flow growth, as the company took on nearly $6.5 billion of capital
> 7 spending. For example, free cash flow deficits have grown at a
> 8 compound annual growth rate (CAGR) of around 62%, debt has grown
> 9 at over 9% CAGR and FFO at roughly a 6% CAGR. For most of this
> 10 time, the company was benefitting from bonus depreciation, which
> 11 resulted in no cash tax payments. However, 2017 federal tax reform
> 12 undid these benefits, which has also contributed in key ratios
> 13 declining, such as funds from operations (FFO) to net debt dropping
> 14 from 18% in 2014 to 16% in 2018 and retained cash flow (RCF) to net
> 15 debt falling from 15% in 2014 to just above 12% in 2018.[73]

16 **Q. Have any other utilities experienced a downgrade related to cash flow metrics**
17 **resulting from the TCJA?**

18 A. Yes. At the time of the filing of my Direct Testimony, I identified the downgrades to
19 OGE Energy Corp., the Consolidated Edison companies and Southwestern Public
20 Service. Figure 9 summarizes the credit rating downgrades for utilities that I am
21 aware of that have resulted from tax reform. As shown in this figure Moody's has
22 downgraded a total of twelve utility companies as a result of the effects on cash flows
23 of the TCJA. Because of the widespread consequences, this demonstrates the

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[72] Moody's Investors Service, American Water Works Company, Inc. Update to credit analysis, January 4, 2019 at 2.

[73] Moody's Investors Service, American Water Works Company, Inc. Rating Action: Moody's downgrades American Water and American Water Capital Corp. to Baa1 from A3; outlooks stable, April 1, 2019.

1 importance of considering the effect of tax reform on the ROE and capital structure of

2 KAWC in this proceeding.

3 **Figure 9: Credit Rating Downgrades Resulting from TCJA**

Utility	Rating Agency	Credit Rating before TCJA	Credit Rating after TCJA	Downgrade Date
American Water Works	Moody's	A3	Baa1	4/1/2019
KeySpan Gas East Corporation (KEDLI)	Moody's	A2	A3	3/29/2019
Xcel Energy	Moody's	A3	Baa1	3/28/2019
ALLETE, Inc.	Moody's	A3	Baa1	3/26/2019
Brooklyn Union Gas Company (KEDNY)	Moody's	A2	A3	2/22/2019
Avista Corp.	Moody's	Baa1	Baa2	12/30/2018
Consolidated Edison Company of New York	Moody's	A2	A3	10/30/2018
Consolidated Edison, Inc.	Moody's	A3	Baa1	10/30/2018
Orange and Rockland Utilities	Moody's	A3	Baa1	10/30/2018
Southwestern Public Service Company	Moody's	Baa1	Baa2	10/19/2018
Dominion Energy Gas Holdings	Moody's	A2	A3	9/20/2018
Piedmont Natural Gas Company, Inc.	Moody's	A2	A3	8/1/2018
WEC Energy Group, Inc.	Moody's	A3	Baa1	7/12/2018
Integrys Holdings Inc.	Moody's	A3	Baa1	7/12/2018
OGE Energy Corp.	Moody's	A3	Baa1	7/5/2018
Oklahoma Gas & Electric Company	Moody's	A1	A2	7/5/2018

4

5 **Q. What are the effects of the TCJA on utility cash flows?**

6 A. The change in the Federal income tax rate from 35 percent to 21 percent affects the

7 company's current collection of taxes as well as the accumulated deferred income tax

8 ("ADIT") allowances that have been collected from customers and held for future tax

9 liabilities. The reduction of the future tax liabilities created an excess ADIT

10 ("EADIT"). In addition, the TCJA eliminated bonus depreciation, which results in

11 lower overall depreciation in the early years of an asset being placed into service,

12 again reducing cash flow. The rating agencies have recognized the negative effects

1 of tax reform on the cash flow metrics of utilities and have recommended
2 constructive regulatory treatment that will stabilize utility cash flow metrics. Moody's
3 specifically identified increasing the equity ratio or the ROE for utilities in order to
4 address cash flow concerns. In addition, Moody's recognizes capital cost recovery
5 mechanisms as positive regulatory treatment to improve utility cash flow.

6 **Q. What are your conclusions regarding the effect of the TCJA on KAWC's ROE?**

7 A. The credit rating agencies have identified the TCJA as credit negative due to the
8 increase to the financial risk of the utilities sector and AWK, specifically. While the
9 rating agencies have identified this concern, they have also provided reasonable
10 approaches for addressing the risk of reduced cash flow coverage ratios. Those
11 remedies include increased equity ratios or higher ROEs. KAWC has proposed an
12 equity ratio that is conservative relative to the proxy group companies. Therefore, a
13 higher ROE would be necessary to compensate for the increased risk associated with
14 greater leverage and to address the cash flow concerns that the rating agencies have
15 specifically noted for the parent company of KAWC.

16 **Q. What are the implications of the AG and LFUGC's proposals on cash flow**
17 **metrics and discretionary capital for KAWC?**

18 A. The combination of the recommendations made by Messrs. Baudino and Kollen, if
19 adopted, will weaken the cash flow coverage ratios of KAWC and will likely reduce
20 the allocation of discretionary capital to this operating subsidiary. Mr. Baudino
21 proposes to accept the KAWC equity ratio of 48.654 percent, which is conservative in

comparison to the equity ratios of the proxy group operating companies and the other operating subsidiaries of AWK. However, Mr. Baudino proposed that this above average leverage be coupled with an ROE that is at the lowest end of recently authorized ROEs and the ROEs of the AWK operating subsidiaries. The result of this is an equity rate that is in the bottom quartile of the AWK operating companies. Finally, his recommendation to reject the QIP proposed by AWK further reduces the Company's cash flow metrics. Mr. Kollen's proposal to amortize the unprotected state and federal EADIT amounts over a three-year period further reduces the company's cash flow by approximately $3 million per year. Each of these proposals individually is the exact opposite of what the rating agencies suggested as approaches for addressing the reduced cash flow metrics resulting from the TCJA. Taken together, the effects of these proposals will serve to weaken KAWC's cash flow metrics and will certainly affect the subsidiary's ability to attract discretionary capital. Therefore, it is reasonable to expect that these recommendations would be viewed as credit negative.

VII. QIP

Q. Please summarize Mr. Baudino's position regarding the Company's proposed QIP.

A. Mr. Baudino recommends that the QIP be rejected by the Commission. As support for his recommendation Mr. Baudino suggests that the Company has earned more than the last Commission authorized ROE of 9.70 percent in 2017 and much of

1 2018.[74] He suggests that this demonstrates that KAWC has been able to provide
2 reliable service to customers without diminished rates of return from ongoing system
3 investments. Furthermore, Mr. Baudino suggests that the return on common equity
4 for QIP-eligible plant be reduced by 1.00 percent.[75]

5 **Q. How do you respond to Mr. Baudino on this issue?**

6 A. It is interesting that Mr. Baudino suggests that KAWC was able to earn greater than
7 the Commission's most recently authorized rate of return for "much of 2018". First,
8 it is important to note that the last Commission authorized ROE in a litigated
9 proceeding was in an Order dated October 25, 2013. Since that time, the Company
10 and intervening parties agreed to the terms of a settlement in a subsequent rate
11 proceeding where the ROE was not specified. Therefore, the return that was
12 established in 2013 is not a meaningful comparison point. Furthermore, Table 6 of
13 Mr. Baudino's testimony is a summary of the annual returns that were provided by
14 the Company in response to AG1-55. The data in that response was provided on an
15 annual basis. Furthermore, the supplemental response to AG1-55 demonstrates that
16 the earned return on equity in 2018 for KAWC was 9.58 percent. Using annual data,
17 there is no basis for Mr. Baudino to conclude that KAWC earned its Commission
18 authorized ROE for "much of 2018". The only logical conclusion from the individual
19 data point that was provided is that KAWC underearned that return in 2018.

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[74] Direct Testimony of Richard A. Baudino, at 52.
[75] Direct Testimony of Richard A. Baudino, at 60.

1 Therefore, if one were to assume the 9.70 percent were to be considered a valid ROE,
2 as Mr. Baudino has done, the correct conclusion would be that KAWC's ability to
3 earn the authorized ROE has been eroded in 2018.

4 **Q. Does Mr. Baudino provide additional support for his statement that KAWC has**
5 **earned greater than the Commission authorized return?**

6 A. While Mr. Baudino provides the Company's response to Staff 2-92, the response to
7 this data request does not support Mr. Baudino's conclusion that the Company has
8 earned more than its authorized ROE for much of 2018. As shown in that exhibit, the
9 Company has provided the 12-month rolling average earned return for KAWC for the
10 period from January 2017 through December 2018. As noted in the response,
11 beginning in September 2017 the earned return was significantly affected by a one-
12 time land sale that was booked in that month, increasing the earned return by more
13 than 200 basis points.

14 **Q. What is your conclusion regarding Mr. Baudino's proposed reduction to the**
15 **ROE for QIP eligible plant investments?**

16 A. Mr. Baudino's proposed reduction of the ROE by 1.00 percent for QIP eligible
17 investments is arbitrary, inconsistent with the *Hope* and *Bluefield* standards, and
18 should be rejected. Mr. Baudino provides no analysis to support a reduction of this
19 magnitude. The recommended ROE reduction appears to be entirely subjective, with
20 no analysis to support this proposal. As Mr. Baudino recognizes, the development of
21 the appropriate return on equity is guided by the principles established in *Hope*

1 including comparability. Therefore, it is not sufficient to demonstrate that an
2 investment that the subject company makes has less risk with the QIP than without it.
3 The appropriate point of comparison is whether or not the Company has less risk than
4 the proxy group companies. Mr. Baudino has not conducted any analysis to
5 determine if the QIP results in a lower overall risk profile for KAWC's investments
6 than the risk exposure of the proxy companies. Therefore, the recommendation that
7 these investments receive a lower return, by any amount, is unsubstantiated.

8 **Q. Have you conducted any analysis of the operating companies of the proxy group**
9 **to determine if these companies have implemented similar programs to the**
10 **Company's proposed QIP?**

11 A. Yes, I have. As shown in Attachment AEB-11, I reviewed the infrastructure
12 replacement surcharges as well as the future test year and decoupling mechanisms
13 that have been implemented by the proxy companies. That attachment demonstrates
14 that the proxy group companies have mechanisms similar to the QIP in approximately
15 63 percent of the jurisdictions that they operate in. Therefore, if the Company's
16 request to implement a QIP were granted, its risk profile would simply be consistent
17 with the risk profiles of the proxy group companies. On the other hand, were it to be
18 rejected, KAWC would continue to have a higher risk profile, which would support
19 an ROE that is greater than the average for the proxy group.

1 **Q. Have the rating agencies commented on the importance of capital tracking**
2 **programs?**
3 A. Yes. In the recent downgrade of AWK, the parent company of KAWC, Moody's
4 noted that the capital trackers provide more certainty in cost recovery and reduce
5 regulatory lag, which contributed positively to the company's stable outlook.
6 Furthermore, Moody's noted that these types of cost recovery trackers are seen as a
7 qualitative benefit for the company.[76] Moreover, Mr. Baudino in his Direct
8 Testimony[77] cites to the Moody's report from January 4, 2019 and includes a quote
9 from the report on the three factors that support the credit profile of AWK with one of
10 the factors being "improving regulatory support as more states adopt cost recovery
11 trackers".[78]

12 **Q. What is your conclusion on the relative risk of KAWC if the QIP is**
13 **implemented?**
14 A. Based on my review of the infrastructure replacement mechanisms that have been
15 implemented by the proxy companies, I conclude that the proxy group companies
16 have similar risk-mitigating mechanisms in place in the majority of the operating
17 subsidiaries. Because the KAWC investments that would be made under the QIP do
18 not have a lower overall risk than the proxy group, I do not believe that there is any

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[76] Rating Action: Moody's downgrades American Water and American Water Capital Corp. to Baa1 from A3; outlook stable. April 1, 2019.
[77] Direct Testimony of Richard A. Baudino, at 14.
[78] Moody's Investors Service, American Water Works Company, Inc. Update to credit analysis, January 4, 2019 at 1.

1 basis for an adjustment to the ROE on these investments. Furthermore, the rating
2 agencies clearly view the tracking mechanisms as providing necessary stability to the
3 financial metrics of the company. Therefore, if the QIP were to be rejected, it is
4 likely that KAWC would be perceived as having greater risk than the proxy group
5 companies and the AWK operating subsidiaries that have implemented these
6 programs.

7 ## VIII. SUMMARY AND CONCLUSIONS

8 **Q. Please summarize your conclusions and recommendations.**

9 A. I continue to support the analyses and recommendation contained in my Direct
10 Testimony. Specifically, the range of reasonable ROE results for the proxy group
11 companies is between 10.00 percent and 10.80 percent, and it is reasonable to place
12 the cost of equity for KAWC towards the higher end of that range. My recommended
13 range is supported by the analyses filed in my Direct Testimony as well as the range
14 of results from the analyses presented in Mr. Baudino's testimony.

15 Consistent with the recent conclusions of other regulators, my recommendation takes
16 into consideration both the results of the DCF model and risk premium
17 methodologies, specifically the forward-looking CAPM. In addition, my
18 recommendation considers other factors in determining the appropriate ROE,
19 including company-specific risk factors faced by KAWC as compared with the proxy
20 group and the capital investment requirements for the Company.

1 Finally, it is important to consider the overall effect of the authorized return, the
2 equity ratio and the recovery mechanisms when considering how the credit rating
3 agencies and investors will view the results of the rate case. At a time when the
4 rating agencies have identified the need for constructive regulation that focuses
5 regulatory policy on supporting the cash flow metrics of the utilities, Messrs. Baudino
6 and Kollen recommend that the Commission impose unconstructive regulatory
7 policies on KAWC, all of which would weaken the cash flow metrics of the
8 Company, increasing its risk. The combination of a below market ROE, a
9 conservative equity ratio, either the rejection of the QIP, or a further reduced ROE for
10 the QIP and accelerated amortization of EADIT would have a significant negative
11 effect on KAWC's cash flow metrics and would be viewed as credit negative by the
12 rating agencies. In addition, the implementation of these regulatory policies would
13 likely make it more difficult for KAWC to attract discretionary capital from the
14 parent company, as the Company would be competing with affiliates that have both
15 more attractive equity returns and more supportive regulatory policies.

16 In contrast, the Company's proposal is structured to be responsive to the concerns
17 noted by the rating agencies. The combination of the proposed ROE and equity ratio
18 will provide stability to cash flow metrics. In addition, the QIP enhances the
19 favorable regulatory treatment that Moody's highlights as a credit strength despite the
20 negative cash flow concerns resulting from the TCJA. Finally, the Company's
21 proposed amortization of the unprotected EADIT over the life of the assets returns
22 EADIT to customers consistent with intergenerational equities while preserving cash

1 flow metrics in the short term. The Company's proposal is consistent with the capital
2 attraction standards and is responsive to the rating agencies' concerns regarding the
3 reduction of cash flow coverage for utilities resulting from the TCJA.

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

5 A. Yes, it does.

VERIFICATION

STATE OF MASSACHUSETTS	)	
	)	**SS:**
COUNTY OF MIDDLESEX	)	

The undersigned, **Ann E. Bulkley**, being duly sworn, deposes and says she is a Senior Vice President with Concentric Energy Advisors, Inc., that she has personal knowledge of the matters set forth in the foregoing testimony, and the answers contained therein are true and correct to the best of her information, knowledge, and belief.

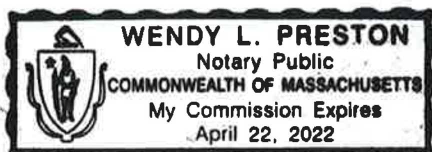
ANN E. BULKLEY

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 25 day of April, 2019.

Notary Public

My Commission Expires:

____



MR. BAUDINO ADJUSTED CONSTANT GROWTH DCF - COMBINED UTILITY PROXY GROUP

	[1]	[2]	[3]	[4]
	Value Line Earnings Growth	Zack's Earnings Growth	Yahoo! Earnings Growth	Average of All Growth Rates
Method 2:				
Dividend Yield [5]	2.38%	2.38%	2.38%	2.38%
Growth Rate [6]	9.00%	6.25%	6.00%	7.08%
Expected Dividend Yield [7]	2.49%	2.46%	2.45%	2.47%
DCF Return on Equity [8]	11.49%	8.71%	8.45%	9.55%

Notes:

[1] Source: Exhibit ___ (RAB-6), Page 1
[2] Source: Exhibit ___ (RAB-6), Page 1
[3] Source: Exhibit ___ (RAB-6), Page 1
[4] Average ([1], [2], [3])
[5] Source: Exhibit ___ (RAB-5), Page 2
[6] See Notes [1], [2], [3], and [4]
[7] Equals [5] x (1 + 0.50 x [6])
[8] Equals [6] + [7]

MR. BAUDINO ADJUSTED CAPM - COMBINED UTILITY PROXY GROUP

Line No.		Value Line Dividend Yield	Standard and Poor's Dividend Yield
1	Median Earnings Growth Rate	12.00%	12.00%
2	Dividend Yield	1.02%	1.97%
3	Market Required Return Estimate	13.08%	14.09%
	(Line 2 * (1 plus 0.5 * Line 1) + Line 1)		
4	Risk-free Rate of Return, 30-Year Treasury Bond		
5	Average of Last Six Months	3.17%	3.17%
6	Risk Premium		
7	(Line 3 minus Line 5)	9.91%	10.92%
8	Proxy Group Beta	0.69	0.69
9	Proxy Group Beta * Risk Premium		
10	(Line 7 * Line 8)	6.82%	7.51%
11	CAPM Return on Equity		
12	(Line 10 plus Line 5)	9.98%	10.68%

ESTIMATED TOTAL MARKET RETURNS - S&P 500

Source	Estimate Date	Dividend Yield	Growth Estimate	S&P 500 Return
Bloomberg Professional	February 28, 2019	1.97%	10.55%	12.63%
Yahoo! Finance	February 28, 2019	1.97%	11.00%	13.08%
Standard and Poor's	February 28, 2019	1.97%	12.33%	14.42%

Notes:
[1] Bloomberg and Yahoo! Finance do not report a dividend yield for the S&P 500; therefore, the most recent 12 month average dividend yield as of February 2019 reported in the February 28, 2019 S&P 500 Earnings and Estimate Report was used to calculate the total return.

MR. BAUDINO'S CAPM ANALYSIS - ALTERNATIVE ESTIMATES OF THE MARKET RETURN & PROJECTED INTEREST RATES
COMBINED UTILITY PROXY GROUP

$$K = Rf + \beta (Rm - Rf)$$

	[4]	[5]	[6]	[7]	[8]
	Risk-Free Rate (R_f)	Beta (β)	Market Return (R_m)	Market Risk Premium ($R_m - R_f$)	ROE (K)
S&P Estimate of the Market Return					
Six month average of 30-year U.S. Treasury bond yield [1]	3.17%	0.69	14.42%	11.25%	10.91%
Near-term projected 30-year U.S. Treasury bond yield (Q2 2019 - Q2 2020) [2]	3.28%	0.69	14.42%	11.14%	10.94%
Projected 30-year U.S. Treasury bond yield (2020 - 2024) [3]	3.90%	0.69	14.42%	10.52%	11.13%
Average					10.99%
Bloomberg Estimate of the Market Return					
Six month average of 30-year U.S. Treasury bond yield [1]	3.17%	0.69	12.63%	9.46%	9.67%
Near-term projected 30-year U.S. Treasury bond yield (Q2 2019 - Q2 2020) [2]	3.28%	0.69	12.63%	9.35%	9.70%
Projected 30-year U.S. Treasury bond yield (2020 - 2024) [3]	3.90%	0.69	12.63%	8.73%	9.90%
Average					9.76%
Yahoo! Finance Estimate of the Market Return					
Six month average of 30-year U.S. Treasury bond yield [1]	3.17%	0.69	13.08%	9.91%	9.98%
Near-term projected 30-year U.S. Treasury bond yield (Q2 2019 - Q2 2020) [2]	3.28%	0.69	13.08%	9.80%	10.02%
Projected 30-year U.S. Treasury bond yield (2020 - 2024) [3]	3.90%	0.69	13.08%	9.18%	10.21%
Average					10.07%
Median CAPM Results					
Six month average of 30-year U.S. Treasury bond yield [1]					9.98%
Near-term projected 30-year U.S. Treasury bond yield (Q2 2019 - Q2 2020) [2]					10.02%
Projected 30-year U.S. Treasury bond yield (2020 - 2024) [3]					10.21%

Notes:
[1] Source: Exhibit ___ (RAB-7), Page 2
[2] Source: Blue Chip Financial Forecasts, Vol. 38, No. 3, March 1, 2019, at 2
[3] Source: Blue Chip Financial Forecasts, Vol. 37, No. 12, December 1, 2018, at 14
[4] See Notes [1], [2], and [3]
[5] Source: Exhibit ___ (RAB-7), Page 2
[6] Source: Attachment AEB-3-R
[7] Equals [6] − [4]
[8] Equals [4] + [5] x [7]

VALUE LINE ROE PROJECTIONS -- COMBINED UTILITY PROXY GROUP

Company	Ticker	2019	2021-2023
American States Water Co	AWR	13.00%	14.00%
American Water	AWK	10.50%	10.50%
Atmos Energy Corporation	ATO	9.50%	10.00%
California Water Service Group	CWT	11.00%	11.50%
Middlesex Water Company	MSEX	13.00%	13.00%
New Jersey Resources Corporation	NJR	11.50%	11.00%
Northwest Natural Gas Company	NWN	9.00%	12.00%
ONE Gas, Inc.	OGS	8.50%	10.00%
South Jersey Industries, Inc.	SJI	10.50%	12.00%
Southwest Gas Corporation	SWX	9.00%	9.50%
Spire, Inc.	SR	8.50%	10.50%
York Water Company	YORW	10.50%	13.50%
	Median	10.50%	11.25%
	Median excl AWK	10.50%	11.50%

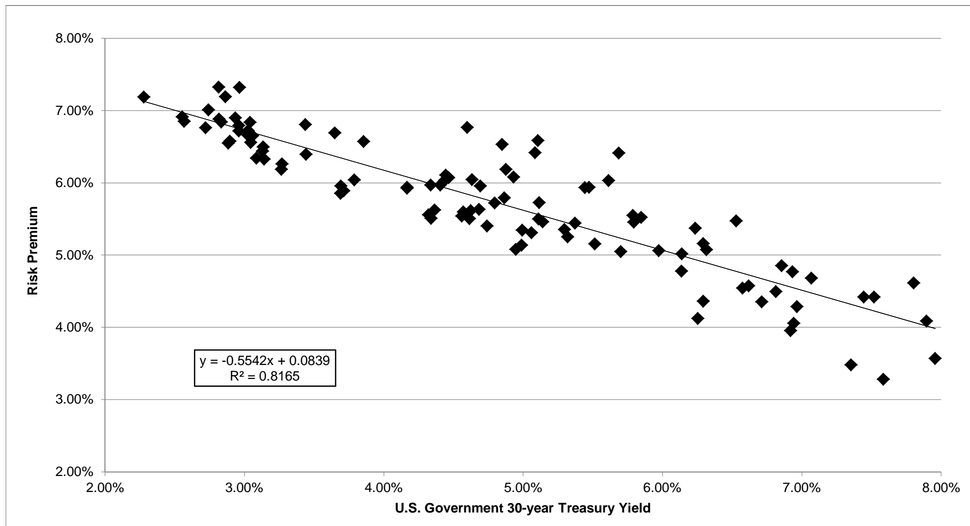
Notes:
[1] Source: Value Line Reports; dated January 11, 2019, and March 1, 2019
[2] The Value Line ROE projections for the Natural Gas Companies are for 2020 and 2022-2024.

BOND YIELD PLUS RISK PREMIUM

	[1]	[2]	[3]
	Average Authorized Gas ROE	U.S. Govt. 30-year Treasury	Risk Premium
1992.1	12.42%	7.80%	4.62%
1992.2	11.98%	7.89%	4.09%
1992.3	11.87%	7.45%	4.42%
1992.4	11.94%	7.52%	4.42%
1993.1	11.75%	7.07%	4.68%
1993.2	11.71%	6.86%	4.85%
1993.3	11.39%	6.31%	5.07%
1993.4	11.16%	6.14%	5.02%
1994.1	11.12%	6.57%	4.55%
1994.2	10.84%	7.35%	3.48%
1994.3	10.87%	7.58%	3.28%
1994.4	11.53%	7.96%	3.57%
1995.2	11.00%	6.94%	4.06%
1995.3	11.07%	6.71%	4.35%
1995.4	11.61%	6.23%	5.37%
1996.1	11.45%	6.29%	5.16%
1996.2	10.88%	6.92%	3.96%
1996.3	11.25%	6.96%	4.29%
1996.4	11.19%	6.62%	4.58%
1997.1	11.31%	6.81%	4.49%
1997.2	11.70%	6.93%	4.77%
1997.3	12.00%	6.53%	5.47%
1997.4	10.92%	6.14%	4.78%
1998.2	11.37%	5.85%	5.52%
1998.3	11.41%	5.47%	5.94%
1998.4	11.69%	5.10%	6.59%
1999.1	10.82%	5.37%	5.44%
1999.2	11.25%	5.79%	5.46%
1999.4	10.38%	6.25%	4.12%
2000.1	10.66%	6.29%	4.36%
2000.2	11.03%	5.97%	5.06%
2000.3	11.33%	5.79%	5.55%
2000.4	12.10%	5.69%	6.41%
2001.1	11.38%	5.44%	5.93%
2001.2	10.75%	5.70%	5.05%
2001.4	10.65%	5.30%	5.35%
2002.1	10.67%	5.51%	5.15%
2002.2	11.64%	5.61%	6.03%
2002.3	11.50%	5.08%	6.42%
2002.4	11.01%	4.93%	6.08%
2003.1	11.38%	4.85%	6.53%
2003.2	11.36%	4.60%	6.76%
2003.3	10.61%	5.11%	5.50%
2003.4	10.84%	5.11%	5.73%
2004.1	11.06%	4.88%	6.18%
2004.2	10.57%	5.32%	5.25%
2004.3	10.37%	5.06%	5.31%
2004.4	10.66%	4.86%	5.79%
2005.1	10.65%	4.69%	5.96%
2005.2	10.54%	4.47%	6.07%
2005.3	10.47%	4.44%	6.03%
2005.4	10.32%	4.68%	5.63%
2006.1	10.68%	4.63%	6.05%
2006.2	10.60%	5.14%	5.46%
2006.3	10.34%	4.99%	5.34%
2006.4	10.14%	4.74%	5.40%
2007.1	10.52%	4.80%	5.72%
2007.2	10.13%	4.99%	5.14%
2007.3	10.03%	4.95%	5.08%
2007.4	10.12%	4.61%	5.50%
2008.1	10.38%	4.41%	5.97%
2008.2	10.17%	4.57%	5.60%
2008.3	10.55%	4.44%	6.11%
2008.4	10.34%	3.65%	6.69%
2009.1	10.24%	3.44%	6.81%
2009.2	10.11%	4.17%	5.94%
2009.3	9.88%	4.32%	5.56%
2009.4	10.31%	4.34%	5.97%
2010.1	10.24%	4.62%	5.61%
2010.2	9.99%	4.36%	5.62%

BOND YIELD PLUS RISK PREMIUM

	[1]	[2]	[3]
	Average Authorized Gas ROE	U.S. Govt. 30-year Treasury	Risk Premium
2010.3	10.43%	3.86%	6.57%
2010.4	10.09%	4.17%	5.93%
2011.1	10.10%	4.56%	5.54%
2011.2	9.85%	4.34%	5.51%
2011.3	9.65%	3.69%	5.96%
2011.4	9.88%	3.04%	6.84%
2012.1	9.63%	3.14%	6.50%
2012.2	9.83%	2.93%	6.90%
2012.3	9.75%	2.74%	7.01%
2012.4	10.06%	2.86%	7.19%
2013.1	9.57%	3.13%	6.44%
2013.2	9.47%	3.14%	6.33%
2013.3	9.60%	3.71%	5.89%
2013.4	9.83%	3.79%	6.04%
2014.1	9.54%	3.69%	5.85%
2014.2	9.84%	3.44%	6.39%
2014.3	9.45%	3.26%	6.19%
2014.4	10.28%	2.96%	7.32%
2015.1	9.47%	2.55%	6.91%
2015.2	9.43%	2.88%	6.55%
2015.3	9.75%	2.96%	6.79%
2015.4	9.68%	2.96%	6.72%
2016.1	9.48%	2.72%	6.76%
2016.2	9.42%	2.57%	6.85%
2016.3	9.47%	2.28%	7.19%
2016.4	9.67%	2.83%	6.84%
2017.1	9.60%	3.04%	6.56%
2017.2	9.47%	2.90%	6.58%
2017.3	10.14%	2.82%	7.32%
2017.4	9.70%	2.82%	6.88%
2018.1	9.68%	3.02%	6.66%
2018.2	9.43%	3.09%	6.34%
2018.3	9.71%	3.06%	6.65%
2018.4	9.53%	3.27%	6.26%
2019.1	9.75%	3.03%	6.72%
AVERAGE	10.54%	4.81%	5.72%
MEDIAN	10.47%	4.74%	5.85%



SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.903583
R Square	0.816462
Adjusted R Square	0.814680
Standard Error	0.003943
Observations	105

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	0.007125	0.007125	458.192438	0.000000
Residual	103	0.001602	0.000016		
Total	104	0.008727			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	0.0839	0.001304	64.36	0.000000	0.081327	0.086498	0.081327	0.086498
U.S. Govt. 30-year Treasury	(0.5542)	0.025890	(21.41)	0.000000	(0.605534)	(0.502840)	(0.605534)	(0.502840)

	[7]	[8]	[9]
	U.S. Govt. 30-year Treasury	Risk Premium	ROE
Current Six Month Average [4]	3.17%	6.63%	9.80%
Blue Chip Consensus Forecast (Q2 2019 - Q2 2020) [5]	3.28%	6.57%	9.85%
Blue Chip Consensus Forecast (2020-2024) [6]	3.90%	6.23%	10.13%
AVERAGE			9.93%

Notes:
[1] Source: Regulatory Research Associates, accessed March 25, 2019
[2] Source: Bloomberg Professional, quarterly bond yields are the average of each trading day in the quarter
[3] Equals Column [1] − Column [2]
[4] Source: Exhibit ___ (RAB-7), Page 2
[5] Source: Blue Chip Financial Forecasts, Vol. 38, No. 3, March 1, 2019, at 2
[6] Source: Blue Chip Financial Forecasts, Vol. 37, No. 12, December 1, 2018, at 14
[7] See notes [4], [5] & [6]
[8] Equals 0.083913 + (-0.554187 x Column [7])
[9] Equals Column [7] + Column [8]

American Water Company Authorized Weighted Cost of Equity by State

Company		Effective Date	Authorized Return on Equity	Authorized Equity Ratio	Authorized Weighted Average Cost of Equity
Michigan-American Water		5/14/2018	10.25%	61.40%	6.29%
Pennsylvania-American Water		1/1/2018	10.00%	53.75%	5.38%
Missouri-American Water		5/28/2018	10.00%	52.79%	5.28%
New Jersey-American Water		10/29/2018	9.60%	54.00%	5.18%
California-American Water		1/1/2018	9.20%	55.39%	5.10%
Iowa-American Water		3/24/2017	9.60%	52.04%	5.00%
Indiana-American Water	(4)	1/29/2015	9.75%	50.01%	4.88%
Illinois-American Water	(1)	1/1/2017	9.79%	49.80%	4.87%
Maryland-American Water		2/5/2019	9.90%	48.66%	4.82%
West Virginia-American Water	(1)	2/25/2019	9.75%	48.40%	4.72%
Kentucky-American Water	(1)				
Hawaii-American Water		12/5/2011	10.20%	41.93%	4.28%
Virginia-American Water	(1) (2)	4/1/2016	9.25%	46.09%	4.26%
New York-American Water	(2)	6/1/2017	9.10%	46.00%	4.19%
Tennessee-American Water	(1)(3)	11/1/2012	10.00%	34.38%	3.44%
Mean					4.83%
1st Quartile					4.39%
Baudino Proposal			9.15%	48.65%	4.45%

(1) IL, VA, KY, WV, TN include short term debt in the Capital Structure
(2) NY, and VA have Consolidated Capital Structure
(3) TN capital structure includes a double leverage adjustment
(4) IN includes deferred Taxes in the capital structure, for comparisons purposes it was removed

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF:	)	
	)	
THE APPLICATION OF KENTUCKY-AMERICAN WATER COMPANY FOR AN ADJUSTMENT OF RATES	)	**CASE NO. 2018-00358**
	)	

REBUTTAL TESTIMONY OF KURT M. KOGLER

April 30, 2019

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

2 A. My name is Kurt M. Kogler and my business address is 2300 Richmond Road,
3 Lexington, Kentucky 40502.

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

7 A. Yes. I filed direct testimony on November 28, 2018.

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

9 A. The purpose of my rebuttal testimony is to respond to that portion of Attorney
10 General/Lexington-Fayette Urban County Government witness Lane Kollen's direct
11 testimony recommending disallowance of certain retirement plan benefits and of all the
12 Company's performance pay expenses.

13 **<u>Retirement Plan Benefits</u>**

14 **Q. Please summarize Mr. Kollen's recommendation regarding certain retirement plan**
15 **benefits.**

16 A. Mr. Kollen recommends that the Company not be permitted to recover the costs of the
17 401(k) plan match for employees who also participate in the Company's defined benefit
18 plan. He relies on the Commission's decision in other rate cases that disallow matching
19 401(k) contributions for employees eligible for defined retirement plan benefits.

1 **Q. Does the fact that some employees remaining in defined benefit plans are eligible for**
2 **401(k) matching contributions automatically mandate disallowance of those benefits**
3 **as Mr. Kollen alleges?**

4 A. No. In a recently decided case involving Duke Energy Kentucky, Inc., the Commission
5 addressed this matter directly and rejected such a disallowance based on a demonstration
6 by Duke Energy that it had taken steps to manage retirement benefits costs:

> 7 Duke Kentucky argues that it has significantly reduced retirement-related
> 8 expenses by transitioning many employees eligible for pension benefits
> 9 from a DDB [defined dollar benefit] plan to a less rich formula and
> 10 partially utilizing those pension savings to enhance DC 401 (k) matching
> 11 formulas. Duke Kentucky states that it has aggressively managed costs
> 12 related to its retirement benefits program by closing the DDB pension
> 13 plans to new hires, and, for existing employees, lock and freezing final
> 14 average pay benefit formulas for all non-union employees and
> 15 transitioning those employees from a final average pay formula to a more
> 16 "Defined Contribution like" cash balance benefit
> 17 formula. Lastly, Duke Kentucky asserts that its benefits packages,
> 18 including retirement programs, as a whole are designed to be market
> 19 competitive and are benchmarked to ensure that is the case.[1]

20
21 The Commission then concluded "that Duke Kentucky's retirement plan expense should
22 be accepted as proposed."[2]

23
24 **Q. Does the Duke Energy resolution support Kentucky-American's full cost recovery**
25 **for retirement plan benefit expenses?**

26 A. Yes, it does. The Company has actively managed compensation and benefit costs for all
27 employees. The Company's retirement plans are one component of an employee's overall

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[1] *In the Matter of:* *Elec. Application of Duke Energy Kentucky, Inc. for: 1) an Adj. of the Electric Rates; 2) Approval of an Envtl. Compliance Plan and Surcharge Mechanism; 3) Approval of New Tariffs; 4) Approval of Accounting Practices to Establish Regulatory Assets and Liabilities; and 5) All Other Required Approvals and Relie*f, Case No. 2017-00321, April 13, 2018 Order, pp. 22-23.

[2] *Id.*

compensation. Throughout the past two decades, the Company has modified retirement benefits to control costs, including closing the defined benefit plan to new hires in 2006, and eliminating the availability of retiree medical benefits for non-union new hires in 2002 and union new hires in 2006. The Company also has, and continues to, mitigate cost increases to group insurance costs. The Company regularly compares benefit offerings to the market and strives to provide competitive and cost reasonable benefits. My direct testimony as well as testimony from Robert V. Mustich and Timothy J. Willig describe the reasonableness and competitiveness of the Company's overall compensation and benefits. In other words, all of the compensation and benefits, including the retirement benefits that Mr. Kollen contests, are reasonable and well within the median paid to similarly situated employees of other utilities and businesses.

Q. What actions has Kentucky-American taken to manage retirement plan costs similar to Duke Energy (Case No. 2017-00321)?

A. The Company's retirement benefits underwent a significant change in 2006 when a defined contribution (401(k)) plan replaced the defined benefit plan for employees hired after January 1, 2006. This froze the number of participants in the defined benefit plan. In 2014, no longer active, but vested, participants throughout American Water had a limited time opportunity to accept a lump sum distribution in lieu of their retirement annuity under the plan. In 2019, a lump sum benefit option was introduced into the defined benefit plan for remaining plan participants. Administratively, the lump sum payment option reduces plan expenses and employer risk. For example, for each employee that takes the lump sum option, the Company avoids incurring the expense

1 associated with the Pension Benefit Guarantee Corporation annual premium associated
2 with each plan participant.

3 **Q. How else is Kentucky-American managing its retirement benefits?**

4 A. In addition to freezing the availability of retiree medical benefits noted above, the
5 Company has also shifted to a fixed cost model for providing retiree medical benefits to
6 eligible employees. The Company has capped its pre-65 retiree medical coverage cost at
7 the fixed 2018 level for each employee, and shifted its post-65 retiree medical coverage
8 from a self-funded program to a fixed dollar amount whereby employees can use the
9 benefit to purchase their own health coverage on the Medicare Supplemental Exchange.
10 Based on recent actuarial projections, the Company estimates that this shift to fixed
11 retiree medical costs has reduced American Water's overall long-term obligation by
12 $211.9 million and its annual 2018 expense by $33.5 million.

13 **Q. What other steps is the Company taking to manage its benefit costs generally?**

14 A. American Water has been proactive in seeking change and improvements in how
15 healthcare is delivered and the costs associated with providing health insurance to
16 employees. This includes offering high-deductible health plans and a telemedicine
17 option, both of which lower overall health insurance program costs. For example, rather
18 than incurring the cost of an office or urgent care visit at a cost generally in excess of
19 $100, our employees have the option to consult with a physician remotely at a much
20 lower cost of $39 per visit. American Water also became a founding member of the
21 Health Transformation Alliance ("HTA") in 2016 with the goals of creating higher
22 quality care by identifying facilities and physicians that have better outcomes, using our

1 purchasing power to keep costs down, and helping every employee become a more
2 engaged consumer.

3 **Q. What is HTA and how is it better than the traditional approach to providing**
4 **healthcare coverage to employees?**

5 A. HTA is group of 50 major corporations that have come together to drive change in the
6 healthcare system. In addition to American Water, its members include companies like
7 American Express Company, Caterpillar, Inc., IBM Corporation, Macy's, Inc., Marriott
8 International Inc., NextEra Energy, Inc., The Coca-Cola Company, and many more. As
9 one company, no HTA member alone is likely to change the trends in healthcare that are
10 driving up costs. By working together, HTA members can create more transparency to
11 drive changes in the way healthcare is delivered, and those changes can result in lower
12 prices for prescription medical and medical services and better outcomes, making health
13 care more affordable. To that end, the HTA has developed value-driven solutions in Data
14 & Analytics, Pharmacy, Medical and Consumer Engagement specifically designed to
15 improve patient care and economic value. For example, through the HTA, American
16 Water was able to secure better pricing on prescriptions, lowering the amount both the
17 Company and employees spend on prescription coverage. For American Water, this
18 resulted in $3 million in savings in 2018 that partially offset the increase in rates
19 generally, mitigating the overall increase in prescription coverage costs.

1 **<u>Employee Compensation Expense</u>**

2 **Q. Please describe Mr. Kollen's recommended adjustments to the Company's**
3 **performance-based compensation costs.**

4 A. Mr. Kollen recommends that the Commission exclude all (100%) of annual performance
5 plan ("APP") compensation costs for both KAWC and Service Company employees. Mr.
6 Kollen also recommends exclusion of 100% of long-term performance plan ("LTPP")
7 compensation costs for KAWC and Service Company employees. Taken together, the
8 proposed adjustments would eliminate $1.927 million from the Company's operating
9 expense in this case, consisting of a reduction of $1.770 million in performance-based
10 compensation expense, a reduction of $0.135 million in related payroll tax expense, and a
11 reduction of $0.022 million in related bad debt and PSC assessment expenses.

12 **Q. What is Mr. Kollen's reasoning for his recommendation?**

13 A. Mr. Kollen relies on ratemaking decisions in which the Commission has denied recovery
14 of variable compensation expenses where, in Mr. Kollen's words, "they are incurred to
15 incentivize the achievement of shareholder goals as measured by financial performance,
16 not incurred to incentivize the achievement of customer and safety goals." Mr. Kollen
17 relies on four Commission decisions – its June 22, 2015 order in a Kentucky Power rate
18 case,[3] its April 22, 2014 order in an Atmos rate case,[4] and its orders in Kentucky-

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[3] *In the Matter of: Application of Kentucky Power Co. for: (1) General Adjustment of Its Rates for Electric Service;(2) an Order Approving Its 2014 Environmental Compliance Plan; (2) an Order Approving Its Tariffs and Riders; and (4) an Order Granting All Other Required Approvals and Relief*, Case No. 2014-00396, Order (Ky. P.S.C. June 22, 2015) (Kentucky Power Order).

[4] *In the Matter of: Application of Atmos Energy Corp. for an Adjustment of Rates and Tariff Modifications*, Case No. 2013-00148 (Ky. P.S.C. Apr. 22, 2014) (Atmos Order).

1 American's 2010[5] and 2004[6] rate cases. On closer examination, however, these decisions
2 do not even support the total exclusion of the Company's performance-based
3 compensation expense as urged by Mr. Kollen in this case.

4 **Q. Why doesn't the most recent decision cited by Mr. Kollen – the Kentucky Power**
5 **Order – support his recommendation?**

6 A. In the Kentucky Power proceeding, the AG recommended elimination of 75 percent of
7 Kentucky Power's incentive compensation plan expense on the ground that the funding
8 measures for the plan were tied to the earnings per share ("EPS") of Kentucky Power's
9 parent corporation (75-percent weight) as well as to safety (10-percent weight) and
10 strategic initiatives (15-percent weight).[7] The Commission declined the AG's
11 recommendation, stating: "we find that the amount that should be removed for
12 ratemaking purposes should be based on the performance of the plan, not the funding
13 measures."[8] Since only 15 percent of the Kentucky Power plan's performance measures
14 were based on financial performance, the Commission's adjustment removed only 15
15 percent of the cost of the plan from operating expenses for ratemaking purposes.[9]

16 Here, although Mr. Kollen acknowledges that 50 percent of the performance measures of
17 the APP are operational rather than financial measures, he recommends that none of the

[5] *In re Application of Kentucky-Am. Water Co. for an Adjustment of Rates Supported by a Fully Forecasted Test Year*, Case No. 2010-00036, Order (Ky. P.S.C. Dec. 14, 2010) (2010 KAWC Order).

[6] *In re Adjustment of the Rates of Kentucky-Am. Water Co.,* Case No 2004, 00103, Order (Ky. P.S.C. Feb. 28, 2004) (2004 KAWC Order).

[7] Kentucky Power Order at 24.

[8] Kentucky Power Order at 25-26 (emphasis added).

[9] Kentucky Power Order at 26 ("Among the performance measures, only 15 percent is based on financial performance. Accordingly, the Commission's adjustment removes only 15 percent, or $442,181, of the cost of $2,947,874 Kentucky Power provided in rebuttal from test-period operating expenses for ratemaking purposes.").

1 APP expense be recovered based on the plan's financial funding measures. This is
2 plainly inconsistent with the Commission's finding in the Kentucky Power order that "the
3 amount that should be removed for ratemaking purposes should be based on the
4 performance measures of the plan, not the funding measures."[10] As explained in my
5 direct testimony, 50% of the APP's performance measures (goals) comprise safety
6 (15%), customer satisfaction (15%), drinking water quality (10%) and operational
7 efficiency improvement (10%).[11] Therefore, even if the Commission were to deny
8 recovery of performance compensation expense related to financial performance
9 measures, the Company should be allowed to recover at least 50 percent of its APP
10 expense in rates.

11 **Q. Does the Commission's decision in the Atmos rate case cited by Mr. Kollen support**
12 **his recommendation that no APP expense be recovered in rates?**

13 A. No. In the Atmos rate case, the Commission disallowed 100 percent of the cost of the
14 company's incentive and variable pay plans because all three plans awarded
15 compensation based solely on financial (EPS) measures.[12] As explained above, 50
16 percent of KAWC's APP performance measures are operational, not financial.

17 **Q. Mr. Kollen also cites the Commission's denial of Kentucky-American's request for**
18 **recovery of performance-based pay costs in the Company's 2004 and 2010 rate case**
19 **orders. Please address these orders.**

---

[10] Kentucky Power Order at 25-26.

[11] Kogler Direct, p.5, l.9.

[12] *See* Atmos Order at 19-20.

1 A. Mr. Kollen cites the 2004 KAWC rate case order[13] and the 2010 KAWC Order[14] for the
2 proposition that the Commission disallowed performance compensation expense tied to
3 financial goals that primarily benefit shareholders. (Kollen Direct 24:19 – 25:5.) As an
4 initial matter, both of those cases were decided well before the Commission's 2015
5 finding in the Kentucky Power case that the relevant variable compensation measures for
6 ratemaking purposes are performance measures rather than funding measures, and its
7 determination that compensation expense related to operating performance measures may
8 be recovered in rates. Furthermore, the Commission denied recovery of the costs
9 associated with Company's annual and long-term performance plans on the ground that
10 Kentucky-American had failed to quantify the plans' benefits to customers[15] or
11 demonstrate a correlation between operations and maintenance expense savings and its
12 use of performance compensation plans.[16] That is not the case here. As Mr. Rogers
13 explained in his direct testimony, the Company's 2017 operating expenses were less than
14 one percent (<1%) higher than its 2010 operating expenses. (Rogers Direct p.13, ll. 4-6.)
15 This level of cost control did not simply materialize out of the blue. It is the result of
16 improvements in operating efficiency, driven by employees that are incentivized, through
17 the Company's carefully constructed compensation plans, to find ways to be more
18 productive and efficient. As Mr. Mustich explains in his rebuttal testimony, while dollars

[13] *In the Matter of: Adjustment of the Rates of Kentucky-Am. Water Co.*, Case No. 2004-00103, Order (Ky. P.S.C. Feb. 28, 2005) (2004 KAWC Order).

[14] *In the Matter of: Application of Kentucky-Am. Water Co. for an Adjustment of Rates Supported by a Fully Forecasted Test Year*, Case No. 2010-00036, Order (Ky. P.S.C. Dec. 14, 2010) (2010 KAWC Order).

[15] *In the Matter of: Adjustment of the Rates of Kentucky-Am. Water Co.*, Case No. 2004-00103, Order at 49 (Ky. P.S.C. Feb. 28, 2005) (2004 KAWC Order).

[16] *In the Matter of: Application of Kentucky-Am. Water Co. for an Adjustment of Rates Supported by a Fully Forecasted Test Year*, Case No. 2010-00036, Order at 32 (Ky. P.S.C. Dec. 14, 2010) (2010 KAWC Order).

1 saved due to increased efficiency and productivity cannot be directly traced to
2 performance compensation plans, such plans correlate closely with such results.

3 **Q. Has the way public utility commissions evaluate performance-based compensation**
4 **programs evolved since the decisions in the 2004 and 2010 KAWC rate cases and the**
5 **other decisions cited by Mr. Kollen?**

6 A. Yes. There is a growing recognition that not only is it difficult to trace dollar-for-dollar
7 benefits to customers from any expenditure, but that performance-based compensation
8 plans featuring the types of measures used in Kentucky-American's plans do, in fact,
9 benefit customers, and, therefore, utilities should be permitted to recover the costs of such
10 plans. For example, the West Virginia Public Service Commission ("WVPSC") has
11 observed as follows:

> 12 Improvement in [plan] metrics can and likely does lead to savings
> 13 that eventually benefit the customer when those improvements are
> 14 captured in a base rate case. The Commission understands that it
> 15 may be difficult to measure the precise financial benefit of the
> 16 incentive plan, but there is no valid argument that the savings that
> 17 do result from the incentive plan cannot be retained by the
> 18 Companies indefinitely, because those savings are included in the
> 19 test-year for each base rate case and returned to benefit the
> 20 customers.[17]

[17] *Appalachian Power Co. and Wheeling Power Co. Rule 42T Tariff Filing to Increase Electric Rates and Charges and Petition to Change Depreciation Rates,* Case Nos. 14-1152-E-42T and 14-1151-E-D, Commission Order at 76 (W. Va. P.S.C. May 26, 2015) (APCo Order).

1 **Q. Please provide the context of the WVPSC's statements about performance-based**
2 **compensation plans.**

3 A. In a 2014 general base rate case for Appalachian Power Company and Wheeling Power
4 Company ("together, APCo")[18] and in a 2015 general base rate case for West Virginia-
5 American Water Company ("WVAWC"),[19] the WVPSC approved recovery of costs of
6 performance-based compensation plans similar to Kentucky-American's APP and LTPP.
7 Specifically, the WVPSC approved recovery of all of APCo's annual performance plan
8 expense and one half of its long term performance plan expense.[20] Similarly, the WVPSC
9 approved recovery of all WVAWC's annual performance plan expense at historic test year
10 levels and one half of its long term performance plan expense.[21]

11 **Q. Why did the WVPSC allow recovery of performance-based compensation expense in**
12 **the APCo and WVAWC rate cases?**

13 A. The WVPSC articulated its rationale for allowing recovery of the cost of the companies'
14 "annual incentive plans" (similar to KAWC's APP) in the APCo Order, which it then cited
15 in the WVAWC Order.

> 16 The Companies have argued that the annual incentive
> 17 compensation performance goals for each employee or group of
> 18 employees are set at a level to drive improvement into metrics that
> 19 measure safety, efficiency of operations and financial performance.
> 20 Improvement in those metrics can and likely does lead to savings
> 21 that eventually benefit the customer when those improvements are

[18] *Appalachian Power Co. and Wheeling Power Co. Rule 42T Tariff Filing to Increase Electric Rates and Charges and Petition to Change Depreciation Rates,* Case Nos. 14-1152-E-42T and 14-1151-E-D, Commission Order (W. Va. P.S.C. May 26, 2015) (APCo Order).

[19] *West Virginia-Am. Water Co. Rule 42T Tariff Filings to Increase Sewer and Water Rates and Charges,* Case Nos. 15-0675-S-42T and 15-0676-W-42T, Commission Order (W. Va. P.S.C. Feb. 24, 2016) (WVAWC Order).

[20] APCo Order at 75-77.

[21] WVAWC Order at 49-51.

1 captured in a base rate case. The Commission understands that it
2 may be difficult to measure the precise financial benefit of the
3 incentive plan, but there is no valid argument that the savings that
4 do result from the incentive plan cannot be retained by the
5 Companies indefinitely, because those savings are included in the
6 test-year for each base rate case and returned to benefit the
7 customers.
8
9 * * *
10
11 Based on the record in this case, the Commission will allow the
12 annual incentive plan costs proposed by the Companies and
13 Staff . . . .[22]
14

15 The WVPSC then explained why the companies also should be permitted to recover 50
16 percent of their long term performance plan expense:

17 The goals for the LTIP plan are largely tied to the overall financial
18 performance of AEP stock. A financially strong utility is also
19 important to customers. In the case of the LTIP goals, however,
20 while those goals may result in favorable cost of capital and
21 favorable other impacts for customers, they also directly benefit
22 the shareholders. Because achievement of the LTIP plan goals
23 benefits both customers and shareholders, the Commission will
24 authorize the Companies to recover one-half of the LTIP
25 (Restrictive Stock Plan) for the historical test-year.[23]
26

27 **Q. Have commissions in other neighboring states approving requests for recovery of**
28 **performance-based compensation expense?**

29 A. Yes. In 2017, the Virginia State Corporations Commission approved Virginia-American
30 Water Company's rate increase, [24] which included 100% recovery of Virginia-American's

[22] APCo Order at 76; *see* WVAWC Order at 48-49. The WVPSC allowed the level of annual performance plan costs experienced by WVAWC in its historical test year, not the higher level proposed by WVAWC based on achievement of 100 percent of the targeted plan measures. *See id.* at 49.

[23] APCo Order at 76-77; *see* WVAWC Order at 51.

[24] *See Application of Virginia-Am. Water Co. for a General Increase in Rates*, PUE-2015-00097, Report of Howard P. Anderson, Jr., Hearing Examiner (Va. S.C.C. Nov. 29, 2016); *Application of Virginia-Am. Water Co. for a General Increase in Rates*, PUE-2015-00097, Final Order (Va. S.C.C. May 24, 2017).

1 APP expense and the APP and LTPP component of Service Company expense. In 2016,
2 the Illinois Commerce Commission approved recovery of 50 percent of Illinois-American
3 Water Company's APP expense in rates.[25] In 2018, the Missouri Public Service
4 Commission approved a settlement in Missouri-American Water Company's general rate
5 case,[26] in which the staff had not opposed recovery of 50% of Missouri-American's APP.
6 In addition, we expect the Indiana Utility Regulatory Commission to approve a settlement
7 of Indiana-American Water Company's 2018 rate case in which no party objected to 100%
8 recovery of APP and LTPP costs.

9 **Q. Do KAWC's APP and LTPP performance measures benefit customers?**

10 A. Yes. The Company's performance compensation plans align the interests of our customers,
11 employees and investors. They contain tangible goals that are designed to do several
12 things. The APP measures and compensates employees for performance based on
13 delivering clean, safe, reliable and affordable water service and providing good customer
14 service when doing so. These operational components measure performance that can most
15 directly influence customer satisfaction, health and safety, environmental performance, and
16 operational efficiency. For example, fewer OSHA incidents indicate improved safety for
17 customers and employees. No one can credibly dispute the benefits of improved safety.
18 Further, reduced accidents reduce the attendant costs—workers' compensation, damage
19 repair, etc.—which mitigates the operating costs that customers pay through rates. KAWC
20 continues to improve its performance in reporting near misses, another illustration of the

[25] *In re Illinois-Am. Water Co. Proposed Rate Increases for Water and Sewer Service,* No. 16-0093, Order at 37-38 (Ill. C.C. Dec. 13, 2016).

[26] *See In the Matter of: Missouri-Am. Water Co.'s Request for Authority to Implement General Rate Increase for Water and Sewer Service Provided in Missouri Service Areas,* File No. WR-2017-0185, *et al.,* Order Approving Stipulations and Agreements (issued May 2, 2018).

1 Company's high-performing safety culture. KAWC's commitment to water quality is
2 evident through its optimization and water quality improvement efforts described in Mr.
3 Rogers's direct testimony (p. 5-9) and it did not receive a notice of violation in either year.
4 The Company's safety and water quality performance reflect an engaged workforce that is
5 focused on providing safe, reliable and affordable service to KAWC's customers.
6 Customers thus derive a direct benefit from our focus on the key measures in the APP
7 program.

8 **Q. Does Mr. Kollen agree that the operational performance goals of the APP promote**
9 **customer interests?**

10 A. Yes. In response to KAWC's data requests, Mr. Kollen stated that he believes that a utility
11 that is focused on improving customer satisfaction,[27] safety,[28] water quality,[29]
12 environmental compliance,[30] and efficiency[31] is in the interest of customers.

13 **Q. While in the Kentucky Power case this Commission permitted recovery of the portion**
14 **of plan expense related to achievement of operational performance measures, it has**
15 **not permitted the recovery of the portion related to financial performance measures.**
16 **Do you believe the APP and LTPP financial performance measures provide tangible**
17 **benefits to customers?**

---

[27] AG-LFUCG response to KAWC 1-48.

[28] AG-LFUCG response to KAWC 1-45.

[29] AG-LFUCG response to KAWC 1-47.

[30] AG-LFUCG response to KAWC 1-46.

[31] AG-LFUCG response to KAWC 1-44.

1 A. Yes. When financial performance is achieved through efficiency, as is the case for
2 Kentucky-American, the interests of customers, employees and investors are aligned. The
3 financial performance measures in both the APP and the LTPP are a proxy metric because
4 achievement of them shows an organization focused on improved performance at all levels,
5 particularly in increasing efficiency, decreasing waste, and boosting overall productivity.
6 All of these aspects of overall performance benefit customers by encouraging and
7 recognizing superior performance in every function.

8 Achieving performance pay financial goals, such as targeted EPS performance, demands
9 attention to operating efficiency. That is, unless the utility controls or reduces its operating
10 costs, it is unlikely to achieve a targeted EPS. Mr. Kollen's position simply overlooks this.
11 But financial goal-based performance pay ensures that employees at all levels of the
12 organization, and not just the upper ranks, remain focused on increasing efficiency,
13 decreasing waste, and boosting overall productivity. As a result, motivating employees to
14 work efficiently controls and reduces operating costs. This unquestionably benefits
15 customers, because it both results in lower costs and mitigates rate increases. Customers
16 thus receive a tangible benefit when a utility reduces or controls its operating expenses
17 while continuing to provide safe and reliable service.

18 In addition, where KAWC can reduce operating expenses, it can increase investment in
19 infrastructure without increasing rates, because every dollar of operating expenses saved
20 can fund approximately $8 of investment. Therefore, customers also benefit from
21 KAWC's enhanced ability to invest in the infrastructure that it needs to meet its service
22 obligations to customers.

1 **Q. How else do financial measures in a performance-based compensation plan benefit**
2 **customers?**
3 A. Because water operations are capital-intensive and must constantly and consistently access
4 the capital markets at reasonable costs, customers benefit when their utility has the
5 financial health to do so. Having access to lower cost debt and internal funds to finance
6 water infrastructure investment mitigates the financing costs that customers ultimately pay
7 through rates. The availability of those sources of capital at reasonable costs, however,
8 depends on the utility's financial performance, including credit and bond ratings. So it's
9 important to focus utility employees on the financial health of the organization. Simply
10 put, a financially healthy utility benefits customers because it enables the utility to meet its
11 service obligations at reasonable financing costs, which can help the Company mitigate its
12 requested rate increase. Again, when financial performance is achieved through efficiency,
13 as is the case for KAWC, the interests of customers and investors are aligned.

14 **Q. Does Mr. Kollen agree that a financially healthy utility is in the interest of customers?**
15 A. Yes.[32]

16 **Q. Are there other ways that financial-goal based performance pay benefits customers?**
17 A. Yes. Long-term financial-goal performance pay programs, such as the LTPP, are
18 particularly intended to reduce attrition at the higher ranks of the organization. Excessive
19 instability at that level may have significant negative financial effects on the organization,
20 such as on EPS, which ultimately impact customer rates. So, as KAWC witness Mustich
21 explains, these types of performance pay programs are well-accepted, both generally and in
22 the utility industry. Importantly, the American Water LTPP achieves its goals of reducing

[32] AG-LFUCG response to KAWC 1-49.

1 leadership attrition at a lower cost to customers than simply increasing leadership's base
2 pay, because performance pay under the LTPP is stock-based. Because stock-based
3 compensation vests on a phased basis in three installments over a prospective three-year
4 period, employees must remain with the organization to realize the vesting of their awards.

5 **Q. The WVPSC and other state commissions that allowed recovery of performance-**
6 **based compensation expense found that the utilities' overall employee compensation**
7 **levels were reasonable. Has the Company shown that its employee compensation**
8 **level, including performance-based compensation, is reasonable?**

9 A. Yes. The direct testimony of Company witness Robert V. Mustich demonstrated that,
10 when assessed against the market, KAWC employees' target total direct compensation—
11 base pay plus short-term and long-term variable pay at target levels—is reasonable. In fact,
12 Mr. Mustich's extensive compensation analysis shows that KAWC employees' target total
13 direct compensation is actually lower than both Midwest regional market and national
14 market median levels for comparable positions. (Mustich Dir., pp. 5-7). So, even if
15 KAWC employees receive their total target performance payout, their total compensation is
16 still less than their market peers. And, as Mr. Mustich explained, if KAWC employees
17 don't receive any performance pay, their base salaries alone would put them significantly
18 below the market median. (Mustich Dir., pp. 7-8). Mr. Kollen does not even acknowledge
19 this testimony, much less dispute it.

20 **Q. Why should the Commission consider Mr. Mustich's testimony?**

21 A. Appropriate levels of employee compensation are necessary in order for KAWC to attract
22 and retain the talented employees it needs to meet its service obligations to Kentucky

customers. Even with performance pay, KAWC employee compensation is below the median pay for comparable positions, both regionally and nationally. Consequently, KAWC's employees are not overcompensated and the Company's overall compensation level is, by definition, reasonable. It is not appropriate, therefore, to disallow any portion of their compensation, including any financial-goal based performance pay. Again, performance pay is not in addition to KAWC employees' reasonable compensation; it makes KAWC employees' compensation reasonable.

Q. How should KAWC's employee compensation expense be assessed?

A. Employee compensation is a necessary cost of providing utility service. Therefore, it should be assessed through the same lens as other necessary operating costs: if it is prudently incurred and reasonable in amount, relative to what the industry pays for the same services, it should be recoverable through rates. The focus should be on the reasonableness of the Company's overall level of 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. This is easily and demonstrably provable.

If we compensated our employees based entirely on base wages and salaries, and those expenses were at or below the median salaries and wages for similarly situated companies,

those expenses should be considered prudently incurred. The fact that part of that compensation is, in fact, based upon performance does not increase the level of overall compensation expense. As Mr. Mustich has demonstrated, KAWC's overall total compensation – which includes fixed compensation and all performance-based compensation – is at the low end or below the competitive market range. Therefore, KAWC's total compensation expense is reasonable and prudently incurred.

Q. Please explain why it is particularly inappropriate for Mr. Kollen to disallow Service Company charges related to performance pay.

A. As has been explained by Company witness Mr. Patrick Baryenbruch, the Service Company provides services to American Water's affiliates at cost and at prices that are more advantageous than could be obtained in the market place. The Service Company provides legal, finance, accounting, engineering, environmental, technology, customer and other valuable services to KAWC and its regulated utility affiliates. The overall question that a regulator should ask regarding these services is whether they are reasonable when compared with services that the Company can obtain in the market. If, for example, KAWC were to obtain operating services from the market, like an outside engineering firm, one would not expect an adjustment for that firm's performance based compensation plan, even if the plan included financial goals. Rather, the Commission would assess the reasonableness of the engineering firm's costs relative to the market, as it did Service Company costs.

1 **Q. Are KAWC's Service Company charges reasonable?**

2 A. Yes. In his direct testimony, Company witness Baryenbruch testifies to the value of
3 Service Company costs and demonstrates that they are equal to or less than the costs we
4 would have to pay for equivalent services. No party challenges the reasonableness of any
5 Service Company rates relative to the market rate for such services. The Service Company
6 is providing KAWC—and its customers—enhanced value, at a reasonable cost, a fact that
7 Mr. Kollen simply ignores. It is inappropriate to disallow a component of that cost simply
8 because it doesn't conform to Mr. Kollen's view of employee compensation.

9 **Q. Mr. Kollen asserts that performance compensation based on financial performance**
10 **measures gives the Company's "executives, managers, and employees" an incentive to**
11 **seek greater and more frequent rate increases (Kollen Direct at p.26, ll. 11-19). How**
12 **do you respond?**

13 A. First of all, Mr. Kollen's assertion is pure supposition, as he provides no basis for his
14 contention that performance-based compensation increases the frequency of rate increase
15 requests, or that the lack of such compensation reduces the frequency. Second, he ignores
16 the fact that the Company pays performance compensation to its employees despite the fact
17 that the Commission denies recovery of it. The failure to recognize such prudently
18 incurred costs in rates creates the need for *more* frequent rate case filings, not less.
19 Kentucky-American Water files rate cases only when necessary to set the rates that will
20 permit the Company to attract the capital required to maintain and improve its
21 infrastructure while providing safe, adequate and reliable service. (See Rowe Direct, p.8,
22 ll. 1-19.) The savings that result from performance-based compensation plans in fact
23 reduce magnitude and/or frequency of those requested rate increases. Finally, even if Mr.

1 Kollen were correct that denial of recovery of performance-based compensation expense
2 provided a disincentive to filing rate cases, it would be inappropriate to deny recovery for
3 that reason. As the Commission noted in an earlier KAWC rate case,

> 4 In Case No. 95-554, the Commission determined that: "Pursuant
> 5 to KRS 278.180, a utility has the discretion to choose the timing of
> 6 its rate case applications. There is nothing in KRS 278 that
> 7 authorizes the Commission to adopt a disincentive to, in effect,
> 8 penalize a utility for exercising its right to seek rate relief." It
> 9 would be a disincentive to Kentucky-American if its shareholders
> 10 are denied the opportunity to recover all prudent and reasonable
> 11 rate case costs.[33]

12 **Q. Please summarize why it is appropriate to include the costs of the Company's**
13 **performance based compensation in rates.**

14 A. The Company's performance based compensation plans contain tangible goals that are
15 designed to do several things. First, they measure and reward employees for performance
16 based on delivering clean, safe, reliable and affordable water service and providing good
17 customer service when doing so. The operational components measure performance that
18 can most directly influence customer satisfaction, health and safety, environmental
19 performance, and operational efficiency. Customers derive a direct benefit from our focus
20 on these key measures in the plan. Further, well-grounded financial measures keep the
21 organization focused on improved performance at all levels of the organization, particularly
22 in increasing efficiency, decreasing waste, and boosting overall productivity.

23 By rewarding superior performance in every function, all of these aspects of overall
24 performance provide direct and tangible benefits to our customers. KAWC's performance

[33] *In the Matter of: Application of Kentucky-Am. Water Co. to Increase Its Rates*, Case No. 97-034, Order at 23 (Ky. P.S.C. Sept. 30, 1997).

1 based compensation is not only a means of focusing its employees on the organization's
2 goals, but also a means of measuring attainment of those goals. We're asking the
3 Commission to approve cost recovery of a powerful tool to drive productivity and excellent
4 employee practices.

5 Moreover, the notion that financial metrics solely benefit investors is misguided. A
6 financially healthy utility focused on efficiency and customer satisfaction is able to attract
7 the capital investments necessary to provide safe and reliable service and to maintain the
8 technological expertise necessary to operate the company and comply with increasing
9 water quality standards. A financially healthy utility is very much in the interest of
10 KAWC's customers, as it helps ensure KAWC the ability to provide safe and reliable
11 service at the lowest reasonable cost. Mr. Kollen conceded in his discovery responses that
12 a financially healthy utility is in the customers' best interest.

13 Most important, however, the evidence in this case demonstrates that, even with
14 performance pay, our overall non-bargaining unit compensation is below the 50th percentile
15 ranking. Consequently, our total compensation (base and performance pay) is necessary to
16 attract and retain employees. Furthermore, the LTPP component is vital to retain
17 employees who might otherwise seek higher compensation elsewhere but who are provided
18 an incentive to remain with the Company. The retention of a highly trained and
19 demonstrably effective and productive workforce is, without question, in the best interest of
20 our customers.

21 Again, it is important for the Commission to view compensation as a whole. As KAWC
22 witness Mustich explains, KAWC's total compensation today (base plus performance pay)

1 results in employee compensation levels that are either at, or below the market median. In
2 other words, KAWC's employees are not overcompensated relative to their peers, even
3 with the inclusion of performance pay. So, it is not appropriate to disallow a portion of
4 their compensation. As I've explained, both the financial performance and the individual
5 metrics provide benefits to our customers, and the resulting overall compensation levels are
6 also demonstrably reasonable, it would not be just or reasonable to disallow a portion of
7 those expenses, regardless of how they are categorized. The question is, "are KAWC's
8 total salaries and benefits reasonable?" Mr. Mustich has demonstrated unquestionably that
9 they are. Mr. Kollen, therefore, is proposing to disallow a reasonable, prudently-incurred
10 operating expense. To do so, would both result in a labor expense that is understated, and
11 deprive KAWC and its customers of an important tool that has produced clear and proven
12 gains in productivity and efficiency improvements. Moreover, as Mr. Baryenbruch
13 confirms, the Service Company charges are demonstrably reasonable. Accordingly, it is
14 inappropriate to reduce them, whether directly or through the artifice of a reduction for
15 performance based compensation.

16 **Q. What is your recommendation regarding Mr. Kollen's adjustment related to**
17 **Performance Pay?**
18 A. Consistent with my testimony, I encourage the Commission to permit full recovery for the
19 Company's compensation expenses including performance pay. We have shown these
20 expenses are reasonable, consistent with other general market companies and utilities as
21 evidenced by market studies and external analysis and upon examination, there is nothing
22 compelling from intervener testimony to support an adjustment.

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

2 A. Yes.

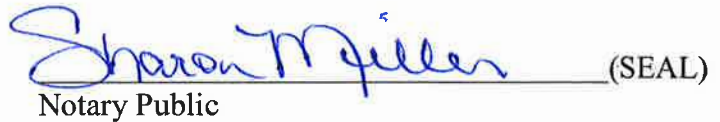
VERIFICATION

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

The undersigned, **Kurt Kogler**, being duly sworn, deposes and says he is the Director, Human Resources Business Partner for American Water Works Service Corporation, that he has personal knowledge of the matters set forth in the foregoing testimony, and the answers contained therein are true and correct to the best of his information, knowledge, and belief.

KURT KOGLER

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 25th day of April, 2019.



(SEAL)

Notary Public

My Commission Expires:

7/25/2020

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF:	)	
	)	
THE APPLICATION OF KENTUCKY-AMERICAN	)	
WATER COMPANY FOR AN ADJUSTMENT	)	**CASE NO. 2018-00358**
OF RATES	)	
	)	

REBUTTAL TESTIMONY OF ROBERT V. MUSTICH

April 30, 2019

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

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

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

7 A. Yes. I filed direct testimony on November 28, 2018.

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

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

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

12 A. The purpose of my testimony is to rebut the testimony of Lane Kollen and demonstrate
13 that his arguments against recovery of both the Annual Performance Plan ("APP") and
14 the Long-term Performance Plan ("LTPP") are inconsistent with his discovery responses
15 and run counter to the effective use of employee compensation programs as a
16 management tool to drive positive customer outcomes.

17 **Q. What does Mr. Kollen recommend in his testimony that the Commission do with**
18 **respect to KAWC's request for full recovery of its APP and LTPP expenses?**

19 A. He recommends that the Commission reject them.

20 **Q. Does Mr. Kollen provide reasons for his recommendation?**

1 A. Yes he gives several, including his belief that this result is supported by Commission
2 precedent and that it affects the rate case process. I will leave those matters to the
3 Company's witnesses. I will address Mr. Kollen's comments in the context of industry
4 practices regarding incentive compensation and in the context of his discovery responses.

5 **Q. Mr. Mustich, are you familiar with the practices of industry, generally, and public**
6 **utility companies in particular, with respect to incentive compensation?**
7 A. Yes, I am.

8 **Q. With respect to the utilities industry and industry in general, is it common for**
9 **businesses across America to have in place incentive compensation plans similar to**
10 **KAWC's APP and LTPP?**
11 A, Yes, it is. Based on my personal experience working with hundreds of companies and
12 WTW advising thousands of companies annually, the vast majority of companies have
13 APPs and use financial and non-financial metrics and have LTPPs that use financial
14 and/or relative total shareholder return metrics. Consequently, it is safe to say that the
15 incentive compensation plans that KAWC maintains are consistent with the practice
16 followed by a vast amount of corporations in American business.

17 **Q. Is the same situation true with respect to the utility industry generally and with**
18 **respect to Kentucky, particularly?**
19 A. Yes, it is. WTW annually conducts a study of prominent investor owned utilities across
20 America and they all maintain incentive plans such as KAWC's APP and LTPP. With
21 respect to Kentucky, virtually every major investor owned utility operating in the
22 Commonwealth maintains such plans that are similar to KAWC's.

1 **Q. Are KAWC's incentive compensation plans appreciably different from the plans**
2 **offered by businesses generally or utilities specifically?**

3 A. No, they are similar and are certainly not more generous than those plans nor do they
4 offer benefits that are out of line with them.

5 **Q. Generally, what is the purpose of such incentive compensation plans?**

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

20 **Q. Is it possible to measure specifically the benefits or success of each type plan?**

1 A. Not specifically although literature in the field demonstrates the theory is well accepted
2 and the widespread adoption of such plans demonstrates that the historical experience of
3 business and utilities demonstrates the success of such plans.

4 **Q. Is there a way to determine if KAWC's incentive plans lie outside the norm?**

5 A. Yes, very simply we can compare the costs of total compensation paid by KAWC,
6 including the plans' payments, to compensation paid by other entities. As our direct
7 testimony demonstrates, we have done so and, whether measured nationally or regionally
8 including other Kentucky utilities, KAWC's total compensation lies below the median.
9 Therefore, regardless if such compensation was paid entirely as wage or salaries, or with
10 a combination of base salary and incentive compensation, as it is done at KAWC, that
11 total compensation is demonstrably reasonable as it lies below the median.

12 **Q. Does Mr. Kollen's testimony suggest that customers and shareholders have**
13 **competing interests when financial metrics are in incentive plans?**

14 A. Yes he does.

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

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

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

1 A. His recommendations in his testimony fail to recognize that shareholders and customers
2 have complementary interests and both benefit when organizations are financially sound,
3 efficiently run, safe, environmentally compliant, reliable and have satisfied customers.
4 KAWC's APP and LTPP fully support these interests and when these complementary
5 interests are not achieved, employee compensation is reduced through the incentive
6 plans. In addition, one cannot isolate and directly trace the benefits of each metric to
7 shareholders and customers especially when they are designed to be complementary and
8 benefit both from a holistic perspective.

9 **Q. Do Mr. Kollen's discovery responses indicate that he investigated the prevalence of**
10 **incentive compensation plans generally or utilities, specifically?**
11 A. His discovery responses indicate that he has not.

12 **Q. Has Mr. Kollen investigated employee compensation practices to know if incentive**
13 **compensation is common in the utility industry?**
14 A. His discovery responses indicated he has not. Notwithstanding that fact, Mr. Kollen
15 concedes that he "is aware that incentive compensation is common in the utility industry
16 based on his review of numerous utility rate filings during his career."

17 **Q. Has Mr. Kollen investigated employee compensation practices to know if incentive**
18 **compensation is common in business, generally?**
19 A. His discovery responses indicated he has not. Nevertheless, Mr. Kollen conceded that he
20 is aware that incentive compensation is common in business, generally.

1 **Q. You testified that based on your analysis, KAWC's wages, salaries and benefits,**
2 **including incentive compensation, are reasonable when compared with other**
3 **businesses generally and utilities, particularly. Does Mr. Kollen agree that KAWC's**
4 **incentive compensation is subject to the standard of reasonableness?**
5 A. Yes, in his response to DR Item No. 33 to him, Mr. Kollen agreed that "a utility's wage
6 and salary expense is subject to the standard of reasonableness, just like any other utility
7 expense."

8 **Q. Did Mr. Kollen undertake any review or analysis, similar to your analysis to**
9 **determine if the overall salary expense for the Company, including APP, is**
10 **reasonable when measured against other Kentucky utilities?**
11 A. He concedes in his discovery response that he did not. Nor did he undertake a similar
12 review to compare the Company to other businesses generally, as I did to establish the
13 comparability and reasonability of KAWC's incentive compensation practices.

14 **Q. Is Mr. Kollen taking the position that it is inappropriate for the Company to pay**
15 **incentive compensation to its employees?**
16 A. Apparently, not based on his answer to discovery:

17 QUESTION No. 39

18 Q. Is it Mr. Kollen's belief that Kentucky American should not pay
19 any performance based compensation but should compensate its
20 employees entirely by means of base wages and salaries?

21 RESPONSE:

22 A. No.

1 **Q. How is Mr. Kollen's testimony inconsistent with his discovery response on the**
2 **benefits of incentive compensation?**
3 A. When Mr. Kollen was asked to state whether it is in the interests of customers for a utility
4 to be: efficiently run, safety conscious, and environmentally compliant, he responded in
5 the affirmative. Furthermore, when asked if a financially healthy utility is in the interest
6 of customers, Mr. Kollen answered "yes." Clearly, KAWC's APP metrics include
7 financial and operational metrics such as EPS, safety and environmental leadership and
8 so they directly align with Mr. Kollen's discovery response as being in the interest of
9 customers.

10 **Q. Although Mr. Kollen argues against recovery of KAW's LTPP expense does he**
11 **concede the benefits of it to ratepayers in his discovery responses?**
12 A. Yes, he does. In response to question 41 he admits that the retention of well-trained,
13 dedicated employees is a benefit to the customers of a business.

14 **Q. What is wrong with Mr. Kollen's recommendation to disallow the APP and LTPP?**
15 A. Besides the inconsistency between his testimony and discovery responses regarding
16 improving operational efficiency being in customers' interest, he does not recognize that
17 employee compensation programs continue to evolve and that balanced financial and
18 operational metrics are in the interests of customers. As my testimony and compensation
19 study show, KAWC's plan designs are prevalent and reasonable. While dollars saved due
20 to increased efficiency and productivity cannot be directly traced to performance
21 compensation plans, such plans correlate with such results through financial and
22 operational metrics. Just like dollars saved and increased efficiency result from

improvements in technology, work environment and a culture of innovation, they are difficult to directly trace because of other multiple contributing factors. Mr. Kollen concedes that APP provides tangible benefits that are in the best interests of KAWC's customers. The LTPP is a plan that vests over three years and incents sustained financial efficiency and performance. It complements and reinforces the APP. In addition, the LTPP aids in retaining experienced and qualified employees since it is designed to have the compensation it provides forfeited if the employee leaves before the plan compensation vests. Having qualified and experienced employees is an essential ingredient in operating an efficient, safe, reliable, and environmentally compliant and customer service focused organization, which are all in the interests of customers. Even with the incentive compensation expenses, KAWC's overall salaries and benefits are reasonable as they lie below the median level for such salaries and benefits paid by other entities. For all these reasons, it would be unreasonable to disallow them. KAWC's compensation practices are well with the practices followed by other utilities and businesses and are reasonable by any measure.

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 he is the Managing Director and Rewards Line of Business Leader, East Region for Willis Towers Watson, that he has personal knowledge of the matters set forth in the foregoing testimony, and the answers contained therein are true and correct to the best of his information, knowledge, and belief.

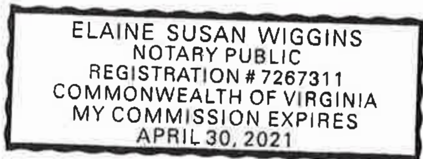
ROBERT V. MUSTICH

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 25 day of April, 2019.

(SEAL)
Notary Public

My Commission Expires:

____



COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF:	)	
	)	
THE APPLICATION OF KENTUCKY-AMERICAN WATER COMPANY FOR AN ADJUSTMENT OF RATES	)))	**CASE NO. 2018-00358**
	)	

REBUTTAL TESTIMONY OF BRENT E. O'NEILL

April 30, 2019

---

1 **I. INTRODUCTION**

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

3 A. My name is Brent E. O'Neill and my business address is 2300 Richmond Road,

4 Lexington, Kentucky 40502.

5 **Q. Did you previously submit direct testimony in this proceeding on behalf of**

6 **Kentucky-American Water Company ("Kentucky-American", "KAWC" or the**

7 **"Company")?**

8 A. Yes. I filed direct testimony on November 28, 2018.

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

10 A. I will address certain of the testimony and proposed adjustments that were filed by

11 Richard Baudino and Lane Kollen, witnesses who are jointly sponsored by the Attorney

12 General ("AG") and the Lexington-Fayette Urban County Government ("LFUCG"). The

13 specific issues that I am addressing are: 1) Slippage Factor; 2) the Qualified

14 Infrastructure Program ("QIP") Mechanism; 3) Unaccounted-for Water ("UFW"); and 4)

15 Base Period Update Projects.

16 **II. SLIPPAGE FACTOR**

17 **Q. What is a "slippage factor?"**

18 A. Mr. Kollen accurately describes the Commission's use of a slippage factor as explained

19 in the Union Light, Heat and Power case he quotes at page 17 of his testimony, as

20 follows:

1 As part of the capital budgeting process, utilities will estimate the level of
2 capital construction that will be undertaken during the year. Because of
3 delays, weather conditions, or other events, the actual level of construction
4 will often vary from the level budgeted. The difference between the actual
5 and budgeted levels is reflected in the calculation of a "slippage factor,"
6 which serves as an indicator of the utility's accuracy in predicting the cost
7 of its utility plant additions and when new plant will be placed into
8 service.

9 **Q. What slippage factor does Mr. Kollen propose in his testimony?**

10 A. Mr. Kollen contends, at page 18 of his testimony, that "[t]he Company calculated a
11 slippage factor of 91.968% based on a comparison of the annual actual construction
12 expenditures compared to the annual original construction budget for the years 2008
13 through 2017."

14 **Q. Is this contention accurate?**

15 A. No. Mr. Kollen cites to his own Exhibit (LK-6) as the basis for his contention that this
16 represents Kentucky-American's calculation of a slippage factor. The Company's
17 response shown on that exhibit actually states:

18 Because these slippage factors reflect only half of the equation when
19 tradeoffs occur between projects, the Company does not feel that the
20 schedules reasonably reflect the variance between the budgeted and actual
21 capital spend for a year. Please see the Company's response to
22 Commission Staffs Third Request Item 1 for further explanation.
23
24 Mr. Kollen improperly omits the Company's narrative response and much of the
25 Company's actual spend. His slippage factor does not compare budgeted and actual
26 spend.

27 **Q. What is the basis of Mr. Kollen's slippage adjustment?**

28 A. Mr. Kollen obtains his information from the response to Staff's Third Request Item 2,
29 which is calculated from Item 1 of Staff's Third Request. This information is only a

1 partial picture of the annual capital investment plan since the response to Item 1
2 eliminates the construction projects that were approved by the Capital Investment
3 Management Committee ("CIMC"), and removes the actual and budgeted construction
4 costs of Kentucky River Station II ("KRS II") in pool 3 of the Kentucky River. By
5 eliminating these projects from his calculation, Mr. Kollen ignores a process that has
6 been implemented to ensure the Company's capital investment plan meets the strategic
7 goals of the business, while maintaining flexibility to reprioritize projects as appropriate,
8 in a way that allows the Company to reach its goal of maintaining the overall capital
9 spend for the year to meet the original capital investment plan.

10 **Q. Do you agree with Mr. Kollen's proposed slippage factor?**

11 A. No. The data Mr. Kollen uses excludes significant portions of spend. The data only
12 includes actual spend for projects that were originally identified on the Company's
13 Strategic Capital Expenditure Plan ("SCEP"). Over the course of any given year, the
14 Company reprioritizes the projects in its capital investment plan due to changes in
15 ongoing projects or unexpected expenditures. Certain projects were reduced in priority
16 and other projects were given precedence. The expenditures on those newly prioritized
17 projects, however, were ignored by Mr. Kollen. The Company explained this when the
18 data was submitted in response to Commission Staff's Third Request Item 1. The
19 Company does not have "budget projects"; it only has an overall capital investment plan.[1]
20 The Company maintains that slippage should not be calculated on a project by project
21 level due to the complexity of multi-year projects and changes in project construction

[1] See, generally, the Company's April 15, 2019 Responses to Staff's Fourth Information Request.

1 schedules as a result of outside influences. The Company believes it should be calculated
2 on an overall basis for recurring project and investment project expenditures.

3 I have included the full text of the KAWC's response to the Commission Staff's Third
4 Request Item 1 above. As indicated in the response, the Company believes that the
5 referenced schedules reflect only half of the equation when tradeoffs occur between
6 projects during each year – the reduction in spend, but not the associated increase in
7 spend, when projects are reprioritized. Consequently, the Company does not believe that
8 the schedules should be used for calculating a slippage factor because they do not
9 reasonably reflect the variance between the planned and actual capital spend for a year.
10 KAW_RT_BEO_043019_Exhibit_1 shows that Mr. Kollen is ignoring $21
11 million of investment and that his slippage factors do not accurately reflect actual to plan
12 expenditure variances. To clarify, the exhibit shows the slippage factors used by the
13 Company for the base period update and for the revenue requirement calculated in
14 response to Commission Staff's Second Request for Information, Item 3. These slippage
15 factors (110.46% for Recurring Projects and 91.08% for Investment Projects) are
16 consistent with Commission precedent. They are based on the data provided in response
17 to the Commission Staff's Second Request for Information, Item 1, which asked for 10
18 years of actual and planned spend, while removing Kentucky River Station II related
19 items.
20 The exhibit also compares the data the Company used with the data Mr. Kollen
21 used and shows the variances. It is evident that Mr. Kollen ignores more than $21
22 million of infrastructure investment and inaccurately depicts a lack of spend. While Mr.
23 Kollen uses a 91.97% slippage factor to reduce investment recovery, the Company has in

1 fact spent more than 100% of what it has planned over the last ten years, and this

2 infrastructure investment should be recognized in the slippage calculation.

3 **Q. Is the Company's proposed calculation of slippage as set forth in Commission Staff**

4 **Second Request for Information, Item 3, consistent with Commission precedent?**

5 A. Yes. The Commission has historically calculated the slippage adjustment for Kentucky-

6 American by adjusting forecasted utility plant in service amounts to reflect 10-year

7 historical trend percentages of actual-to-budgeted construction spending.[2] The

8 Commission has stated: "The 10-year slippage factor is an average of the highs and lows

9 that have occurred over time and it produces a more reliable estimate of the construction

10 projects Kentucky-American will have in service or under construction in the forecasted

11 period."[3] The Commission has consistently applied a slippage factor adjustment using

12 this method, even when it results in an increase to Kentucky-American's forecasted

13 utility plant in service.[4]

14

15 **Q. Are there other reasons to question Mr. Kollen's proposed slippage factor?**

16 A. Yes. As we noted in discovery responses, Mr. Kollen's approach only considers half the

17 equation. While the capital investment plan for each year is developed using particular

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[2] *See, e.g.*, *Application of Kentucky-American Water Company for an Adjustment of Rates Supported by a Fully Forecasted Test Year*, Case No. 2012-00520, Order at 4-7 (Ky. PSC Oct. 25, 2013); *Application of Kentucky-American Water Company for an Adjustment of Rates Supported by a Fully Forecasted Test Year*, Case No. 2010-00036, Order at 4-7 (Ky. PSC Dec. 14, 2010); *Adjustment of the Rates of Kentucky-American Water Company*, Case No. 2004-00103, Order at 3-4 (Ky. PSC Feb. 28, 2005); *The Application of Kentucky-American Water Company to Increase Its Rates*, Case No. 2000-120, Order at 2-4 (Ky. PSC Nov. 27, 2000); *The Application of Kentucky-American Water Company to Increase Its Rates*, Case No. 97-034, Order at 3-7 (Ky. PSC Sep. 30, 1997); *The Application of Kentucky-American Water Company to Increase Its Rates*, Case No. 95-554, Order at 2-3 (Ky. PSC Sep. 11, 1996); *Notice of Adjustment of Rates of Kentucky-American Water Company*, Case No. 92-452, Order at 9-11 (Ky. PSC Nov. 19, 1993).

[3] *Application of Kentucky-American Water Company to Increase Its Rates*, Case No. 95-554, Order at 5 (Ky. PSC Sep. 11, 1996).

[4] *Application of Kentucky-American Water Company for an Adjustment of Rates Supported by a Fully Forecasted Test Year*, Case No. 2012-00520, Order at 6-7 (Ky. PSC Oct. 25, 2013).

1 projects identified in the Company's SCEP, approval of the capital investment plan does
2 not constitute approval of individual capital projects. Instead, approval of the capital
3 investment plan is an approval of the overall expected capital spend for the year. As set
4 forth above, during any given year, unexpected changes may occur due to outside
5 influences, unexpected failures that affect the infrastructure's ability to serve the
6 customer, or to meet regulatory requirements. In these cases, a new priority project not
7 previously included in the plan is initiated or a planned project is changed. Since these
8 changes were not identified during the original planning process, the need to offset the
9 new project's expected cost is required to ensure that the overall company capital
10 investment plan amount is maintained. As a result, projects that were originally
11 identified within the plan are changed or delayed to make room for the new, unexpected
12 projects or a change in an existing project so that the overall company capital spend for
13 the year is maintained as presented in the capital investment plan.

14 **Q. Does the Company tend to spend less than its annual capital investment plan**
15 **amount as Mr. Kollen indicated in his testimony?**

16 A. No. As indicated in the KAWC Net Capital Investment Budget vs Actual Capex for 2012
17 through 2017 table in Mr. O'Neill's testimony on page 9, the Company had a cumulative
18 capital investment plan of $139,164,836 and had an actual capital investment of
19 $141,151,623 which resulted in an overspend during this period of 1.43%.[5] In fact, even
20 looking at Mr. Kollen's ten-year schedule of the slippage percentages (as shown on

[5] For the period of 2008 to 2017, the Company had a cumulative capital investment plan of $344,850,740 and had an actual capital investment of $358,919,661 which resulted in an overspend during this period of 4.08%. Even excluding KRS II, the Company overspent during the same period by 1.89% as shown on the KAWC Column of Exhibit 1.

1 Exhibit 1 attached to my rebuttal testimony), one cannot help but to be struck by the very
2 clear differences between the slippage percentages for the first five years (2008 – 2012)
3 and the following five years (2013 – 2017). Mr. Kollen's cumulative average slippage
4 factor for the earlier period is 80.77%. In rather dramatic contrast, the cumulative
5 average slippage factor for the more recent five years is 100.74%. Using the Company's
6 data on Exhibit 1, the contrast is even more dramatic – the slippage percentage for the
7 most recent five years (118.38%) is significantly higher than the slippage percentage for
8 the first five years (82.19%). This clearly demonstrates that the Company does not spend
9 less than its annual capital investment plan. In fact, most recently the Company has spent
10 more than its plan. As explained above, by completely ignoring reprioritized
11 infrastructure investment, Mr. Kollen is simply cherry-picking the data that suits him to
12 assert that the Company spends less than its capital investment plan to impose a negative
13 slippage factor. A ten-year average slippage factor that considers the entirety of the data,
14 as proposed by the Company, is more appropriate.

15 **Q. Is this relevant to a discussion of slippage factors?**

16 A. Yes, it is highly relevant. Mr. Kollen states at page 16 of his testimony:

17 For example, in 2008, the Company actually spent $12.9 million
18 compared to its budget of $18.0 million. In 2009, the Company actually
19 spent $11.8 million compared to its budget of $17.9 million. This is
20 typical, in my experience, particularly when the utility's rates are set based
21 on costs in a forecast test year rather than actual costs in a historic test
22 year.
23
24 I do not purport to question what Mr. Kollen's experience might be with respect to other
25 companies in other jurisdictions. I do note that his criticism of forecasted test years has
26 no applicability to the matter at hand here and little, if any, applicability to KAWC's

1 recent rate case experience. For example, in Case No. 2012-00520, the forecasted test
2 period was the 12-month period ending July 31, 2014. In Case No. 2015-00418, the
3 forecasted test period was the 12-month period ending August 31, 2017. As shown on
4 the left hand column of Exhibit 1 (the Company's actual spend vs. plan), the Company
5 spent more than planned in each of these years, not less. Mr. Kollen's claim that the
6 Company underspends relative to its forecast is simply false.

7 **Q. What does Kentucky-American Water believe is a more appropriate factor?**

8 A. The Company believes that the KAWC column of Exhibit 1 attached to my rebuttal
9 reflects a more coherent view of the management of the overall capital spend to achieve
10 the overall capital investment plan amounts. It is calculated in a manner that is consistent
11 with this Commission's precedent, was used in the Company's base period update, and is
12 the appropriate calculation of slippage. The ten-year average slippage factor based on
13 Exhibit 1 is 110.46% for recurring projects and 91.08% for investment projects.

14 III. QUALIFIED INFRASTRUCTURE PROGRAM

15 **Q. You also noted that you were addressing certain claims raised by AG witness**
16 **Richard Baudino, correct?**

17 **A.** Yes. Ms. Schwarzell will address some of the various other criticisms that Mr. Baudino
18 levels against the Company's proposed Qualified Infrastructure Program ("QIP") Rider.
19 I will address specifically his comments regarding the Company's responsibility to make
20 ongoing investments, his contention that Kentucky-American's main break experience
21 does not warrant the QIP Rider, and his quarrel with the composition of the investments
22 that should be eligible under that rider.

1 **Q. Mr. Baudino comments that, "Like any regulated utility, KAWC has a responsibility**
2 **to make ongoing investments in its system in order to provide ratepayers safe and**
3 **reliable service at just and reasonable rates. This is the case whether or not the**
4 **Commission grants KAW a QIP rider." Can you respond?**
5 A. Yes. As I stated in my direct testimony, Kentucky-American has always, and will
6 continue, to make investments in our water infrastructure to ensure adequate and
7 satisfactory sources of supply, treatment, pumping transmission and distribution facilities.
8 We also make these investments to comply with applicable laws and regulations, which is
9 key to meeting our public service commitment. There is a distinction between the
10 necessary rate of replacement and a more optimal replacement rate. The necessary rate
11 of ongoing infrastructure investment to provide safe and adequate service is not the same
12 as the optimum rate of infrastructure investment that best serves the long term interests of
13 our customers. For example, when there is a break in our distribution system
14 infrastructure, it is "necessary" –a must – that we make the repairs. But it is "optimal" to
15 replace our infrastructure at a rate that more closely matches the estimated useful life of
16 the respective assets.
17 Replacing pipes that are near the end of their useful life in the present rather than
18 deferring replacement will result in lower costs for customers over time. Responsible,
19 systematic replacement is far more cost efficient. Planned pipe replacements are much
20 less costly on a unit cost basis compared to the steep increase in future pipe replacements
21 resulting from prior deferrals of those replacements. In addition, there are costs relating
22 to increasing pipe breaks, service disruptions, property damages, health risks from

potential drinking water contamination exposure and related community opportunity costs tied to community health and economic development.

Q. Mr. Baudino also claims that a QIP Rider cannot be justified because the Company has not demonstrated an increase in water main breaks and leaks over the last 10 years. How do you respond?

A. Main breaks are not the most critical element in determining the need for infrastructure replacement, but they are certainly one of several important criteria that the Company uses to determine the priority of main replacements. They are not the most critical because as quoted in Mr. Baudino testimony from the Company's response to AG's First Request, Item 85, "it is difficult to determine a trend from year to year over that period due to the impact of a variety of factors on main breaks that leads to leaks." The response further explains that those factors include pipe age, pipe material, diameter, weather, and soil type. Because weather and soil types also contribute to main breaks -- as can be seen in the 2014 Polar Vortex event in Kentucky, where ground movement increased main breaks for that year, and in the dry conditions during the fall of 2016 that again contributed to an increase in main breaks over that period -- main breaks can only be used in a combination of other indicators to determine the need for infrastructure replacement. As explained in my direct testimony, Kentucky-American uses eight criteria to prioritize mains for replacement and determine if a main is providing reliable service, as well as indicating the condition of the main. The eight criteria are: Low Pressure; Number of Breaks/Leaks; Fire Flow; Age; Material Type; Size of Main; Water Quality; Customer Impact. While the number of main breaks has fluctuated over the past decade, the Company has experienced recent increases in unaccounted for water above

1 15% of system delivery as discussed below. The Company believes unaccounted for
2 water is a better indicator of the system's condition than the number of main breaks
3 alone. It is an indication, that there are likely smaller leaks that have not surfaced or yet
4 resulted in a main break. Again, a variety of factors are considered to prioritize mains
5 for replacement. Regardless of the prioritization factors considered, Kentucky-American
6 has demonstrated that the purpose of a QIP is to allow the Company to address
7 infrastructure nearing the end of its useful life and that our proposal carefully prioritizes
8 and undertakes drinking water infrastructure renewal investments to support the
9 communities we serve. The Company has further shown that, as the water distribution
10 system begins to reach the end of its useful life, increased failures in the infrastructure
11 begin to occur that negatively influence the ability to provide safe and reliable service to
12 the community. Neglecting this aging infrastructure will, among other things, increase
13 the frequency of water main breaks and leaks.

14 **Q. Were main breaks used to identify a particular material type for replacement?**

15 A. Yes. My direct testimony demonstrates that a review of the reported breaks from January
16 2012 to December 2017 shows that main breaks on cast iron main represents 63.2% of all
17 of main breaks. This is significant because cast iron main (both lined and unlined
18 material) only represents 15.3% of the total inventory of mains in the ground. So,
19 clearly, the break rate on this type of material is significantly higher than the other
20 material in the system. It is in this context that main breaks provide a compelling
21 indicator of the status of the infrastructure and a priority of need for infrastructure
22 replacement.

1 **Q. Has the Company experienced an increase in the frequency of breaks on cast iron**
2 **main?**
3 A. Yes. In reviewing the reported breaks from January 2012 to December 2018, cast iron
4 accounted for 60% of the breaks in the five-year period from 2009 to 2013 while it
5 accounted for 68% of the breaks during the five-year period from 2014 to 2018. Through
6 this review, it would appear that, as cast iron main continues to age, the likelihood of
7 main breaks and disruptions will increase.

8 **Q. Will the QIP rider address this increase in the frequency of breaks on cast iron**
9 **main?**
10 A. Yes, the Company is proposing that cast iron and galvanized steel be prioritized for
11 replacement first through the QIP Rider. The Company believes that the best course at
12 this time is to target this type of pipe material over the next 25 years for replacement.
13 The replacement of cast iron and galvanized mains allows KAWC to address
14 underperforming mains and, accordingly, reduce the impact of main breaks in the areas
15 served by this type of material.

16 **Q. Mr. Baudino has indicated that the proposed QIP Rider represents an expansion of**
17 **the DISC rider that was previously proposed in Case No. 2012-00520. Is this**
18 **accurate?**
19 A. Yes, as Mr. Baudino has indicated the Company proposed four plant accounts associated
20 with distribution system improvements during the 2012 case. In the current case,
21 Kentucky-American is proposing to include the distribution system improvement
22 associated plant accounts and add several plant accounts that allow KAWC to address the

1 problem of aging infrastructure across its system. Although, in most cases, transmission
2 and distribution main will require attention first and will be the priority of a QIP, a pump
3 or treatment asset may require more immediate attention due to its effect on a larger
4 portion of the service area.

5 **Q. Why does the Company propose to include plant account 311– Pumping Equipment**
6 **and plant account 310 – Power Generation Equipment in the category of plant that**
7 **is eligible for the QIP?**

8 A. As indicated in my direct testimony, the Company has 18 distribution pumping stations
9 that are integral to the distribution system's ability to the provide safe, reliable and
10 affordable service while meeting the demands placed upon the system to provide
11 adequate pressure, fire protection, and limited disruptions in service. Working in concert
12 with the pumping stations is back up generation at these sites to allow the pumping
13 stations to continue to provide adequate service for extended time periods after an
14 extreme event. Similar to the aging water mains within the distribution system, the
15 distribution pumping equipment is also aging and, as an integral part of the distribution
16 system, KAWC believes it is appropriate to be included in the QIP Rider along with the
17 access to a reliable source of power.

18 **Q. Why were the additional plant accounts included within the QIP Rider?**

19 A. KAWC also included plant accounts 320-Water Treatment Equipment, 344 – Laboratory
20 Equipment, 346 – Communication Equipment and 347 – Miscellaneous Equipment as
21 part of the QIP. Utilities are not only faced with an aging distribution system
22 infrastructure but also with the need to replace water treatment infrastructure. The

1 inclusion of these additional plant accounts in the accounts eligible for the QIP Rider
2 allows the Company to address treatment plant replacements projects that are identified
3 as posing a threat to regulatory compliance, system reliability, documented structurally
4 deficiencies, and safety. The Company believes that these types of investments are
5 specifically related to the quality, reliability and safety of the drinking water and are in
6 the public interest.

7 **Q. Does Mr. Baudino recommend the type of investments covered by the QIP Rider?**
8 A. Yes. At first, Mr. Baudino indicates he does not favor the QIP. However, he does
9 indicate that if a QIP is allowed, then then the Commission should "take a careful and
10 considered approach". He further indicates that "only those older mains that [] do not
11 produce new and expanded revenues for the Company should be included in the initial
12 stage of a QIP rider program."

13 **Q. Do you agree with Mr. Baudino that "only older mains" should be included in the**
14 **QIP Rider?**
15 A. No. The QIP Rider, as currently proposed, does focus on the replacement of mains. In
16 fact, in my direct testimony I committed to an estimated incremental cost of accelerated
17 infrastructure replacement of an additional $6 to $10 million for the first five years of the
18 QIP Rider. I also explained that, based on a variety of prioritization factors (not just age),
19 the investment will be primarily driven by cast iron and galvanized steel replacements. I
20 noted, however, that the QIP program also would include some replacement of aging
21 distribution pump stations that would have a significant impact on the ability of the
22 distribution system to provide reliable service and integrity of the system if they were to

1 fail. The Company cannot ignore the remainder of its aging infrastructure and focus
2 entirely on main replacement. It is important that any infrastructure replacement program
3 consider critical infrastructure serving the customers beyond just distribution mains. The
4 replacement of pumping equipment and water treatment infrastructure is an important
5 part of the Company's ability to address aging infrastructure and it has a significant
6 impact on the system's ability to provide reliable and safe water to its customers. In
7 some respects, the replacement of this type of infrastructure impacts water service quality
8 and reliability across the entire customer base is even more critical than the local effect of
9 replacing a distribution main.

10 **Q. Do you agree with Mr. Baudino that the Commission should "take a careful and**
11 **considered approach"?**

12 A. Yes. The Company has taken such an approach and our QIP proposal reflects that
13 approach over the long term. The Company's proposal is based on a careful evaluation
14 of KAWC's infrastructure, described in my direct testimony. Through the QIP, the
15 Company seeks to further accelerate the rate of investment to replace its aging water
16 infrastructure in a systematic, responsible manner that addresses the long-term
17 replacement needs of the system in a more cost effective way. As I discuss above, from
18 the perspective of long-term sustainable customer service and water rates, replacing
19 infrastructure near the end of its useful life in this way will result in lower costs to
20 customers over time rather than waiting to repair and replace infrastructure as it
21 breaks. The QIP Rider represents a careful and measured approach to address our aging
22 infrastructure over the long term.

IV. UNACCOUNTED-FOR WATER

Q. Mr. Kollen recommends that the Commission adjust the Company's production costs for UFW above 15%. Do you agree with his recommendation?

A. No, I do not. The Company takes reasonable, cost-effective steps to control unaccounted-for water. One of the most significant of those steps is its request for approval of a QIP in this case. The Company is also adding leak detection resources to strengthen its water loss reduction program as described in Company Witness Kevin Rogers' direct testimony page 23, line 4 through page 26, line 16.[6] As the Company continues to aggressively pursue its comprehensive water loss reduction plan, the Company believes it would be appropriate for the Commission to establish an alternative level of reasonable unaccounted-for water loss pursuant to 807 KAR 5:066, Section 6(3) rather than make an adjustment to production costs incurred by the Company. Section 6(3) of 807 KAR 5:066 provides as follows:

> Unaccounted-for water loss. Except for purchased water rate adjustments for water districts and water associations, and rate adjustments pursuant to KRS 278.023(4), for rate making purposes a utility's unaccounted-for water loss shall not exceed fifteen (15) percent of total water produced and purchased, excluding water used by a utility in its own operations. Upon application by a utility in a rate case filing or by separate filing, or upon motion by the commission, an alternative level of reasonable unaccounted-for water loss may be established by the commission. A utility proposing an alternative level shall have the burden of demonstrating that the alternative level is more reasonable than the level prescribed in this section.[7]

Q. What alternative level of UFW loss should the Commission establish?

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[6] *See* Kentucky-American Water Company's Notice of Adoption of Departed Witness Testimony and Data Responses (Apr. 26, 2019)(notifying the Commission that I have adopted this portion of Mr. Rogers' direct testimony).

[7] 807 KAR 5:066, Section 6(3).

1 A. The Company respectfully requests that the Commission establish an alternative level of
2 unaccounted-for water loss of 20% of system delivery for ratemaking purposes in this
3 case in order to accommodate the Company's current level of UFW.

4 **Q. Why is the Company's proposed alterative UFW level of 20% of system delivery**
5 **more reasonable than the 15 % level currently prescribed by the rule?**

6 A. The Company's exceedance of the 15% level is a fairly recent phenomenon. For most of
7 the past decade, from 2009 through 2015, the Company's UFW remained below 15% of
8 system delivery. It rose to 15.69% in 2016, 18.86% in 2017 and 19.95% 2018. The
9 Company addresses its water loss levels through a consistent main replacement
10 infrastructure plan and a robust leak detection program. As outlined in this case, the
11 Company realizes that more can be done, and, therefore, continues to increase its water
12 loss reduction efforts. These efforts include adding dedicated labor resources to support
13 the Company's leak detection program and pursuing a more aggressive infrastructure
14 replacement plan via our proposed QIP to speed up the replacement of our aging water
15 mains. A part of this effort is outlined in the attached
16 KAW_RT_BEO_043019_Exhibit_2, which indicates the activities the Company will
17 undertake in 2019 in the effort to reduce water loss in its Southern Division System. The
18 Company expects to carry out similar activities and tasks w in its Central Division during
19 2019.

20 While we do not know all the causes of UFW, the main driver is continued leakage on
21 aging infrastructure from unidentified leaks. Despite KAWC's current level of
22 investment, more is needed to address the long-term replacement needs of the system in a

more cost effective way. The QIP mechanism will support an increased level of infrastructure investment that, over time, will help reduce the amount of water lost due to aging infrastructure. The Company has improved its main replacement rate from the almost 500 years needed to replace all of its mains, as identified in its last rate case, to 377 years. However, our mains have a realistic pipe life expectancy of only 60 to 100 years, and this acceleration is not sustainable without more timely cost recovery such as would be provided by our proposed QIP.

The Company's proposed alternative UFW level of 20% is reasonable. First, the increased UFW experienced in 2016-2018 is recent and not due to any lack of diligence on the part of the Company. The reality is that despite extensive water loss reduction efforts, UFW cannot be reduced overnight. Second, the Company has taken substantial steps to reduce UFW, such as shortening its main replacement cycle from 500 to 377 years since its last rate case. In order to sustain and increase the acceleration of main replacement, the Company is asking for the constructive regulatory measure of the QIP. However, even with the QIP, it will take a sustained period of accelerated main replacement to reduce UFW. For purposes of this rate case, we believe it is reasonable for the Commission to establish the Company's unaccounted-for water level at its current level of approximately 20%.

V. BASE PERIOD UPDATE PROJECTS

Q. Did KAWC make adjustments to deferred maintenance during the update to the base period?

1 A. Yes. In KAWC's update of the base period, the Company added two new tank painting
2 projects to deferred maintenance. The Company included Kentucky River Station
3 Hydrotreators 9 and Hydrotreators 10 rehabilitation and painting in the updated base
4 period.

5 **Q. Why were Kentucky River Station Hydrotreators 9 and Hydrotreators 10 added to**
6 **the base period update?**

7 A. KAWC included the two hydrotreators in the base period update to reflect the work that
8 was completed on the two treatment tanks. Originally, the two hydrotreator tanks were
9 scheduled to be painted outside of the forecast period. However, due to a delay in the
10 start of painting of the Muddy Ford Tank, the Company was able to avoid demobilizing
11 the contractor and complete the painting of the treatment tanks ahead of peak demands
12 period during 2019.

13 **Q. Why were Kentucky River Station Hydrotreators 9 and Hydrotreators 10 scheduled**
14 **to be painted?**

15 A. Over the past several years, KAWC has painted eight of the ten hydrotreators to ensure
16 the coatings on the steel tanks and treatment structures provide a continued protection of
17 the tanks from corrosion and preserve their structural integrity. Hydrotreators 9 and
18 Hydrotreators 10 were the final two treatment units to be repainted, which completes the
19 maintenance on all of the units for an expected period of 15 years.

20 **Q. Why was Muddy Ford Tank painting delayed?**

21 A. Muddy Ford Tank was delayed from the planned start of September 2018 to March 2019
22 due to the need to ensure that removing the tank from service would not adversely affect
23 the service to customers and cause low pressure events within the surrounding area of the

1 Muddy Ford Tank during painting operations. During the end of 2018, the Company was
2 completing programing and testing of the new Rest Area Booster that was a key element
3 in being able to take Muddy Ford Tank out of service. During the end of 2018, the
4 decision was made that additional operational testing was required to ensure that the new
5 booster station would perform as expected during the painting of Muddy Ford and
6 provide the company with operational experience with the station prior to taking Muddy
7 Ford out of service for an 8-week period.

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

9 A. Yes.

VERIFICATION

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

The undersigned, **Brent O'Neill**, being duly sworn, deposes and says he is the Director of Engineering for Kentucky-American Water Company, that he has personal knowledge of the matters set forth in the foregoing testimony, and the answers contained therein are true and correct to the best of his information, knowledge, and belief.

BRENT O'NEILL

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 25th day of April, 2019.

(SEAL)

Notary Public

My Commission Expires:

7/25/2020

Kentucky American Water
Summary of Slippage Factors
Case No. 2018-00358

Slippage Factors	
RPs	110.5%
IPs	91.1%
CIAC	110.5%
Cust Adv	110.5%

KAWC
PRECEDENT CONSISTENT SLIPPAGE CALCULATION
SUMMARY OF DATA USED FOR COMPANY'S RESPONSE TO COMMISSION STAFF'S SECOND REQUEST FOR INFORMATION, ITEM 3

Total Recurring Projects, Excluding DV

Recurring Projects	Actual	Budget	Difference	% Slippage
2008	10,189,801	9,403,440	786,361	108.36%
2009	10,018,007	11,256,248	(1,238,241)	89.00%
2010	9,970,662	8,727,894	1,242,768	114.24%
2011	15,765,624	10,996,891	4,768,733	143.36%
2012	12,293,465	12,114,955	178,510	101.47%
2013	12,711,637	12,764,455	(52,818)	99.59%
2014	13,944,053	13,026,468	917,585	107.04%
2015	15,440,019	11,699,775	3,740,244	131.97%
2016	12,102,788	11,569,947	532,841	104.61%
2017	15,195,390	14,473,565	721,825	104.99%
Total	127,631,446	116,033,638	11,597,808	110.00%
Arithmetic Average				110.46%

Investment Projects

	Actual	Budget	Difference	% Slippage
2008	3,404,838	8,565,709	(5,160,871)	39.75%
2009	2,060,714	6,625,803	(4,565,088)	31.10%
2010	4,903,209	9,267,222	(4,364,013)	52.91%
2011	5,530,010	12,060,966	(6,530,956)	45.85%
2012	10,526,754	12,486,481	(1,959,727)	84.31%
2013	16,130,179	11,286,304	4,843,875	142.92%
2014	6,333,591	6,508,099	(174,508)	97.32%
2015	18,585,805	15,614,020	2,971,785	119.03%
2016	13,322,400	7,460,398	5,862,002	178.57%
2017	9,516,762	7,995,885	1,520,877	119.02%
Total	90,314,263	97,870,887	(7,556,624)	92.28%
Arithmetic Average				91.08%

Total Project

	Actual	Budget	Difference	% Slippage
2008	13,594,640	17,969,149	(4,374,509)	75.66%
2009	12,078,721	17,882,051	(5,803,330)	67.55%
2010	14,873,871	17,995,116	(3,121,245)	82.66%
2011	21,295,634	23,057,857	(1,762,224)	92.36%
2012	22,820,219	24,601,436	(1,781,217)	92.76%
2013	28,841,816	24,050,759	4,791,057	119.92%
2014	20,277,644	19,534,567	743,077	103.80%
2015	34,025,824	27,313,795	6,712,029	124.57%
2016	25,425,189	19,030,345	6,394,844	133.60%
2017	24,712,152	22,469,450	2,242,703	109.98%
Total	217,945,709	213,904,524	4,041,185	101.89%

AG / LFUCG
NON-PRECEDENT CONSISTENT SLIPPAGE CALCULATION
BASED ON COMPANY'S RESPONSE TO COMMISSION STAFF'S THIRD REQUEST FOR INFORMATION, ITEM 2

VARIANCE BETWEEN ACTUAL KAWC SPEND AND AG-LFUCG OBSERVED SPEND

Total Project

	Actual	Budget	Difference	% Slippage	Variance from Actual	Variance From Budget
2008	12,880,191	17,969,149	(5,088,958)	71.68%	(714,448)	0
2009	11,817,305	17,882,051	(6,064,745)	66.08%	(261,416)	0
2010	14,868,318	17,995,116	(3,126,798)	82.62%	(5,553)	0
2011	20,572,837	22,943,595	(2,370,758)	89.67%	(722,796)	(114,262)
2012	23,077,755	24,601,436	(1,523,681)	93.81%	257,536	0
2013	26,128,386	24,050,759	2,077,627	108.64%	(2,713,430)	0
2014	18,446,756	19,534,567	(1,087,811)	94.43%	(1,830,888)	0
2015	28,256,721	27,313,795	942,926	103.45%	(5,769,103)	0
2016	20,674,381	19,030,345	1,644,036	108.64%	(4,750,807)	0
2017	19,896,805	22,469,450	(2,572,645)	88.55%	(4,815,347)	0
Total	196,619,456	213,790,262	(17,170,806)	91.97%	**$ (21,326,253)**	**$ (114,262)**

Scope of 2019 NRW Reduction Activities
KAW – Southern Division System

A. Background

Kentucky American Water has established a goal of reducing NRW volume levels as measured against a three year rolling average. This proposal establishes what activities must take place in 2019 to support the reduction of NRW in order that the yearly goal might be achievable.

B. Scope of Activities

Various leak detection methods and tools will be utilized to monitor the system for leakage and account for known, unbilled usage. Active acoustic methods of sounding will be employed for surveying purposes. This method is the most labor intensive but is very effective on all types of iron and AC piping materials and will be the primary approach to surveying the system in 2019.

1. Task Number 1 - Sounding of Creek and River Crossings, Locations where main lines cross creeks will be inspected for leakage by manual sounding and visible inspections. Leaks that occur in or near creeks could go unnoticed without periodic investigations of these areas.

2. Task Number 2 - Manual Sounding of Distribution System, The hydrant and valve approach will be utilized to leak sound all of the distribution system in 2019.

3. Task Number 3 Eliminating Potential Theft of Service, Inactive meter settings located in sparsely populated areas will be identified and retired to eliminate the potential for theft of service.

4. Task Number 4 – Fire Department Usage , Educational communication will be generated to re-affirm with the departments that water is to be used for firefighting purposes only. Each department will be visited by KAW personnel in 2019.

5. Task Number 5 Master Meter Assessment, Water providers for the system will be engaged to confirm that meters are being tested by certified testers and performed annually.

Scope of 2019 NRW Reduction Activities
KAW – Southern Division System

C. Schedule

The dates provided in the schedule below represent the targets by which leak detection activities will be managed. These targets are contingent upon having the proposed level of staffing, necessary to complete all of the program objectives.

Task #	Task	Start Date	50% Complete	75% Complete	100% Complete
1	**Creek Crossing & River Crossing Sounding** (7)	3/1/19			
5	**Manual Sounding of System**	3/1/19			
6	**Inactive Service Retirement (10)**	2/18/19			
7	**Fire Department Engagement**	2/4/19			
8	**Master Meter Assessment**	*To be scheduled			

D. Other Requirements

An increase in staffing will be required to perform all the tasks noted in this proposal. **One** additional person from the Field Operations area will be required to assist in executing the manual survey work as well as special project assignments to meet the monthly and annual NRW operational targets.

E. Other Considerations

- Continued close monitoring of flushing activity to better manage losses.
- Timeliness of leak repairs (Reduce repair time from acknowledgement to repair)
- Engage entire work force to be on the lookout for leaks
- Partner with KAW External Affairs to increase community awareness regarding what constitutes theft of service.
- Partner with local law enforcement agencies to provide assistance in dealing with habitual theft occurrences

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF:	)	
	)	
THE APPLICATION OF KENTUCKY-AMERICAN WATER COMPANY FOR AN ADJUSTMENT OF RATES	)	**CASE NO. 2018-00358**
	)	

REBUTTAL TESTIMONY OF JAMES S. PELLOCK

April 30, 2019

---

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

2 A. My name is James S. Pellock and my business address is 1 Water Street, Camden, NJ
3 08102.

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

7 A. Yes. I filed direct testimony on November 28, 2018.

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

9 A. The purpose of my rebuttal testimony is threefold. First, I will address certain aspects of
10 Mr. Lane Kollen's testimony on behalf of the Office of the Attorney General ("AG") and
11 Lexington-Fayette Urban County Government ("LFUCG") regarding the Company's
12 forecast of full-time equivalent employees. Second, I will address Mr. Kollen's
13 recommendation regarding rate case expense. Third, I am sponsoring the revised forecast
14 for labor and related expenses and maintenance expense, as shown in the base period
15 update.

16 **Employee Forecast**

17 Q. **AG/LFUCG witness Mr. Kollen proposes a reduction in full time equivalent**
18 **("FTE") employees to reduce the revenue requirement by $0.492 million for payroll**
19 **and payroll related expenses. Do you agree with this proposal?**

20 A. No, I do not. The Company's work must be completed by its available resources (full-
21 time employees, overtime, temporary employees or contract employees). KAWC has
22 two methods by which it can present the cost structure to accomplish its work: (1) assume

1 no vacancies and reduce overtime, temporary and contractor expenses accordingly; or (2)
2 assume a vacancy rate and include increased expenses for overtime, temporary and
3 contractor expenses to complete the work. The Company has chosen the first
4 methodology and has presented its cost structure accordingly.

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

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

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

12 A. Yes, AG witnesses have proposed similar reductions in Case No. 1995-00554, Case No.
13 2004-00103 and Case No. 2010-00036, and the Commission has upheld the Company's
14 methodology in each case, recognizing that:

15 If vacant employee positions exist, work will either be shifted to
16 other employees and thus result in an increase in overtime costs or
17 Kentucky-American will hire additional temporary/contract labor.
18 Kentucky-American has shown that its forecasts for overtime and
19 temporary/contract labor have been reduced to reflect a full
20 workforce. The vacant employee positions to which the AG refers
21 will result in decreased direct labor costs, but that decrease will be
22 offset by increases in overtime or temporary labor costs.[1]
23

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

25 A. Yes, not only because it is grounded in precedent but because it is based on the sound
26 principle that, if we are accomplishing our workload with a combination of regular time,

[1] 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).

1 overtime, temporary labor and contractors, and we propose to increase our employee
2 complement and reduce overtime, temporary labor and contractors, accordingly, the
3 elimination of the additional FTEs must be accompanied by the restoration of the
4 overtime, temporary workers and contractors. In this case, for example, the Company
5 has demonstrated that its forecast for overtime has been reduced to reflect the full
6 employee complement proposed in this case. The average overtime hours over the past
7 four years has been approximately 27,500 hours,[2] but the Company, in this case, is
8 forecasting only 16,034 hours (see Exhibit 37 G Schedule G-2, line 6).

9 **Rate Case Expense**

10 **Q. What is the AG/LFUCG position regarding the Company's rate case expense?**

11 A. AG/LFUCG witness Lane Kollen recommends that internal labor costs be excluded from
12 the deferred rate case expense total, asserting that rate case expenses are excessive
13 because (1) they are higher than in the Company's last rate case, (2) they are somehow
14 disproportionate to the size of the requested increase, and (3) internal labor costs
15 generally are not requested because the costs are not incremental.

16 **Q. Do you agree with AG/LFUCG's rate case expense position?**

17 A. No. Rate case expense, like every other expense item, should be recoverable if it is
18 reasonable and prudently incurred by the Company. The prudency of rate case expense
19 should be based on the time and effort reasonably spent to support the requested rate
20 relief. The fact that the expense may be higher than in past cases is not grounds for not
21 allowing KAWC to recover a prudently incurred cost. Neither is a claim that it is
22 somehow disproportionate to the requested increase in this case, particularly when no

[2] The Company's calculation is based on calendar year overtime hours for 2015 (26,451), 2016 (20,853), 2017 (25,016), and 2018 (37,526), resulting in an average of 27,461 hours per year.

1 basis for such a comparison is articulated. Finally, Mr. Kollen's assertion that internal
2 support services labor costs are not incremental is incorrect.

3 **Q. How does the scope of rate case expenditures in the current rate case filing compare**
4 **to the prior rate case proceeding?**

5 A. As Mr. Kollen points out, the estimated rate case expense in this case is larger than in the
6 Company's last rate case (Case No. 2015-00418), but that is for good reason. The
7 Company takes seriously its obligation to support the requests it has made in this rate
8 case filing, many of which raise complex issues for the Commission's consideration. The
9 Company recognizes that the Commission is charged with determining the
10 reasonableness of the Company's expenditures. To that end, in this case, the Company
11 commissioned and submitted a compensation study and a support services study. These
12 analyses are prepared periodically, as appropriate, to support the Company's position in
13 its rate case filing and to aid the Commission in fulfilling its responsibility to set just and
14 reasonable rates based on substantial evidence. Kentucky-American secured the services
15 of Willis Towers Watson to conduct a competitive review of total remuneration levels
16 and practices. The direct testimony of Company Witnesses Robert V. Mustich and
17 Timothy Willig outline the compensation and benefits analysis completed by the firm. In
18 addition, Kentucky-American procured the services of Baryenbruch & Company, LLC to
19 perform a market comparison study for the cost of services provided by Service
20 Company. Please see the direct testimony of Patrick L. Baryenbruch for details of the
21 study conducted by the firm. The Company commissioned the studies to confirm and
22 demonstrate that our compensation and Service Company costs are prudently incurred

1 and reasonable. In Case No. 2015-00418, these studies were not included in the scope of
2 work performed for the case.

3 **Q. Has Mr. Kollen offered evidence of any correlation between the cost of a rate case**
4 **and the amount of the rate increase requested?**

5 A. No, and the Company asserts that no such correlation exists. As explained above,
6 KAWC is thoughtful about the recovery it seeks in rate cases, the time and effort it takes
7 to prepare its rate cases and the presentation of the support for its requested revenue
8 requirement, as well as policy reform such as the proposed Qualified Infrastructure
9 Program. Moreover, the Company has an obligation to provide the Commission with the
10 best record possible. All Mr. Kollen's recommendation counsels is an arbitrary
11 disallowance of expenses that are prudently and reasonably incurred in order to present
12 our rate case.

13 **Q. You state that Mr. Kollen's assertion that internal labor costs are not incremental is**
14 **incorrect. Please explain.**

15 A. The Company uses American Water Works Service Company, Inc. ("Service Company")
16 resources to support the preparation, filing and litigation of a rate case as an alternative to
17 Kentucky-American staffing and maintaining its own in-house expertise for the full scope
18 of rate case filings 100% of the time. The cost of providing these services is directly
19 charged to Kentucky-American and not otherwise included in the Company's revenue
20 requirement. Consequently, these are, in fact, incremental costs.

1 **Q. Are the internal labor costs presented as deferred rate case expense also included**
2 **among the support services costs included in this case?**
3 A. No, Service Company charges are not being double-counted. Service Company
4 employees performing work specifically for an affiliate (for example, the Kentucky-
5 American rate case) use a charge code specifically designated to capture costs for the
6 preparation and support of the rate case, with such costs charged directly to that affiliate
7 and not allocated to other affiliate companies. When Service Company personnel are
8 performing work that is not company specific, time and costs are compiled under a
9 charge code that allocates such costs across affiliates. This represents the support services
10 element of operations and maintenance expense included in the Company's rate case
11 filing. If employees are charging time directly to a rate case or any other affiliate, those
12 charges are not included in the amounts calculated and billed to Kentucky-American for
13 support services. Accordingly, the costs specific to the rate case filing from Service
14 Company resources are incremental to Kentucky-American and should not be excluded
15 from deferred rate case expense.

16 **Q. Please explain how the Service Company – specifically, Regulatory Services and**
17 **Revenue Analytics – charges time?**
18 A. The Service Company bills by either direct charging or by using an allocation.

19 In order to provide a more detailed view please see Tables 1 and 2 below. Table 1
20 reflects the total hours charged for the period April 1, 2018 through March 31, 2019 by
21 those Regulatory Services and Revenue Analytics employees who charged time to the
22 Kentucky-American 2018 Rate Case. Table 2 reflects the total hours charged for the

1 period April 1, 2017 through March 31, 2018 for those Regulatory Services and Revenue
2 Analytics employees who charged time for Kentucky-American 2018 Rate Case.

3 The tables display how the employees charged their time to Kentucky-American and
4 other affiliates.

Employee	Job Title	(A) Kentucky Deferred - Rate Case No. 2018-00358 Charged	(B) Kentucky Non Rate Case Expense Charged	(C) Other Affiliate (excluding Kentucky) Deferred - Rate	(D) Other Affiliate (excluding Kentucky) Non Rate Case Expense Charged	(E) Service Company Allocated Non Rate Case Expense Charged	(F) Service Company Hours Charged to Kentucky Based on Allocation	(G) Grand Total =(A)+(B)+(C) +(D)+(E)
				Hours by Employee Period 4/1/2018 - 3/31/2019				
3000003	Principal Regulatory Analyst	353		445	282	1,000	40	2,080
3000131	Principal Regulatory Analyst	542	29	918	121	471	59	2,080
3000457	Sr. Regulatory Analyst	11		612	947	510	20	2,080
3002531	Sr. Director Regulatory Services	21		207	741	1,111	45	2,080
3017840	Principal Regulatory Analyst	44	25	405	405	1,201	100	2,080
17003587	VP Regulatory Services					2,080	86	2,080
18507395	Sr. Regulatory Analyst	364	34	616	581	485	60	2,080
18507643	Sr. Manager Regulatory Services			499	1,003	578	2	2,080
22000088	Sr. Manager Regulatory Services	211	18	784	165	904	133	2,080
24007208	Principal Regulatory Analyst	32			401	567	2	1,000
24007249	Regulatory Analyst	395		316	250	1,121	44	2,080
50027598	Sr. Manager Regulatory Services			560	137	1,383	56	2,080
50099158	Sr. Manager Regulatory Services	12		914	77	1,077	44	2,080
50111360	Admin Asst IV Rates & Regulatory (	48		37	3	2,137	22	2,225
50273031	Principal Regulatory Analyst	5		122	821	1,132	46	2,080
50302498	Admin Asst IV Rates & Regulatory (	11		14	3	2,098	21	2,126
50315421	Principal Regulatory Analyst			348	821	912	11	2,080
50326971	Regulatory Analyst	206		438	86	951	34	1,680
50345804	Principal Regulatory Analyst	149	60	794	356	721	27	2,080
50434554	Regulatory Analyst	264	1	569	396	851	34	2,080
50481432	Sr. Director Regulatory Services		674		170	1,237	51	2,080
50525790	Principal BIRS	343	217		265	1,255	51	2,080
50566911	Sr. Manager Regulatory Services				506	455	2	960
50596877	Senior Mgr BIRS Revenue Analytics	133		890	(2)	1,059	37	2,080
50615230	Principal Regulatory Analyst			200	39	561	17	800
60000549	Principal Regulatory Analyst				208	752	9	960
60002188	Mgr Budgeting and Internal Report	41		101	740	1,199	48	2,080
60002780	Director Rates and Regulatory			441		1,639	76	2,080
Total		**3,182**	**1,058**	**10,226**	**9,519**	**29,445**	**1,178**	**53,430**

***Hourly Employee**

**** The hours in column (F) are representative of the % of Service Company hours (for those employees who charged time to the Kentucky American Rate Case). These hours are included in column (E) therefore are not included in column (G).**

1

Hours by Employee Period 4/1/2017 - 3/31/2018								
Employee	Job Title	(A) Kentucky Deferred - Rate Case No. 2018-00358 Charged	(B) Kentucky Non Rate Case Expense Charged	(C) Other Affiliate (excluding Kentucky) Deferred - Rate Case Charged	(D) Other Affiliate (excluding Kentucky) Non Rate Case Expense Charged	(E) Service Company Allocated Non Rate Case Expense Charged	(F) Service Company Hours Charged to Kentucky Based on Allocation %**	(G) Grand Total =(A)+(B)+(C)+(D)+(E)
3000003	Principal Regulatory Analyst					2,080	80	2,080
3000131	Principal Regulatory Analyst		150	941	463	527	64	2,080
3000457	Sr. Regulatory Analyst			992	583	506	20	2,080
3002531	Sr. Director Regulatory Services		4	556	92	1,429	58	2,080
3017840	Principal Regulatory Analyst		8	636	463	973	111	2,080
17003587	VP Regulatory Services					2,080	86	2,080
18507395	Sr. Regulatory Analyst		13	811	594	662	83	2,080
18507643	Sr. Manager Regulatory Services			861	345	874	1	2,080
22000088	Sr. Manager Regulatory Services		49	909	182	941	126	2,080
24007208	Principal Regulatory Analyst		7	947	383	743	1	2,080
24007249	Regulatory Analyst			929	127	1,024	42	2,080
50027598	Sr. Manager Regulatory Services			600	72	1,409	57	2,080
50099158	Sr. Manager Regulatory Services			477	99	1,505	60	2,080
50111360	Admin Asst IV Rates & Regulatory (N)			59		2,129	16	2,188
50273031	Principal Regulatory Analyst		9	740	200	1,131	46	2,080
50302498	Admin Asst IV Rates & Regulatory (N)			23		2,128	16	2,151
50315421	Principal Regulatory Analyst			615	449	1,016	13	2,080
50326971	Regulatory Analyst			708	178	1,194	47	2,080
50345804	Principal Regulatory Analyst		14	915	173	978	40	2,080
50434554	Regulatory Analyst			769	254	1,058	43	2,080
50481432	Sr. Director Regulatory Services		3	178	98	1,801	72	2,080
50525790	Principal BIRS		88		845	1,147	47	2,080
50596877	Senior Mgr BIRS Revenue Analytics			942		1,137	41	2,079
60002188	Mgr Budgeting and Internal Reporting			109	130	921	36	1,160
60002780	Director Rates and Regulatory			113	12	267	11	392
Total		**0**	**344**	**13,826**	**5,740**	**29,659**	**1,217**	**49,569**

***Hourly Employee**

**** The hours in column (F) are representative of the % of Service Company hours (for those employees who charged time to the Kentucky American Rate Case). These hours are included in column (E) therefore are not included in column (G).**

- The hours direct billed to the Company are classified as Kentucky Deferred - Rate Case Charged or Kentucky Non Rate Case Expense Charged. Kentucky Deferred – Rate Case Charged hours are the hours for the current rate case. Kentucky Non Rate Case Expense Charged displays the hours charged directly to Kentucky American for non-rate case work specifically for the Company (i.e. Commission report, other regulatory filings, etc).

- Other Affiliate (excluding Kentucky) Deferred - Rate Case Charged displays the hours that are directly charged to other regulated companies for work on their specific rate cases. The cost associated with these hours is deferred and recovered through amortization in their respective states.

1 • Other Affiliate (excluding Kentucky) Non Rate Expense Charged displays the
2 hours charged directly to other regulated companies for non-rate case work
3 specifically for those companies (i.e. Commission report, other regulatory filings,
4 etc.).

5 • Service Company Allocated Non Rate Case Expense Charged includes hours
6 allocated to all regulated companies, including Kentucky American. A portion of
7 this is allocated to Kentucky American and represented in column (F) of both
8 Table 1 and Table 2.

9 Service Company employee hours charged to rate case expense are done so appropriately
10 and separate of other hours worked. Since the deferred rate case expense is direct charged
11 to KAWC and held for recovery (column A), it is not included in the Service Company
12 expense. Only non-rate case work (such as that represented in columns B and F) would
13 be included in the Service Company expense, as those are the kind of charges that flow to
14 the Company as expense. Rate case expense should represent a utility's incremental or
15 additional costs incurred to execute its rate case. The expense associated with Regulatory
16 Services and Revenue Analytics charged to rate case expense are the exact charges
17 associated with the incremental or additional costs incurred to execute a rate case. By
18 deferring these costs the Company ensures that our customers do not pay for them
19 annually when seeking recovery of support services expenses. The Company's recovery
20 of rate case expense by Regulatory Services and Revenue Analytics is no different from
21 the recovery of fees charged by a consultant engaged to prepare its rate cases, except that

1 Service Company expenses are charged at cost and without the profit margin that an

2 outside firm would charge.

3 **Base Period Updates**

4 **Q. Please explain the Company's base period update to labor and related expenses.**

5 A. Upon further review of the labor-related costs for one employee being added through the

6 North Middletown acquisition following the filing of this case, the Company realized

7 there was an errant assumption regarding the percentage of time that employee would be

8 spending on water operations. While the assumption in the initial filing was for a 100%

9 allocation to water operations, the allocation of time (and expenses) to water operations

10 should have been 60%. The net result is a reduction of $27,232 in costs for labor and

11 related expenses for the fully forecasted test period, broken down as follows:

Line	Item	Amount
12	Salaries and wages	$ 19,353
13	Payroll tax	1,516
14	Group insurance	4,782
15	Defined contribution / 401(k)	1,581
16	Total	$ 27,232

17 **Q. Please explain the Company's base period update to maintenance expenses.**

18 A. Maintenance expense has been adjusted to reflect the amortization of tank painting

19 projects for Hydrotreators #9 and #10 at Kentucky River Station I. Witness Brent

20 O'Neill will describe the projects in his rebuttal testimony.

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

22 A. Yes.

VERIFICATION

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

The undersigned, **James S. Pellock**, being duly sworn, deposes and says he is the Principal Regulatory Analyst for American Water Works Service Company, Inc., that he has personal knowledge of the matters set forth in the foregoing testimony, and the answers contained therein are true and correct to the best of his information, knowledge, and belief.

JAMES S. PELLOCK

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 18th day of April, 2019.

Notary Public (SEAL)

My Commission Expires:

ANN G. ALFANO
NOTARY PUBLIC OF NEW JERSEY
ID # 50014130
My Commission Expires 4/15/2020

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF:	)	
	)	
THE APPLICATION OF KENTUCKY-AMERICAN WATER COMPANY FOR AN ADJUSTMENT OF RATES	)))	**CASE NO. 2018-00358**
	)	

REBUTTAL TESTIMONY OF NICK O. ROWE

April 30, 2019

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

2 A. My name is Nick O. Rowe and my business address is 2300 Richmond Road, Lexington,

3 Kentucky 40502.

4 **Q. Did you previously submit direct testimony in this proceeding on behalf of**

5 **Kentucky-American Water Company, Inc. ("Kentucky-American," "KAWC" or**

6 **the "Company") in this proceeding?**

7 A. Yes. I filed direct testimony on November 28, 2018.

8 **Q. Please describe the purpose of your Rebuttal Testimony.**

9 A. I will address certain of the testimony and proposed adjustments that were made by

10 Richard Baudino and Lane Kollen, witnesses who are jointly sponsored by the Attorney

11 General ("AG") and the Lexington-Fayette Urban County Government ("LFUCG")

12 (together "AG/LFUCG").

13 **Q. What elements of Messrs. Baudino's and Kollen's testimony are you addressing?**

14 A. In my Direct Testimony, I explained that the most significant driver of this rate case is

15 Kentucky-American's increasing infrastructure investment, which accounts for more than

16 half of our total requested rate increase. Accordingly, we again are requesting a

17 Qualified Infrastructure Program ("QIP") to provide the Company with much needed

18 assistance to further accelerate our infrastructure replacement program. The AG/LFUCG

19 witnesses, however, oppose that measure. They also propose substandard rates of return

20 that would harm our ability to attract the discretionary capital necessary to fund that

21 program. I noted that another significant driver of this rate case is the need to reset the

22 TCJA interim base rate reduction. Here, too, the AG/LFUCG witnesses are

1 recommending a rapid amortization of excess accumulated deferred income taxes
2 ("EADIT")[1] that will harm the Company's cash flow, create rate shock and
3 intergenerational inequities, and further harm our ability to attract discretionary capital. I
4 explained, too that we are seeking recognition in rates of employee performance based
5 compensation expense that we believe is not only competitive, but also reasonable. Here,
6 again, the AG/LFUCG witnesses are proposing a complete denial of these just and
7 reasonable expenses, which will further harm our ability to attract discretionary capital. I
8 will explain these issues in more detail below.

9 **Q. What is the position of the AG/LFUCG with respect to the Company's QIP**
10 **proposal?**
11 A. They advocate rejecting our proposed QIP. And, if the QIP were to be adopted, they
12 advocate that the ROE associated with it be reduced by 100 basis points -- a weighted
13 rate of return that would place Kentucky American among the lowest earners in the
14 American Water system.

15 **Q. Would the rejection of the proposed QIP be considered constructive regulation?**
16 A. No, it would not. As I noted in my Direct Testimony, one-half of our increased revenue
17 requirement is driven by our investments. Our proposed QIP is largely for investments to
18 upgrade and replace our systems and infrastructure that are at or nearing the end of their
19 useful life - which also requires significant capital expenditures. The Company will
20 have invested more than $100 million in capital improvements since the last rate case
21 without realizing any capital cost recovery or depreciation expense on that investment.

[1] The EADIT balances are produced by the tax reductions resulting from the federal Tax Cuts and Jobs Act ("TCJA") and Kentucky House Bill 487.

1 Our aged infrastructure must be continuously replaced, so that KAWC can continue to
2 provide its customers safe, adequate, efficient, and reliable utility service. KAWC's
3 investment has, in fact, shifted largely from plant needed to meet demand to non-
4 revenue producing infrastructure replacement and compliance with new drinking
5 water standards. In my Direct Testimony, I pointed out, for example, that, at the current
6 rate over the past few years it would take nearly 377 years to replace all of the mains in
7 the system, which have a realistic pipe life expectancy of only 60 to 100 years, depending
8 on the pipe type. Although the Company has managed to bring this down from the nearly
9 500 years to replace all of the mains in the system identified in the last rate case, this
10 acceleration is not sustainable without more timely cost recovery. As a result, the
11 Company's request for a QIP to provide a more current matching between making an
12 investment and recovering the cost of that investment is vital to our ability to continue to
13 provide safe, adequate and reliable water to our customers in a way that best serves the
14 long-term interest of our customers, and to compete for the discretionary capital
15 necessary to do so.

16 **Q. Please explain why the QIP is critically important to the Company.**

17 A. While American Water always ensures that each of its water utilities is afforded access to
18 capital to provide safe, adequate, and reliable service, investment funding is not limitless.
19 American Water is competing with other companies and industries in the marketplace for
20 capital, and American Water's subsidiaries (including Kentucky-American) are
21 competing within the American Water system for discretionary allocations of American
22 Water's investment and financing capacity. Discretionary allocations within American
23 Water can be influenced by a subsidiary company's capital requirements, as well as by

1 market conditions and available funds. Investors have choices. The choices investors
2 make must necessarily consider the returns available on invested capital. American
3 Water is acutely aware that utility statutes and regulatory frameworks vary from state to
4 state; regulatory commissions have different policies, administrative procedures, and
5 precedents; and these differences affect American Water's investment decisions.
6 Kentucky, like the rest of the United States is reaching a crossroads and facing difficult
7 choices. Kentucky-American is looking to reach and maintain an optimal level of
8 infrastructure investment, but if Kentucky's regulatory treatment does not keep up with
9 ongoing capital expenditures and results in significant and persistent regulatory lag, it
10 discourages expenditures in Kentucky versus alternative investments available to
11 American Water.

12 **Q. Do other American Water subsidiaries have mechanisms similar to the QIP?**

13 A. Yes. As I explained in my Direct Testimony, American Water regulated subsidiaries in
14 Illinois, Indiana, Iowa, Missouri, New Jersey, New York, Pennsylvania, Tennessee,
15 Virginia and West Virginia have some mechanism to recover costs of infrastructure
16 replacement in between general rate case proceedings. With Kentucky-American being
17 among the last of American Water's regulated subsidiaries without a mechanism to
18 achieve timely recovery of its investment in accelerated infrastructure replacement, it is
19 at a significant disadvantage to attract discretionary capital allocations from American
20 Water as compared to its affiliates. Furthermore, as Ms. Bulkley points out in her
21 Rebuttal Testimony, capital recovery mechanisms such as the QIP have become
22 commonplace for water utilities, with the majority of our peer companies in the industry
23 having them in place. Such clauses are also common for natural gas distribution utilities.

1 Without such a clause we are at a distinctive competitive disadvantage to our peers, both
2 within the American Water System and outside of it.

3 **Q. You mentioned that there is a deterioration in cash flow due to federal income tax**
4 **reform. Is the AG/LFUGC proposing policies that will exacerbate the Company's**
5 **cash flow difficulties?**

6 A. Yes. Mr. Kollen is proposing an alarmingly rapid accelerated EADIT amortization that
7 will create cash flow, credit rating, rate spike and intergenerational equity issues
8 discussed by Company witnesses Bulkley, Schwarzell, and Wilde. As Ms. Schwarzell
9 notes, the rapid acceleration of EADIT amortization also would create a near term
10 revenue requirement spike that will make a follow on rate case a certainty following the
11 expiration of the rapid amortization. Perhaps even more troubling, Ms. Bulkley notes
12 that many utilities have already seen their credit ratings downgraded due to the negative
13 cash flow implications for public utilities from federal tax reform. Ms. Bulkley goes on
14 to discuss the positive steps that the ratings agencies advocate that utility regulators take
15 to address these cash flow concerns, among which are increasing allowed equity returns
16 and adopting positive regulatory mechanisms such as the QIP, which I will address
17 further in my testimony. Unfortunately, Mr. Kollen's proposal to amortize the EADIT
18 over just three years flies directly in the face of, and simply ignores, the
19 recommendations of the rating agencies and this Commission. As I will also explain
20 below, we directly compete with our utility affiliates for discretionary capital from our
21 parent company. Were the Commission to adopt such a negative policy toward EADIT
22 amortization, the Company would be adversely affected in that competition for resources
23 with our sister companies.

1 **Q. You also state that Kollen's proposal to disallow the Company's expenses for its**
2 **Annual Performance Plan ("APP") and Long Term Performance Plan ("LTPP") will**
3 **further harm the Company's ability to attract discretionary capital. Please elaborate**
4 **on that point.**

5 A. Kollen's proposal is not only counterproductive but it borders on being punitive. As Mr.
6 Kogler explains in his rebuttal testimony, there is a growing recognition that performance-
7 based compensation plans featuring the types of measures used in Kentucky-American's
8 plans do, in fact, benefit customers, and Mr. Kollen agreed. In response to KAWC's data
9 requests, Mr. Kollen stated that he believes that a utility that is focused on improving
10 customer satisfaction,[2] safety,[3] water quality,[4] environmental compliance,[5] and efficiency[6]
11 is in the interest of customers. KAWC's performance plans are focused on these
12 performance measures. And, as I pointed out in my Direct Testimony, our total 2017 O&M
13 expense is relatively flat as compared to our total 2010 O&M expense. This is a
14 remarkable achievement that simply would not have occurred without a motivated,
15 dedicated workforce. Moreover, our LTPP has operated to help retain our key employees,
16 saving the Company from the expense and disruption of replacing productive, high
17 performing employees.

18 **Q. You called the recommended disallowance "punitive." Why do you believe that?**

19 A. Kentucky-American is committed to paying its employees fairly and providing them
20 performance pay when they perform effectively and in the best interests of our customers.

[2] AG-LFUCG response to KAWC 1-48.
[3] AG-LFUCG response to KAWC 1-45.
[4] AG-LFUCG response to KAWC 1-47.
[5] AG-LFUCG response to KAWC 1-46.
[6] AG-LFUCG response to KAWC 1-44.

1 As Mr. Mustich demonstrated, even with the performance pay, our pay levels are still at or
2 below the median levels for similar positions. Mr. Kogler explains how the structure of our
3 performance pay benefits our customers. Even in Mr. Kollen's responses to discovery, he
4 concedes that it has become the norm for American businesses, generally, and utilities, in
5 particular. We do not intend to reduce our employees' wage, salary and benefits to levels
6 below market, and eliminating performance pay would do just that. Under the
7 circumstances, it appears punitive to deprive the Company of recovery for employee
8 expenses that are clearly prudently incurred, reasonable and in the best interests of our
9 customers and all of our stakeholders.

10 **Q. Is there any other reason why denying the Company recovery of its APP and LTPP**
11 **expenses is unwise?**

12 A. Yes, as I explained in my testimony, there is $1.8 million of performance compensation
13 costs that the Commission previously has not recognized in rates. If we do not recover
14 these unavoidable costs, we will have an immediate diminution in our earned rate of return.
15 We will, moreover, suffer the same magnitude of cash flow losses because we will pay
16 these expenses to our deserving employees regardless of whether they are recognized in
17 rates, or not, but we will be deprived of the cash necessary to pay them. I believe this is
18 unwise and counterproductive at a time when, as I explain above, the Company's cash flow
19 situation is already deteriorating due to federal tax reform.

20 **Q. What would be the net result of the AG/LFUCG's recommendations?**

21 A. It is vitally important that the Commission consider the overall effect of the Company's
22 authorized return, equity ratio, recovery mechanisms, any disallowance of prudent

1 employee performance pay expenses, and the treatment of EADIT when considering how
2 the credit rating agencies and investors will view the results of the rate case. At a time
3 when the rating agencies have identified the need for constructive regulation that focuses
4 regulatory policy on supporting the cash flow metrics of the utilities, the AG/LFUCG
5 witnesses recommend that the Commission impose unconstructive regulatory policies on
6 KAWC, all of which would weaken the cash flow of the Company, increasing its risk. The
7 combination of a below market ROE, a conservative equity ratio, the rejection of the QIP,
8 or a further reduced ROE for the QIP and accelerated amortization of EADIT, along with
9 the disallowance of employee expenses would have a significant negative effect on
10 KAWC's cash flow and would be viewed as credit negative by the rating agencies. The
11 implementation of these regulatory policies would likely make it more difficult for KAWC
12 to attract discretionary capital, as the Company would be competing with affiliates that
13 have both more attractive equity returns and more supportive regulatory policies.

14 **Q. How do the equity cost rates recommended by the AG/LFUCG's witness stack up**
15 **against the equity cost rates that are in place for your sister utility companies in the**
16 **American Water system?**

17 A. Ms. Bulkley advised me that the average weighted ROE of the operating subsidiaries of the
18 parent company, excluding KAWC, is 4.83 percent. Mr. Baudino's proposed weighted
19 ROE is below the weighted ROE established for ten of the operating subsidiaries of
20 American Water. Worse, still, among those ten operating subsidiaries are some of the
21 largest companies in the system such as Pennsylvania American Water, New Jersey
22 American Water and Missouri American Water. Furthermore, the 9.15% ROE advocated

1 by the AG/LFUCG's witnesses would be perceived as, and in fact, would be, a significant
2 reduction from the 9.7% ROE last set by the Commission.

3 **Q. Is the concern regarding the ROE about attracting money from investors, or what is**
4 **best for customers?**

5 A. Both; this is about aligning customer and investors' interests. We have a multi-decade-
6 long investment need that is funded up-front by shareholders and lenders and recovered
7 from customers over a 40 plus-year time frame. Imposing extraordinarily low
8 shareholder returns may have the temporary effect of lowering rates, but that practice
9 ultimately imposes long-term costs that cannot be measured in dollars alone.
10 Discouraging discretionary funding that serves the long-term interests of customers, in
11 the name of "protecting" those customers, ultimately harms the constituency the policy is
12 meant to help. It is well-recognized that a reasonable ROE and equity ratio is necessary
13 to align both customer and investor interests. This results in a stronger and more reliable
14 water system for both current and future customers, reduces the need for general rate
15 cases, lessens the occurrence of customer "rate shock," supports the maintenance and
16 improvement of essential infrastructure, ensures safety and reliability, and allows for
17 more efficient, streamlined regulation.

18 **Q. What is your role in securing capital for KAWC?**

19 A. Part of my job involves making the case to American Water for investment in Kentucky.
20 Every affiliate employs someone in a capacity comparable to mine, and part of that
21 person's job is to make the case for investment in their respective state. Because the
22 collective demand for capital inevitably exceeds the resources available from American
23 Water, the various states are effectively competitors. This type of competition is healthy

because it forces the utilities to identify and develop projects that produce the greatest benefits at the least cost.

Q. Are you suggesting that American Water will cut-off investment to Kentucky if the Commission adopts equity cost rate and other recommendations that place it among the worst performing in the American Water system?

A. I am not saying that at all. As I said previously, the Company will fulfill its duty to provide safe, adequate, and reliable service. Kentucky-American continues to make the necessary investments in developing and maintaining adequate sources of supply, treatment, pumping, transmission and distribution facilities, as well as to comply with applicable environmental laws and regulations (Safe Drinking Water Act, the Clean Water Act, etc.).

Q. Where does the Commission's approach make a difference?

A. When an investor is confronted with the choice of investing in Kentucky at the 4.45% equity cost rate recommended by the AG/LFUCG's witness or, for example, Iowa or Illinois, at a 5.00% and 4.88% equity cost rate, respectively, the disparity in available returns will necessarily steer the allocation of discretionary capital in a way that requires KAWC to manage operations toward the "bare minimum" end of the acceptable range. Moreover, when that disparity is compounded by the absence of a QIP and adverse cash flow implications of a rapid EADIT amortization and the disallowance of employee expenses, the disadvantage of KAWC is further magnified. In this situation, capital will obviously be freed-up for jurisdictions with higher equity costs rates and a greater opportunity to earn those authorized returns. The equity cost rates and ratemaking adjustments and policies advocated by AG/LFUCG's witnesses would put KAWC in a

1 subordinate position, resulting in capital funding at a level necessary to maintain only
2 adequate service, and certainly not optimal service. And it would surely put me at a
3 distinct competitive disadvantage against my colleagues as we vie for investment by
4 American Water.

5 **Q. Have you quantified the range of what would be considered a "bare minimum" level**
6 **of capital investment versus a level that begins to suggest imprudence?**

7 A. I have not, and I do not believe anyone else can, either. There are simply too many
8 variables to consider in deciding whether a utility is spending too much or too little. These
9 judgments are typically made in hindsight based on whether the decision was reasonable,
10 given what was known, or should have been known, at the time the decision was made.
11 My point is not to establish that there is a definite, quantifiable figure for what is "too
12 much" or "too little." I am simply trying to stress the point that authorized ROEs, equity
13 ratios, and the resultant equity cost rates, cash flow and infrastructure investment recovery
14 policies have a very real influence in how capital allocation decisions are made in the real
15 world. And it is my firm belief that AG/LFUCG's witnesses' recommendations in this case
16 ignore that reality. When those recommendations are exacerbated by arguments to reduce
17 the equity return from that currently authorized, disallow expenses and worsen cash flow,
18 the ability to make the case for investing in Kentucky becomes infinitely more difficult.

19 **Q. What type of capital projects would be at risk if the Commission were to adopt the**
20 **AG/LFUCG's witnesses' recommendations?**

21 A. I cannot provide a line-by-line description of every planned project and how it would be
22 affected. What I can say is that investment decisions would have to be re-evaluated. If

KAWC is among the lowest equity cost rate in the American Water system, the absence of any infrastructure recovery mechanism and adverse cash flow policies which would simply render the Company uncompetitive in relation to its affiliates and other comparable utilities.

Q. If the Company cuts back capital investment to a level supported by the policies advocated by the AG/LFUCG's witnesses, who would be harmed?

A. Everyone: the Company, customers, and the Kentucky economy. The Company currently invests between $25 and $35 million annually in system improvements and infrastructure. This level of investment in the state has tremendous statewide impacts including jobs, spending on goods and services, system reliability and improved customer service. The Commission is being asked to authorize an equity cost rate that is among the lowest in our system and approve unsupportive ratemaking adjustments and policies. Such a decision would have regrettable consequences, starting with the unraveling of the benefits achieved through investment that got the Company to where it is today.

Q. What do you want the Commission to do?

A. I want the Commission to adopt the Company's ROE recommendation and constructive ratemaking policies, while considering the consequences of adopting a ROE, equity ratio and unsupportive ratemaking policies that together are out of step with returns and mechanisms awarded in other jurisdictions.

Q. Does this conclude your testimony?

A. Yes.

VERIFICATION

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

The undersigned, **Nick O. Rowe**, being duly sworn, deposes and says he is the President of Kentucky-American Water Company, Inc., that he has personal knowledge of the matters set forth in the foregoing testimony, and the answers contained therein are true and correct to the best of his information, knowledge, and belief.

NICK O. ROWE

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 26th day of April, 2019.

(SEAL)

Notary Public

My Commission Expires:

7/25/2020

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF:	)	
	)	
THE APPLICATION OF KENTUCKY-AMERICAN	)	
WATER COMPANY FOR AN ADJUSTMENT	)	**CASE NO. 2018-00358**
OF RATES	)	
	)	

REBUTTAL TESTIMONY OF SCOTT W. RUNGREN

April 30, 2019

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

2 A. My name is Scott W. Rungren and my business address is 727 Craig Road, St. Louis,

3 Missouri 63141.

4 **Q. Did you previously submit direct testimony in this proceeding on behalf of**

5 **Kentucky-American Water Company, Inc. ("Kentucky-American," "KAWC" or**

6 **the "Company")?**

7 A. Yes, I filed direct testimony on November 28, 2018.

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

9 A. The purpose of my rebuttal testimony is to:

10 - Describe KAWC's updates to the capital structure and weighted average cost of
11 capital ("WACC") filed with the Commission on April 15, 2019, which also
12 included a minor correction to the carrying amount of preferred stock. These
13 revisions and the correction to preferred stock impact both the base period ending
14 February 28, 2019 and the forecast period ending June 30, 2020;
15 - Respond to the Direct Testimony of Attorney General ("AG") and Lexington-
16 Fayette Urban County Government ("LFUCG") witness Lane Kollen as it pertains
17 to KAWC's projected costs of short-term debt and long-term debt used in the
18 WACC calculation.

19 **BASE PERIOD UPDATES**
20 **<u>TO CAPITAL STRUCTURE AND WACC</u>**

21 **Q. Please explain how you have updated the Company's capital structure for the base**

22 **period ending February 28, 2019.**

1 A. The Company's February 28, 2019 capital structure, which reflected projected data when
2 initially filed, was updated on April 15, 2019 to reflect actual capital component
3 balances. It should be noted that the balances of long-term debt and Job Development
4 Investment Tax Credits provided in the update filing are the same as originally filed. The
5 balance of preferred stock included in the update filing reflects a minor correction made
6 to the amortization of the issuance expense.

7 **Q. Please explain the correction made to the calculation of preferred stock.**

8 A. To arrive at the projected preferred stock carrying amount for February 28, 2019 in the
9 initial filing, I started with the actual carrying value at March 31, 2018 and then
10 amortized the carrying value forward to February 28, 2019 using the monthly issuance
11 expense amortization amount of $32.19. However, due to a formula error in Workpaper
12 7-5 (supporting Exhibit 37, Schedule J-5), amortization was not included for the month of
13 August 2018. Thus, for each month from August 2018 to June 2020 the carrying amount
14 of preferred stock was understated by $32.19. The correct carrying amount of preferred
15 stock at February 28, 2019 is $2,243,144, and is shown on Exhibit 37, Schedules J-2 and
16 J-5 (both p. 2) of the Company's update filing. This correction did not alter the preferred
17 stock cost rate for the update filing.

18 **Q. Were any of the capital component cost rates revised for the update filing?**

19 A. Yes, the Company's cost of short-term debt for February 2019 was updated to the actual
20 rate of 2.837%, as shown on Exhibit 37, Schedules J-2 and J-3 (both p. 2).

21 **Q. What is the updated February 28, 2019 capital structure and WACC?**

1 A. The updated capital structure at February 28, 2019 is composed of 5.215% short-term
2 debt, 46.811% long-term debt (52.025% total debt), 0.514% preferred stock, and
3 47.461% common equity. The resulting WACC is 8.120%.
4

5 **FORECAST PERIOD REVISIONS**
6 **TO CAPITAL STRUCTURE AND WACC**

7 **Q. Are you presenting revisions to the Company's capital structure?**
8 A. Yes, I am.
9 **Q. Please explain the revisions you have made to the Company's capital structure for**
10 **the forecast period ending June 30, 2020.**
11 A. The revisions pertain to the following five areas:
12 1) An update for the short-term debt balance to reflect the North Middletown acquisition
13 that closed in April 2019. In the Company's initial filing this acquisition was
14 projected to occur in February 2019;
15 2) An update to the projected cost of short-term debt;
16 3) An update to the interest rate projection for the long-term debt issuance planned for
17 May 2019;
18 4) An update to the amount of the equity infusion planned for May 2019; and
19 5) An updated WACC based on the revisions noted in items 1 through 4 above.
20 **Q. Please explain how you adjusted the short-term debt balance for the North**
21 **Middletown acquisition.**
22 A. The Company's initial filing reflected the expectation that the acquisition would occur in
23 February 2019, and the projected balance of short-term debt for February 2019 was
24 adjusted upward to reflect the acquisition price. Because the closing date of the

1 acquisition was in April 2019, the adjustment to the short-term debt balance was moved
2 to April, and the balance was adjusted upward by $1,175,509 to reflect the expected
3 acquisition price at the time the update was prepared. Thus, impact of the North
4 Middletown acquisition is reflected in the forecast period beginning in April 2019, and
5 the actual short-term debt balance at February 28, 2019 included in the Company's
6 update filing does not reflect any adjustment for the North Middletown acquisition.

7 Q **Have you also updated KAWC's projected cost of short-term debt for the forecast**
8 **period?**

9 A. Yes, I have. The updated short-term debt cost projection is 2.585%. This cost rate is
10 applicable to the thirteen-month average forecasted short-term debt balance for the period
11 ending June 30, 2020. This updated rate represents a decrease from the 3.274% estimate
12 used in the Company's initial filing, and is also lower than the short-term interest rate
13 projection of 2.68% recommended by AG and LFUCG witness Lane Kollen in his direct
14 testimony (p. 47).

15 **Q. Please explain how you updated the projected cost of short-term debt.**

16 A. Because interest rates have changed since the Company's initial filing in this case, I have
17 updated the short-term interest rate projections. The updated projection for March 2019
18 is from Bloomberg as of March 27, 2019, and the updated projections for April 2019
19 through June 2020 are from Bloomberg as of March 28, 2019. The projections are for the
20 one-month LIBOR (London InterBank Offer Rate) rate, consistent with the forecast
21 methodology the Company used for its initial filing. The updated short-term debt interest
22 rate projection for June 30, 2020 is 2.361% and, as noted above, the updated thirteen-
23 month average short-term debt cost for the period ending June 30, 2020 is 2.585%. This

1 cost rate, 2.585%, was then used to calculate the weighted cost of short-term debt in the
2 Company's proposed capital structure.

3 **Q. Have you updated the interest rate for the long-term debt issuance planned for May**
4 **2019?**

5 A. Yes, I have. The updated projected interest rate for the May 2019 issuance is 4.16%.
6 The Company continues to expect this debt issuance to be a taxable issue with a 30-year
7 term. The updated base rate for this estimate is 2.91%. A spread of 1.25% was added to
8 that rate based on indicative pricing received from JP Morgan, US Bank, and Wells Fargo
9 on April 5, 2019. This updated rate represents a decrease from the 4.55% estimate used
10 in the Company's initial filing, and is also lower than the long-term interest rate
11 projection of 4.22% recommended by AG and LFUCG witness Lane Kollen in his direct
12 testimony (p. 48).

13 **Q. What is KAWC'S updated overall cost of long-term debt for the forecast period?**

14 A. As a result of the updates noted above, the overall cost of long-term debt is 5.87% for the
15 thirteen-month average forecast period ending June 30, 2020.

16 **Q. Have you also updated the amount of the equity infusion planned for May 2019?**

17 A. Yes, I have. In the Company's original filing the amount of the planned equity infusion
18 was $6 million. At the time that filing was prepared, the projected February 2019 short-
19 term debt balance was $17.1 million. However, as can be seen on Exhibit 37, Schedule J-
20 2, page 2, in the Company's update filing, the actual February 2019 short-term debt
21 balance is $22.8 million. This increase to the short-term debt balance is largely the result
22 of the flowback related to tax savings that began in September 2018. The increase to
23 short-term debt caused the Company's test year equity ratio to fall from 48.654% to

1 47.957%. To bring the short-term debt and equity ratios back in line with the Company's
2 original filing, the equity infusion was increased from $6 million to $9.30 million. The
3 additional $3.30 million of equity offsets a portion of the additional short-term debt. As a
4 result, the Company's test year equity ratio of 48.685% included in the update filing is
5 consistent with the equity ratio of 48.654% included in the Company's original filing.

6 **Q. What is the updated capital structure and WACC for KAWC for the forecast**
7 **period ending June 30, 2020?**

8 A. As a result of the capital structure revisions discussed above, the Company's updated
9 thirteen-month average capital structure for the forecast period ending June 30, 2020 is
10 composed of 2.274% short-term debt, 48.546% long-term debt (50.820% total debt),
11 0.495% preferred stock, and 48.685% common equity. As a result of the revisions to the
12 balance and cost of short-term debt, the cost of long-term debt, and the planned equity
13 infusion in May 2019, all discussed above, the Company's updated overall WACC for
14 the thirteen-month average forecasted period ending June 30, 2020 is 8.210%. The
15 Company continues to request that its return on equity ("ROE") be set at 10.80%, which
16 is within the ROE range recommended by Company witness Ms. Ann Bulkley.

17 **Q. Are the revisions to the capital structure and WACC for the forecast period ending**
18 **June 30, 2020 reflected in the base period update that the Company filed on April**
19 **15, 2019?**

20 A. Yes, all the revisions and updates discussed above are reflected in the forecast period
21 capital structure and WACC shown on Exhibit 37, Schedule J-1 included with the
22 Company's update filing on April 15, 2019.

23

1 **RESPONSE TO AG AND LFUCG WITNESS LANE KOLLEN**

2

3 **Q.** **In his computation of KAWC'S overall rate of return Mr. Kollen has used a short-**
4 **term debt cost rate of 2.68%, rather than the 3.274% the Company used in its direct**
5 **case. Please comment.**

6 A. Mr. Kollen has used the one-month LIBOR rate of 2.49% as of March 11, 2019, and then
7 added the credit spread of 0.19% to arrive at his recommended short-term debt cost rate
8 of 2.68% (Kollen DT, pp. 46-47). The credit spread of 0.19% was used by the Company
9 to calculate its projected short-term debt cost rate for the original filing. As noted
10 previously, the Company has revised its projected cost of short-term debt for the forecast
11 period to 2.585%. However, the 2.585% projection I developed relies on one-month
12 LIBOR rate projections for the months of June 2019 through June 2020. Because the
13 short-term debt cost is being estimated for the forecast year ending June 30, 2020, it is
14 more appropriate to base the cost on projections for that period, rather than on a spot
15 LIBOR rate as used by Mr. Kollen. Thus, the methodology used by Mr. Kollen is not
16 consistent with the Company's chosen forecast period.

17 **Q.** **Mr. Kollen criticized the data used by the Company for its short-term interest rate**
18 **projection, noting that "the present rate is a far better indicator for the test year**
19 **than outdated forecasts developed five or more months ago" (Kollen DT, pp. 46-47).**
20 **What is your response?**

21 A. The data used by the Company to develop its short-term interest rate projection was
22 current at the time the Company filed its case in chief. However, as noted above, the
23 Company has updated its projection based on Bloomberg data as of March 28, 2019.
24 Thus, this should alleviate Mr. Kollen's concern that the Company used outdated data. In

1 addition, the Company's updated proposed cost of short-term is 2.585%, which is lower
2 than Mr. Kollen's recommendation of 2.68%.

3 **Q. Mr. Kollen also claimed that the Company's forecasted interest rate of 4.55% for its**
4 **May 2019 long-term debt issuance is excessive, recommending instead a projected**
5 **interest rate of 4.22% (Kollen DT, pp. 47-48). Do you agree with Mr. Kollen's**
6 **recommendation?**

7 A. No, I do not. The Company's initial projection was based on a Bloomberg forward yield
8 curve on October 18, 2018, which was current at the time the Company filed its direct
9 case on November 28, 2018. The Company intended to update this projection at the time
10 it filed its base year update, to the extent the forecast changed measurably. As explained
11 previously, the Company updated this rate to 4.16% in its update filing on April 15, 2019.
12 This rate is lower than Mr. Kollen's proposed rate, which is based on a 30-year U.S.
13 Treasury yield of 3.1% from March 5, 2019 and a credit spread of 1.12%. In addition,
14 with regard to the planned May 2019 long-term debt issuance, the applicable rate should
15 be based on an interest rate projection rather than on a current rate as relied on by Mr.
16 Kollen. It is more appropriate to base the rate for a planned issuance on a projection for
17 the time period in which the debt will be issued.

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

19 A. Yes, it does.

VERIFICATION

STATE OF MISSOURI	)	
	)	**SS:**
CITY OF ST. LOUIS	)	

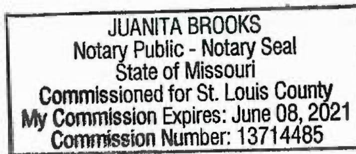
The undersigned, **Scott W. Rungren**, being duly sworn, deposes and says he is the Principal Regulatory Analyst for American Water Works Service Company, Inc., that he has personal knowledge of the matters set forth in the foregoing testimony, and the answers contained therein are true and correct to the best of his information, knowledge, and belief.

SCOTT W. RUNGREN

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 24th day of April, 2019.

_______________ (SEAL)
Notary Public

My Commission Expires:
6/8/21


JUANITA BROOKS
Notary Public - Notary Seal
State of Missouri
Commissioned for St. Louis County
My Commission Expires: June 08, 2021
Commission Number: 13714485

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF:	)	
	)	
THE APPLICATION OF KENTUCKY-AMERICAN WATER COMPANY FOR AN ADJUSTMENT OF RATES	)	**CASE NO. 2018-00358**
	)	

REBUTTAL TESTIMONY OF MELISSA L. SCHWARZELL

April 30, 2019

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

2 A. My name is Melissa L. Schwarzell and my business address is 1 Water Street, Camden,
3 NJ 08102.

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

7 A. Yes. I filed direct testimony on November 28, 2018.

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

9 A. The purpose of my rebuttal testimony is (1) to support the Company's updated revenue
10 requirement, (2) to respond to the Attorney General and Lexington-Fayette Urban County
11 Government ("AG/LFUCG") witness Kollen's proposed adjustments to working capital,
12 revenues, and Excess Accumulated Deferred Income Tax ("EADIT") amortization, (3) to
13 respond to AG/LFUCG witness Baudino's concerns about the Company's proposed
14 Qualified Infrastructure Program ("QIP"), and (4) to present the Company's ratemaking
15 proposal for a planned future refinancing.

16 **<u>KAWC's Updated Revenue Requirement</u>**

17 **Q. What is the Company's requested revenue requirement?**

18 A. The Company affirms the $107 million revenue requirement presented in the base period
19 update, or an $18.5 million increase to present rates. The requested increase to present
20 rates includes the elimination of $4.1 million of "stub period" bill credits resulting from

1 the Tax Cuts and Jobs Act of 2017 ("TCJA") and incremental rate relief of $14.4 million.
2 This represents $1.4 million less incremental rate relief than originally proposed.

3 **Q. Please summarize the changes in the Company's revenue requirement request from**
4 **its original filing.**
5 A. The largest reduction to the revenue requirement request results from state and federal
6 excess accumulated deferred income tax "EADIT" amortizations. This is $1.2 million of
7 the $1.4 million decrease.[1] Please see the rebuttal testimony of John Wilde for more
8 information on the Company's proposed amount of EADIT amortization.

9 In addition, the Company's updated forecast includes reductions to the Company's cost
10 of capital, from 8.25% as originally filed, to 8.21% as shown in the base period update.[2]
11 This cost of capital change results in approximately $0.2 million of revenue requirement
12 reduction due to lower cost of short and long term debt, as well as changes to the capital
13 component ratios. Please see the rebuttal testimony of Scott Rungren for more
14 information.

15 Changes to O&M expense further reduce the revenue requirement in net by $0.7 million.[3]
16 Pension and OPEB expense have been updated per 2019 actual costs and the result has
17 been a net reduction to expense of $0.6 million. Consistent with the AG/LFUCG's
18 proposed adjustments, fuel and power was reduced by $0.1 million related to the

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[1] The new totals for tax asset amortizations may be found on Exhibit 37, Schedules E-1.3, row 51 and Exhibit 37, Schedule E-1.4, row 50, as submitted with the base period update. Collectively, these amortizations are $1.2 million more negative than those in the Exhibits filed on November 28, 2018.
[2] Exhibits 37 A (row 24) and 37 J may be compared between the original and base period update files to see the changes to the cost of capital. Additionally, the changes may be seen in greater detail on Exhibit 37 J.
[3] All comparisons of original to revised expense may be examined by comparing Exhibit 37C-1 from the original and base period update files.

1 Kentucky Utilities settlement and chemical expense was corrected for an error, further
2 reducing the revenue requirement by $0.1 million. Additionally, an error was corrected
3 in labor and related costs for a reduction of just under $0.03 million. These changes are
4 partially offset by higher tank painting amortization of $0.1 million which affects
5 maintenance expense. I am the sponsor of the Pension and OPEB changes, and James
6 Pellock will sponsor the change to maintenance and labor expense. Company witness
7 Justin Sensabaugh will be available to answer questions regarding chemicals and fuel and
8 power.

9 Several changes to rate base result in an increase to the revenue requirement of $0.7
10 million. Slippage has been updated consistent with precedent calculations, as submitted
11 in response to Commission Staff's Second Request for Information, Item 3. This has
12 resulted in an increase of approximately $0.1 million. Please see the testimony of Brent
13 O'Neill's for support of the Company's slippage calculation. Other increases due to rate
14 base include removal of the CIAC gross up ($0.3 million), higher deferred maintenance
15 ($0.2 million), and various adjustments which result in a collective increase of $0.1
16 million. I will sponsor these changes and describe them in more detail.

17 **Q. Please describe the changes for CIAC gross up and Deferred Maintenance (tank**
18 **painting) that are included in the base period update?**

19 A. A change was made to forecasted rate base, and consequently to forecasted depreciation
20 expense, to reflect the cessation and refund of tax gross-up on contributions. As noted in
21 my direct testimony, page 23, lines 7-10, the Company had originally forecasted a gross-
22 up of CIAC receipts in the test period. Also, per the Company's response to Commission

1 Staff's Third Data Request, Item 12, gross-ups had been collected on developer
2 contributions since the beginning of 2018. However, through discovery, Commission
3 Staff brought to the Company's attention that Administrative Case No. 313 ordered Class
4 A and Class B water utilities to use the "no gross-up" method for CIAC and Advances.[4]
5 The Company has ceased taking in gross-up for new contributions and has begun
6 refunding gross-up on contributions collected to date. These changes are now reflected in
7 the base period update.

8 Deferred maintenance has also been adjusted to reflect new projects to repaint
9 Hydrotreators #9 and #10 at Kentucky River Station I and to adjust the timing of the
10 Muddy Ford tank rehabilitation. This impacts both forecasted average rate base and
11 maintenance expense (due to amortization of deferred maintenance).[5]

12 **Q. Are there any other base period changes to rate base?**

13 A. Yes, in addition to the changes summarized above, there are small changes to deferred
14 taxes, cash working capital, AFUDC, and the North Middletown acquisition that result
15 from the base period update. Collectively, these increase the revenue requirement by less
16 than $0.1 million, the bulk of which is due to deferred tax changes including changes
17 related to EADIT flow back ($0.072 million) and cash working capital ($0.021 million).

18 **<u>Overview of AG/LFUCG Proposed Adjustments</u>**
19 **<u>to KAWC's Requested Revenue Requirement</u>**

20 **Q. What level of rate relief does AG/LFUCG propose for Kentucky-American?**

[4] Commission Staff's Second Request for Information, Item 18, and Staff's Third Request for Information, items 11, 14, and 15.
[5] The balance of deferred maintenance can be compared from the original to revised filing on Exhibit 37 B-1.

1 A. After restoring the $4.1 million of rates related to the temporary TCJA reduction,
2 AG/LFUCG witness Kollen proposes to provide the Company with only $2.4 million of
3 incremental rate relief.[6] The AG/LFUCG proposes this minimal $2.4 million of
4 incremental rate relief despite a much larger demonstrable increase in the revenue
5 requirement. For example, a simple comparison between the base period update in the
6 current case and Case No. 2015-00418 ("2015 Rate Case"), alone reveals a $3.0 million
7 increase in depreciation expense and $3.8 million increase in after-tax operating income
8 requirement (at the same cost of equity and before tax gross up- which would add another
9 $0.8 million[7].) Additionally, general taxes, driven by higher property taxes, are up $1.6
10 million. Even after the $1.2 million EADIT reduction proposed by the Company, this is
11 still at least $8.0 million of revenue requirement increase before any other matters are
12 considered, such as increases in chemical costs and the need for greater staffing to detect
13 leaks, complete markout work, and improve system maintenance. Seen in this light, the
14 $2.4 million of incremental rate relief proposed by the AG/LFUCG is clearly insufficient.
15 Such a lack of rate recognition is only achieved by:
16 1) Proposing an accelerated Excess Accumulated Deferred Income Taxes
17 ("EADIT") amortization that is not right for our customers
18 a. $3.0 million artificial rate reduction ($4.2 million rate reduction
19 instead of $1.2 million as presented in the base period update)
20 2) Breaking a number of precedents:

[6] Witness Kollen also states that he did not make an adjustment for unaccounted for water but that "the Commission should determine the amount of cost reflected in customers' rates related to the excess unaccounted-for water and make an adjustment accordingly." (Page 45, lines 6-8)

[7] The Company's pretax cost of capital is approximately 10% (2.91% short and long term debt + 5.3% equity and preferred stock x tax gross up 134.75%). A 10% pretax cost of capital is 122% of the after-tax cost of 8.21%. $4.6 million is 122% of the $3.8 million increase in after-tax operating income, thus the tax gross up would be the difference of $0.8 million.

1 a. $1.0 million rate reduction for working capital;

2 b. $0.7 million rate reduction for slippage (-$0.6 million decrease
3 compared to $0.1 million increase as presented in the base period
4 update); and

5 c. $0.5 million rate reduction for full time employees

6 3) Proposing a drastic reduction in cost of equity to 9.15%.

7 a. $4.7 million reduction in the revenue requirement

8 **Q. Are there any other matters to consider related to the AG/LFUCG**
9 **recommendations?**

10 A. Yes. It's important that special consideration be given to the AG/LFUCG
11 recommendations related to EADIT amortization and its impacts on the customer base.
12 The Company strongly urges the Commission to reject Mr. Kollen's proposal. Several
13 witnesses will discuss why the Company's proposed EADIT amortization is far more
14 appropriate. Company witness John Wilde will discuss EADIT amortization from a
15 ratemaking and economic perspective. In addition, cash flow and credit rating issues
16 related to EADIT amortization will be discussed in the rebuttal of Ann Bulkley. Finally,
17 I will address various problems for the customer base that accelerated EADIT
18 amortization would produce if Mr. Kollen's recommendations were adopted.

19 **Working Capital**

20 **Q. What adjustments does Mr. Kollen propose for Working Capital?**

21 A. Mr. Kollen proposes three adjustments to Working Capital, as described below.

1 1) Mr. Kollen proposes the removal of non-cash items from Working Capital. He
2 removes depreciation and amortization, deferred income taxes, and net income if it is
3 not used to pay dividends. He proposes a $0.273 million reduction in the revenue
4 requirement as a result.
5 2) Mr. Kollen proposes retaining net income in the Working Capital if it is used to pay
6 dividends and imputing 134 lag days for a $0.647 million reduction in the revenue
7 requirement.
8 3) Mr. Kollen proposes imputing lag days on Support Services expense for a $0.132
9 reduction in the revenue requirement.
10 The Company does not agree with these adjustments and each is addressed below.

11 **Working Capital: Non-Cash Items and Net Income**

12 **Q. Is there Commission precedent regarding the Company's inclusion of non-cash**
13 **items and all of net income in the Working Capital calculation?**
14 A. Yes, there is extensive precedent. The AG has made similar recommendations in
15 Kentucky-American Case Nos. 2012-00520, 2004-00103, 97-034, 95-554, and 92-452. In
16 each case, the Kentucky Public Service Commission ("Commission") denied the AG's
17 adjustment and found that the Company's working capital calculation is appropriate.

18 To the Company's knowledge, the same working capital methodology has been used for
19 numerous rate cases leading up to and including this one. In its order dated November
20 19, 1993 regarding Case No. 92-452, the Commission concluded that "including net
21 earnings and noncash items is theoretically sound." In its orders dated September 11,
22 1996 and September 30, 1997, the Commission referred to its decision in November 19,

1 1993 and reaffirmed its position regarding inclusion of net income in the working capital
2 calculation. Most recently, this issue was litigated in Case No. 2012-00520, and the
3 Commission affirmed the position again, noting that "Kentucky-American's lead/lag
4 study uses the methodology that the Commission has generally accepted since 1983. Our
5 review of past Kentucky-American rate adjustment proceedings indicates that the AG has
6 consistently presented, and the Commission has consistently refused to adopt, his
7 argument regarding working capital."

8 **Q. Can you elaborate on Mr. Kollen's position regarding the depreciation and deferred**
9 **tax expense portion of this issue?**
10 A. Yes. Mr. Kollen claims that non-cash expenses should be excluded from the Working
11 Capital calculation because "the non-cash expenses are never paid in cash."[8] He further
12 states that the "net accumulated depreciation and accumulated deferred income taxes are
13 subtracted from rate base, but only on a lagged basis."[9]

14 **Q. Does the Company agree with Mr. Kollen's assessments?**
15 A. No. If depreciation and deferred taxes are not included in the Working Capital
16 calculation, the Company does not have the opportunity to earn a full return on its
17 investment. As stated in the order from 1993[10], "depreciation expense represents the
18 recovery of prior plant investment from the customers over the respective plant lives.
19 But there is a considerable delay in the recovery of these depreciation charges from the
20 customers." In this case, that delay of revenue receipt is 43 days. The order went on to

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[8] Direct Testimony of Lane Kollen, page 14 line 20 through page 15, line 1.
[9] Id., page 14, lines 2-3.
[10] Case No. 92-452, Order dated November 19, 1993, page 18.

1 state that if the "depreciation expense lag is not reflected in rate base, investors will not
2 have an opportunity to earn a return on their full investment."

3 Additionally, the notion that there is a lag before accumulated depreciation ("AD") and
4 accumulated deferred income taxes ("ADIT") are subtracted from rate base is false. The
5 Company records depreciation and deferred taxes on a monthly basis and rate base for the
6 future test year is a 13-month average. This means that the levels of AD and ADIT in the
7 test year represent the average carrying amounts from the beginning to the end of each
8 period. There is no lag in the deduction of these items from rate base, even though there
9 is a lag in the receipt of the associated cash from customers. The Commission has
10 consistently found that deferred taxes and depreciation should be included in the Working
11 Capital calculation in order for investors to be made whole. Mr. Kollen advances no new
12 arguments to change that conclusion.

13 **Q. Please address the net income components that the AG/LFUCG proposes to exclude**
14 **and adjust in Working Capital?**

15 A. The AG/LFUCG proposes to treat net income differently depending on how the
16 Company elects to use it. Mr. Kollen claims that net income which is not paid in
17 dividends should be excluded from working capital under his "infinite lag days"
18 argument, and that net income which is paid in dividend should have 134 lag days
19 applied.

20 **Q. Does the Company agree with this position?**

21 A. No. As the Commission stated in its order in Case 92-452, "Investors are entitled to
22 receive a return on their reinvested earnings on a daily basis" and "net earnings are

1 earned when customer service is provided, and become the property of the stockholders.
2 This requires that a cash working capital requirement should be recognized for the lag in
3 receipt of operating income."[11]

4 In contrast, Mr. Kollen implies that there are an "infinite number of expense lag days"[12]
5 that shareholders can wait for their cash return. He further argues that if the Company
6 pays a portion of net income out in periodic dividends, that this net income can be treated
7 differently and should actually have 134 lag days applied to it. Both of these positions
8 are misguided. The Commission has found that investors are entitled to a return when
9 service is rendered and are entitled to daily reinvestment of the earnings. The cash is
10 expected as soon as the service is rendered. How the Company finances its ongoing
11 operations, relative to dividend payment (or share buyback, debt repayment or debt and
12 equity issuance), is purely a financing decision that has no effect on whether or not a cash
13 return is expected at the time that service is rendered.

14 The AG/LFUCG position on net income in working capital continues to conflict with
15 Commission precedent, is unreasonable, and should again be rejected.

16 **Working Capital: Service Company**

17 **Q. What is the AG/LFUCG proposing for Service Company expense in the working**
18 **capital calculation?**
19 A. Mr. Kollen recommends that 45.63 lag days be applied to American Water Works
20 Service Company, Inc. ("AWWSC" or "Service Company") expense, despite recognition

[11] Case No. 92-452, Order dated November 19, 1993, page 20.
[12] Direct Testimony of Lane Kollen, page 14, lines 10-11.

1 that Kentucky-American prepays for services rendered by Service Company. He
2 contends that prepayment of the Service Company bill is not a reasonable provision for
3 an affiliate agreement and that the prepayment results in excessive working capital cost,
4 because it is reflected at Kentucky-American's full cost of capital rather than a lower
5 short term debt rate that could be used by the Service Company. He also contends that
6 the estimation process is not accurate and causes harm.

7 **Q. Is the prepayment reasonable?**

8 A. Yes. The Service Company exists to provide services to American Water affiliates at
9 cost. The Service Company makes no profit from the provision of these services.
10 Service Company's billing terms are meant to match expenses with the receipt of
11 payments from affiliates which are the beneficiaries of the services. This is an equitable
12 arrangement.

13 Additionally, the Service Company invoices are trued-up the month after services are
14 rendered. Affiliates are provided charge details that give them the ability to scrutinize the
15 bills. The Service Company billing practice does not interfere with normal management
16 controls.

17 **Q. Please respond to Mr. Kollen's assertion that Service Company bills are not**
18 **accurately estimated, and that there are "excessive prepayments that are not**
19 **refunded until a month after they are paid" and that this "compounds the**
20 **prepayment harm"?[13]**

[13] Id., Page 8, line 19 to page 9 line 1.

1 A. Mr. Kollen relied on partial information from Data Request KAW_R-AGDR2_NUM033_030119 to draw this conclusion. That data request shows the monthly invoiced and billed amounts for AWWSC charges to KAWC during 2017 and 2018. Mr. Kollen, however, selectively chose to highlight invoice and payment amounts from just two of the 24 months shown in the data request and he looked only at the monthly impact rather than the annual impact. In doing so he exaggerated the difference between estimated and final invoiced amounts.

A proper analysis of the information in this data request shows that the total difference between estimated and final AWWSC amounts is actually quite small on an annual basis. As shown in Exhibit –MLS Rebuttal 1 during 2017 and 2018, the difference between AWWSC estimated and final invoiced amounts was a net under-collection of $325,537 overall (or 1.3% less than final bills). The annual difference between the estimated and final invoices constituted a prepayment greater than final invoice of just 1.1% in 2017, and an underpayment of 3.3% in 2018. All of these figures stand in sharp contrast to the +19% and +39% variances Mr. Kollen selected to highlight. While the values vary from month to month, and thus the true ups vary as well (either lower or higher than the final invoice), the overall result is reasonable and in no way constitutes "excessive prepayment".

Q. Mr. Kollen contends that the Service Company bill should not be prepaid and that instead customers "should pay only the AWWS cost of short-term debt." Does Mr. Kollen make an adjustment to increase the Service Company bill for the extra short term debt he says customers should pay for in his adjustment?

1 A. No. Even if Mr. Kollen's adjustment was warranted, and it is not, his alleged "remedy"
2 is one-sided and incomplete. He proposes to impute a lag that does not exist for the
3 subsidiary, based on the idea that an offsetting lead for the service company could have a
4 different and lower cost of capital. However, he does not offer to measure the lead and
5 does not propose an adjustment for the additional debt costs that would be billed by
6 Service Company in this scenario.

7 **Q. What is the Company's recommendation regarding Mr. Kollen's adjustment to**
8 **working capital for Service Company lag days?**
9 A. The Company's recommendation is that Mr. Kollen's adjustment be rejected.
10 Prepayment of the at-cost Service Company bill is a reasonable provision to support cash
11 expenses and payroll incurred on behalf of Kentucky-American. The estimation and
12 prepayment process does not interfere with prudent management and produces an overall
13 reasonable billing result. Furthermore, any adjustment of this nature would require an
14 offsetting adjustment to Service Company expense, which Mr. Kollen does not offer, and
15 which, consequently, would unreasonably deprive the Company of recovery for this cost.
16 Given these facts, Mr. Kollen has not presented a reasonable or adoptable adjustment.

17 **Trane**

18 **Q. Mr. Kollen proposes that the Company defer revenues associated with the Trane**
19 **industrial operation, which is planned to close by the end of the year. Do you agree?**
20 A. The Company maintains that the Trane revenues are uncertain and that a deferral would
21 be challenging to estimate. However, current information does indicate that Trane will
22 maintain some form of operation through December 2019, which is six months into the

test year. And the amount of revenue involved, as Mr. Kollen notes, is relatively minor. Accordingly, in order to limit the contested issues, the Company accepts Mr. Kollen's proposal to defer and amortize Trane revenues and to reduce the revenue requirement by $8,000.

EADIT Amortization

Q. What adjustments does Witness Kollen propose for EADIT Amortization?

A. Mr. Kollen proposes to reduce the Company's revenue requirement by $4.3 million for EADIT amortization. This includes protected EADIT, which Mr. Kollen proposes should be spread out over the life of the associated assets. He estimates a $1.0 million decrease for this protected EADIT. The additional $3.3 million decrease in revenue requirement relates to several pieces of EADIT that Mr. Kollen proposes to amortize over just three years. This includes EADIT associated with asset investments, such as repairs related EADIT (proposed $2.2 million revenue requirement reduction), and virtually all of the Company's state EADIT (proposed $0.6 million revenue requirement reduction). He also proposes returning unprotected EADIT over three years (proposed $0.5 million revenue requirement reduction). These three-year proposals are not right for our customers, and the Company strongly recommends they be rejected.

Mr. Kollen also appears to omit reflecting a rate base offset for the flowback of deferred taxes. As discussed below, EADIT flowback must be financed and increases rate base, so any amortization schedule adopted would need to include a corresponding rate base adjustment.

1 **Q. Why are the three-year EADIT amortizations proposed by Mr. Kollen not right for**
2 **the customer base?**
3 A. An accelerated three-year amortization of unprotected, state, and repairs related EADIT
4 would harm our customers' interests in at least five different ways.

5 First, a three-year amortization is not in the long term best interests of our customers
6 because it creates generational inequities. It distributes all of the excess deferred tax
7 benefit associated with long-lived plant to just three years of customers. This means that
8 future generations of customers will be paying for the plant but not getting the associated
9 tax benefit. Please see the rebuttal testimony of John Wilde for further discussion of the
10 appropriate economic return of EADIT.

11 Second, flowing back EADIT over such a short term consumes limited capital that could
12 be used for replacement of aging water treatment and distribution infrastructure, as well
13 as other investments in the provision of water service. This rapid flow back could result
14 in fewer investments in the near term, as limited capital allocations must be diverted to
15 flowback of EADIT. Moreover, since liabilities on the balance sheet are not cash in a
16 piggy bank, the accelerated flowback of EADIT liabilities will have to be financed, thus
17 consuming additional funds that could be used for infrastructure replacement.

18 Third, as Ms. Bulkley explains in her rebuttal testimony, Mr. Kollen's proposal, together
19 with that of AG/LUCFG Witness Baudino's ROE recommendation, will serve to weaken
20 KAWC's cash flow metrics and adversely affect the Company's ability to attract
21 discretionary capital, which would in turn be viewed as credit negative for American
22 Water.

1 Fourth, the rapid flowback of EADIT over three years would distort price signals and
2 thus undermine water efficiency efforts. By artificially deflating the cost of water
3 service, customers would not receive accurate messages about how to budget for and use
4 water resources efficiently.

5 Fifth and finally, when EADIT is returned to customers over the course of just a few
6 years, a few things happen that set up conditions for a rate spike. The biggest driver is
7 that the immediate rate relief is temporary and causes a need for a rate increase upon
8 expiration. Additionally, EADIT flowback increases rate base, and this compounds the
9 looming revenue requirement spike. If the AG/LFUCG's recommendation of a three
10 year flow back for these items were adopted (and his figures were used), a rate spike of
11 approximately $4mm[14] would be necessary upon the expiration of the three year flow
12 back. This could force the filing of a rate case for no reason other than to reset the
13 EADIT credit. It could also cause unnecessary and difficult to understand swings in
14 customer bills.

15 For these five reasons, a rapid EADIT amortization should be rejected by the
16 Commission and the Company's proposed EADIT amortizations, as discussed in Mr.
17 Wilde's rebuttal, should be adopted.

18

19

[14] Based on the AG/LFUCG numbers, there would be a $3.3 million increase to the revenue requirement due to the expiration of the three-year amortizations proposed by Mr. Kollen ($2.2 million repairs+$0.6 million unprotected+ $0.5 state) plus approximately $0.8 million of increased rate base return (10% pretax return x approximately $8 million increase to rate base).

1 **QIP**

2 **Q. What is Mr. Baudino's position on the proposed QIP, and please identify who will**
3 **respond to his specific concerns.**

4 A. Mr. Baudino recommends "that the Commission reject that QIP rider"[15]. He further
5 states that "[i]t is not the purpose of my testimony in this case to address the
6 reasonableness or prudence of the Company's proposed QIP as described by Mr.
7 O'Neill." Instead, Mr. Baudino addresses "…the specifics of the rider mechanism…and
8 the regulatory principles that should guide the Commission's consideration as to whether
9 the rider should be approved in this case."[16]

10 Mr. O'Neill addresses Mr. Baudino's comments regarding the Company's responsibility
11 to make ongoing investments, his contention that Kentucky-American's main break
12 experience does not warrant the QIP Rider, and his quarrel with the composition of the
13 investments that should be eligible under that rider. Mr. Rowe explains the critical
14 importance of the proposed QIP to support the level of discretionary investment needed
15 to fund the Company's proposed accelerated infrastructure replacement program. Ms.
16 Bulkley responds to Mr. Baudino's recommended reduction in the return on common
17 equity for QIP eligible plant.

18 I am responding to Mr. Baudino's specific concerns that the Company has not showed
19 that a QIP mechanism is necessary. I am also responding to Mr. Baudino's
20 recommendations that the QIP mechanism:

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[15] Direct Testimony of Richard A. Baudino, page 50, line 21
[16] Id., page 49, lines 15-19.

1 • should be limited to distribution mains only that are nonrevenue producing and non-
2 expense reducing plant and that serve to replace existing plant;
3 • should include historical cost, not prospective or forecast costs;
4 • should include an annual and cumulative cap;
5 • should allow for a reasonable review process to ensure the reasonableness of costs for
6 eligible facilities; and
7 • should be limited to a 2-year pilot program and should require a base rate case filing
8 within 2 years of QIP rider implementation.

9 **Q. Mr. Baudino argues that KAWC has not demonstrated that a QIP is necessary. Do**
10 **you agree with his contention?**

11 A. No, I do not. The Company has improved its main replacement rate from the almost 500
12 years needed to replace all of its mains, as identified in its last rate case, to 377 years. As
13 Mr. O'Neill has demonstrated and Mr. Baudino has not contested, our mains have a life
14 expectancy of only 60 to 100 years, and this acceleration is not sustainable without more
15 timely cost recovery. Kentucky-American is one of the few subsidiaries in the American
16 Water system to have neither an infrastructure surcharge nor a multi-year future test year
17 for capital recovery.[17] As Mr. Rowe explains in both his direct and rebuttal testimony,
18 with Kentucky-American being among the last of American Water's regulated
19 subsidiaries without a mechanism to achieve timely recovery of its investment in
20 accelerated infrastructure replacement, it is at a significant disadvantage to attract

[17] Subsidiaries in Iowa, Illinois, Indiana, Missouri, New Jersey, New York, Pennsylvania, Tennessee, Virginia, and West Virginia all have infrastructure surcharges (See Commission Staff's Second Information Request, Item 59). California has a multi-year future test year.

1 discretionary capital allocations from American Water as compared to its affiliates.[18] The
2 Company has provided ample evidence that the QIP is a constructive regulatory
3 mechanism that is necessary to allow KAWC to attract the discretionary capital needed to
4 fund its accelerated infrastructure replacement program.

5 **Q. Mr. Baudino argues that, "KAW has not shown why the Commission should deviate**
6 **from its past practice of utilizing traditional rate cases with future test periods as**
7 **the most reasonable way to collect revenues associated with system infrastructure**
8 **replacements."[19] Please summarize why the existence of a future test year alone does**
9 **not adequately support the Company's proposed accelerated infrastructure**
10 **replacement program.**
11 A. The QIP is intended to support an increase in capital investment of $6 - $10 million per
12 year *in between rate cases*, in other words, after the end of future test year in this case
13 and before the test year in the Company's next rate case. As Mr. O'Neill has
14 demonstrated, replacing pipes that are near the end of their useful life in the present rather
15 than deferring replacement will result in lower costs for customers over time because
16 planned pipe replacements are much less costly on a unit cost basis compared to the steep
17 increase in future pipe replacements resulting from prior deferrals of those
18 replacements.[20] As Mr. Rowe has explained, Kentucky-American is looking to reach and
19 maintain an optimal level of infrastructure investment, but if Kentucky's regulatory
20 treatment does not keep up with ongoing capital expenditures and results in significant
21 and persistent regulatory lag, it discourages expenditures in Kentucky versus alternative

[18] Direct Testimony of Nick O. Rowe p. 16; rebuttal testimony pp. 4-5.
[19] Id. P. 53, lines 25 – p. 54, lines 1-3.
[20] Direct Testimony of Brent E. O'Neill, page 30.

investments available to American Water. To the extent that this Commission supports the Company's proposal to maintain a sustainable accelerated infrastructure replacement program, the QIP is necessary to support more timely cost recovery and enhance the Company's ability to attract capital in an increased investment environment.

Q. Mr. Baudino also contends that a QIP is not necessary because the Company "has earned robust ROEs throughout 2017 and 2018 without a QIP." Are the Company's actual ROEs in 2017 and 2018 sufficient bases to conclude that a QIP should not be approved?

A. No, they are not, and Mr. Baudino's conclusions are not reasonable. First of all, the Company was only able to achieve its authorized ROE[21] once in the last 9 years absent the sale or donation of its assets (such asset sales occurred in 2011, 2017, and 2018).[22] In 2011, 2017, and 2018, the Company's ROE would have been 8.9%, 8.9%, and 8.8% respectively without the asset divestitures. These recent results demonstrate that the Company has been unable to achieve its authorized returns without selling or otherwise divesting assets. Second, the QIP is not yet in place. The Company's historic financial performance (absent asset divestitures) demonstrates that even the current levels of capital investment may not be sustainable because of regulatory lag between rate cases without a QIP.

[21] Presuming an authorized ROE of 9.7% as ordered in Case No 2010-00036 and 2012-00520. No cost of equity was specifically authorized in Case No. 2015-00418.
[22] The one year that the Company achieved its authorized ROE without asset sales or donation was 2016. During 2016, dry weather prompted a spike in sales, as can be seen in the Company's Base Period Update, Exhibit 37, Schedule I-4.

1 **Q. Please respond to Mr. Baudino's recommendation that QIP eligible plant additions**
2 **"…should be limited to distribution mains only that are nonrevenue producing and**
3 **non-expense reducing plant and that serve to replace existing plant"?**

4 A. Mr. Baudino's recommendation is vague and ambiguous. Consequently, if language of
5 this kind were introduced into the tariff or order, without definition, it would call into
6 question the recoverability of virtually any investment the Company could plan for the
7 QIP. Traditionally, the term "non-revenue producing and non-expense reducing plant" is
8 plant that is not constructed or installed for the purpose of serving new customers. The
9 Company's proposed QIP is meets this criteria.

10 **Q. Mr. Baudino claims that the proposed 90-day review process is inadequate for**
11 **proper prudence and reasonableness review (including testimony, discovery, and**
12 **adjudication)[23]. Do you agree?**

13 A. No, I do not. Kentucky American believes that a review window of approximately 90
14 days can be sufficient for two reasons. First, the cost drivers in the mechanism (including
15 depreciation rates, cost of capital, and property tax rates) are proposed to all come from
16 the most recent rate case authorization. Thus there is no need to review receipts or
17 employ cost of capital witnesses- since the issues have been recently litigated and the
18 Company would bear the risk of fluctuation in these figures.

19 Second, the projects to be included in the mechanism are all replacement infrastructure
20 projects for the production and distribution system. Mr. O'Neill has robustly
21 demonstrated the need for these projects, and these projects are rarely contested in a
22 general rate case. Given the nature of the projects and the recent adjudication of the cost

[23] Direct Testimony of Richard A. Baudino, page 55, line 20 to page 56 line 8.

1 drivers, the Company's proposed QIP program seems well suited to a simple, streamlined
2 review.
3 Ninety days also allows time for testimony, discovery and adjudication. For example, a
4 ninety-day procedural schedule could include:
5 - Six weeks for intervention and discovery (42 days)
6 - Three weeks for rebuttal (21 days)
7 - Two weeks for hearing preparation (14 days)
8 - Two weeks following hearing for tariff approval (14 days)
9 Given the reasonable expectation for limited issues of contention, this 91-day schedule
10 should be adequate to cover all reasonably conceivable issues of concern.

11 **Q. Mr. Baudino's claims that forecasting the QIP further complicates a short review**
12 **timeline[24] and he suggests that a historic mechanism be used instead.[25] Do you**
13 **agree?**
14 A. No. It is unreasonable to suggest that a forecasted test period can't be used effectively
15 for QIP. The Commission has authorized forecasted capital recovery for Kentucky-
16 American since at least 1992 through general rate case proceedings. The Commission is
17 very familiar with and adept at approving forecasted capital as proven by its handling of
18 numerous future test year cases with all manner of proposed forecasted infrastructure
19 investment. Forecasted test years have been an effective way to reduce regulatory lag in
20 general rate cases and forecasted capital additions can be an effective way to reduce lag
21 between general rate cases, through the QIP as well. Mr. Baudino did not present any

[24] Id., page 55, line 25 through page 56 line 4.
[25] Id., page 58 lines 13 and 14.

1 argument of substance that would explain why what has worked for decades is now
2 somehow inappropriate for a QIP.

3 **Q. Mr. Baudino recommends that if a QIP is authorized, it should have a 2.5% annual**
4 **cap and a 5% overall cap. Do you agree with this idea?**

5 A. The Company believes that the program as proposed does not require an annual or
6 cumulative cap in order to protect customers, given the estimated impact of the program.
7 The estimated QIP amounts (subject to multiple variables) were shown in response to the
8 Attorney Generals First Information Request, Item 61 and were cited by Mr. Baudino as
9 Exhibit RAB-13. The QIP increases shown would equate to 2.1% or less per year,
10 compared to the requested revenue requirement in this case. Please see attached Exhibit
11 MLS Rebuttal-2 for this calculation. This is less than the cap Mr. Baudino proposed on
12 an annual basis. It is also less than the annual price increase experienced by water
13 consumers across the nation over the last decade, as documented by the Bureau of Labor
14 Statistics Consumer Price Index ("BLS CPI"). This BLS CPI for water and wastewater
15 has had an average annual increase of 5.2% over the course of the last decade, as shown
16 in Exhibit MLS Rebuttal-3. An estimated QIP impact of less than 2.1% is much closer to
17 the BLS CPI for all goods and services, which has had an average annual increase of
18 approximately 1.6% over the last decade (also shown on Exhibit MLS Rebuttal 3). So,
19 the estimated annual impact is less than the annual threshold proposed by Mr. Baudino
20 and reasonable by comparison to inflationary indexes for all goods and especially for
21 water.

1 **Q. Mr. Baudino recommends that the QIP, if authorized, be a 2-year pilot and that the**
2 **Company be required to file a general rate case within two years of QIP**
3 **implementation. Please respond to this.**

4 A. The Company would strongly discourage this. It is counterproductive and unnecessary
5 for several reasons.

6 First, as discussed by witness Brent O'Neill in response to the Staff's Second Request for
7 Information, Item 55, the QIP program will not be fully ramped up until after year five.
8 Mr. O'Neill states that during the first five years, fewer miles of main will be replaced
9 than targeted (6-10 miles instead of the 10-13 miles). He states "the replacement of 6 to
10 10 miles will allow KAWC to determine the efficient mix of projects that will allow
11 contractors and company personnel to develop procedures and practices that ensure an
12 effective deployment of resources. The first 5 years will also allow the Company to
13 ensure that the impact on adjacent customers is considered and the projects provide
14 sufficient communication and coordination with all stakeholders." He elaborates that this
15 period will ensure that "the company's contractors and resources are provided time to
16 develop their additional workforce." As Mr. O'Neill states, it is "following year 5" when
17 the Company hopes to achieve the targeted replacement rate of 10-13 miles of cast iron
18 and galvanized steel replacements. As evidenced by Mr. O'Neill's testimony, two years
19 is not an adequate time period for the Company to operationally execute the targeted QIP
20 program, let alone to examine its success. It wouldn't be an efficient deployment of
21 resources to procure the contractors, train the workforce, contract the supplies and
22 coordinate with community stakeholders, all for a program that would end before it fully
23 began.

1 Second, Kentucky American plans its capital in five to ten year increments and a two
2 year timeframe does not provide the regulatory certainty that's required to meaningfully
3 improve capital attraction. Instead, the best way to improve capital attraction in the
4 upcoming five to ten years is to authorize the QIP as requested, without an extremely
5 limited scope of years or plant accounts. Kentucky-American is significantly behind
6 American Water's other subsidiaries in regulatory recovery of capital, and such a tiny,
7 overly-cautious step forward would not enable the Company to catch up.

8 Third, infrastructure surcharges have been in use for a long time and are well tested. As
9 noted earlier, commissions in the American Water footprint have been authorizing
10 surcharges to accelerate infrastructure replacement for a combined total of nearly 100
11 years. Infrastructure surcharges are also viewed as a best practice by the National
12 Association of Regulatory Utility Commissioners ("NARUC").[26] Indeed, NARUC
13 identified distributions system improvement charges as mechanisms which could "help
14 ensure sustainable practices in promoting needed capital investment and cost-effective
15 rates" in their 2005 "Resolution Supporting Consideration of Regulatory Policies
16 Deemed as "Best Practices". NARUC subsequently reiterated support for the 2005 best
17 practices in a 2013 resolution which stated that "traditional cost of service ratemaking,
18 which has worked reasonably well in the past for water and wastewater utilities, no longer
19 adequately addresses the challenges of today and tomorrow. Revenue, driven by declining
20 use per customer, is flat to decreasing, while the nature of investment (rate base) has shifted
21 largely from plant needed for serving new customers to non-revenue producing infrastructure

[26] For full text of the NARUC resolutions quoted here, please see Exhibit NOR-1 submitted with the Direct Testimony of Nick O. Rowe.

1 replacement and compliance with new drinking water standards." The resolution went on to
2 state that "[a]lternative regulatory mechanisms can enhance the efficiency and effectiveness
3 of water and wastewater utility regulation by reducing regulatory costs, increasing rates for
4 customers, when necessary, on a more gradual basis; and providing the predictability and
5 regulatory certainty that supports the attraction of debt and equity capital at reasonable costs
6 and maintains that access at all times." Given that infrastructure surcharges already have
7 such a substantial history of success and are considered best practices, Kentucky should
8 be able to step forward with confidence in establishing a mechanism which can improve
9 capital attraction for the Commonwealth.

10 Finally, this is the fourth time Kentucky-American has requested an infrastructure
11 surcharge through a formal regulatory proceeding since 2012. Over the course of that
12 time, there has been abundant opportunity to weigh the merits through discovery,
13 testimony, and exhibits. To complete this lengthy process only to begin it again in two
14 years is not a good use of resources on anyone's behalf.

15 **Q. What does Kentucky-American recommend be done in relation to its QIP request?**

16 A. The Company recommends that the QIP mechanism be authorized as originally requested
17 in this proceeding. It will improve capital attraction, will accelerate the replacement of
18 aging distribution and production infrastructure, and is in the long term best interest of
19 our customers.

20 **<u>Refinancing Proposal</u>**

21 **Q. What financing proposal is the Company introducing?**

1 A. As noted in the financing petition submitted March 8, 2019 (Case No. 2019-00083), the
2 Company is pursuing an opportunity to call and refinance two tax exempt bonds. Several
3 factors make the success, timing, and benefit of this effort significantly uncertain.
4 However, the Company has made an adjustment to the managerial forecast in anticipation
5 of savings from these potential refinancings, and a portion of the benefit may be achieved
6 during the forecasted test year. While the uncertainties preclude a precise rate case
7 adjustment at this time, the Company is proposing to defer any savings achieved and to
8 make a filing within 90 days of the end of the test year to determine if any change to rates
9 is appropriate.

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

11 A. Yes.

VERIFICATION

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

The undersigned, **Melissa L. Schwarzell**, being duly sworn, deposes and says she is the Senior Director of Regulatory Services for American Water Works Company, Inc., that she has personal knowledge of the matters set forth in the foregoing testimony, and the answers contained therein are true and correct to the best of her information, knowledge, and belief.

MELISSA L. SCHWARZELL

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 18th day of April, 2019.

Notary Public (SEAL)

My Commission Expires:

ANN G. ALFANO
NOTARY PUBLIC OF NEW JERSEY
ID # 50014130
My Commission Expires 4/15/2020

Kentucky-American Water Company
2017-2018 Service Company Estimated and Final Invoices
Per Data Provided in Attorney General's Second Request for Information, Item 33

Case No 2018-00358
Exhibit - MLS Rebuttal 1

Month	Estimated Invoice	Final Invoice	Difference (True-Up)	Percent (Over) or Under Payment
Jan 2017	$ 1,244,410	$ 1,006,080	$ (238,330)	
Feb 2017	$ 1,006,080	$ 618,052	$ (388,028)	
Mar 2017	$ 618,052	$ 929,005	$ 310,952	
Apr 2017	$ 929,005	$ 776,890	$ (152,115)	
May 2017	$ 776,890	$ 1,091,330	$ 314,440	
Jun 2017	$ 1,091,330	$ 1,052,895	$ (38,434)	
Jul 2017	$ 1,052,895	$ 873,115	$ (179,781)	
Aug 2017	$ 873,115	$ 978,124	$ 105,009	
Sep 2017	$ 978,124	$ 1,085,508	$ 107,385	
Oct 2017	$ 1,085,508	$ 1,007,051	$ (78,457)	
Nov 2017	$ 1,007,051	$ 933,622	$ (73,429)	
Dec 2017	$ 933,622	$ 1,119,044	$ 185,422	
Annual 2017	$ 11,596,082	$ 11,470,716	$ (125,366)	-1.1%
Jan 2018	$ 1,119,044	$ 1,093,850	$ (25,195)	
Feb 2018	$ 1,093,850	$ 971,346	$ (122,504)	
Mar 2018	$ 971,346	$ 1,198,713	$ 227,367	
Apr 2018	$ 1,198,713	$ 856,533	$ (342,180)	
May 2018	$ 856,533	$ 999,779	$ 143,246	
Jun 2018	$ 999,779	$ 1,229,880	$ 230,101	
Jul 2018	$ 1,229,880	$ 1,066,199	$ (163,680)	
Aug 2018	$ 1,064,199	$ 935,158	$ (129,042)	
Sep 2018	$ 935,157	$ 1,317,908	$ 382,751	
Oct 2018	$ 1,317,908	$ 1,189,869	$ (128,039)	
Nov 2018	$ 1,189,869	$ 1,151,793	$ (38,076)	
Dec 2018	$ 1,151,793	$ 1,567,947	$ 416,153	
Annual 2018	$ 13,128,074	$ 13,578,976	$ 450,902	3.3%
2017 - 2018	$ 24,724,156	$ 25,049,693	$ 325,537	1.3%

Estimated QIP Incremental Revenue Requirement Impact

		Year 1	Year 2	Year 3	Year 4	Year 5
a) Revenue Requirement Case No. 2018-00358, per Base Period Update	$ 106,984,074					
b) Estimated QIP per Attorney General's First Request for Information, Item 61		$ 688,843	$ 2,534,378	$ 4,807,278	$ 7,068,409	$ 9,303,816
c) Estimated QIP increment (=b for current year - b for prior year)		$ 688,843	$ 1,845,535	$ 2,272,900	$ 2,261,131	$ 2,235,407
d) Estimated QIP incremental revenue requirement impact (= c/a)		0.6%	1.7%	2.1%	2.1%	2.1%

U.S. Bureau of Labor Statistics
CPI-All Urban Consumers (Current Series)
Original Data Value

Case No. 2018-00358
Exhibit- MLS Rebuttal 3

Line #		
1	**Series Id:**	CUUR0000SEHG01
2	**Not Seasonally Adjusted**	
3	**Area:**	U.S. city average
4	**Item:**	Water and sewerage maintenance
5	**Base Period:**	1982-84=100
6	**Years:**	2007 to 2019

Line #	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Average Monthly	Increase from Prior Average
8	**2008**	322.470	324.418	325.023	325.327	326.259	327.152	330.693	335.915	336.067	339.437	341.181	341.965	331.326	
9	**2009**	344.374	345.232	346.222	347.420	349.813	350.418	354.834	359.915	360.657	363.712	364.951	365.664	354.434	7.0%
10	**2010**	370.268	373.080	374.109	375.775	377.921	377.579	381.694	385.242	385.959	387.509	389.255	390.362	380.729	7.4%
11	**2011**	393.336	396.895	398.361	399.072	399.649	400.044	403.385	405.874	408.108	409.102	409.527	411.067	402.868	5.8%
12	**2012**	414.691	418.722	420.614	424.463	425.355	426.863	429.460	435.793	435.246	436.200	437.628	438.486	428.627	6.4%
13	**2013**	442.190	444.814	446.071	446.612	447.548	448.234	451.200	452.459	452.456	454.864	454.999	455.317	449.730	4.9%
14	**2014**	458.119	461.013	462.214	462.830	462.998	463.579	468.197	471.538	471.925	475.476	478.295	480.698	468.074	4.1%
15	**2015**	483.308	486.233	487.250	488.293	488.981	490.072	492.931	498.209	498.898	499.187	500.515	501.462	492.945	5.3%
16	**2016**	504.402	506.031	508.140	510.778	513.157	513.440	513.040	516.427	518.004	518.722	520.577	521.107	513.652	4.2%
17	**2017**	525.645	527.759	528.876	530.602	531.355	531.685	532.833	535.029	536.055	536.295	538.466	539.531	532.844	3.7%
18	**2018**	543.112	545.227	546.202	547.718	548.392	549.461	551.385	553.374	553.383	554.109	557.447	559.040	550.738	3.4%
19															
20											10-Yr Average Water and Sewerage Maintenance				5.2%

Line #		
21		
22	**Series Id:**	CUUR0000SA0
23	**Not Seasonally Adjusted**	
24	**Area:**	U.S. city average
25	**Item:**	All items
26	**Base Period:**	1982-84=100
27	**Years:**	2007 to 2019

Line #	Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Average Monthly	Increase from Prior Average
29	**2008**	211.080	211.693	213.528	214.823	216.632	218.815	219.964	219.086	218.783	216.573	212.425	210.228	215.303	
30	**2009**	211.143	212.193	212.709	213.240	213.856	215.693	215.351	215.834	215.969	216.177	216.330	215.949	214.537	-0.4%
31	**2010**	216.687	216.741	217.631	218.009	218.178	217.965	218.011	218.312	218.439	218.711	218.803	219.179	218.056	1.6%
32	**2011**	220.223	221.309	223.467	224.906	225.964	225.722	225.922	226.545	226.889	226.421	226.230	225.672	224.939	3.2%
33	**2012**	226.665	227.663	229.392	230.085	229.815	229.478	229.104	230.379	231.407	231.317	230.221	229.601	229.594	2.1%
34	**2013**	230.280	232.166	232.773	232.531	232.945	233.504	233.596	233.877	234.149	233.546	233.069	233.049	232.957	1.5%
35	**2014**	233.916	234.781	236.293	237.072	237.900	238.343	238.250	237.852	238.031	237.433	236.151	234.812	236.736	1.6%
36	**2015**	233.707	234.722	236.119	236.599	237.805	238.638	238.654	238.316	237.945	237.838	237.336	236.525	237.017	0.1%
37	**2016**	236.916	237.111	238.132	239.261	240.229	241.018	240.628	240.849	241.428	241.729	241.353	241.432	240.007	1.3%
38	**2017**	242.839	243.603	243.801	244.524	244.733	244.955	244.786	245.519	246.819	246.663	246.669	246.524	245.120	2.1%
39	**2018**	247.867	248.991	249.554	250.546	251.588	251.989	252.006	252.146	252.439	252.885	252.038	251.233	251.107	2.4%
40															
41														10-Yr Average All Goods	1.6%

COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

IN THE MATTER OF:	)	
	)	
THE APPLICATION OF KENTUCKY-AMERICAN	)	
WATER COMPANY FOR AN ADJUSTMENT	)	**CASE NO. 2018-00358**
OF RATES	)	
	)	

REBUTTAL TESTIMONY OF JOHN R. WILDE

April 30, 2019

---

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

2 A. My name is John R. Wilde and my business address is 1 Water Street, Camden, NJ
3 08102.

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

7 A. Yes. I filed direct testimony on November 28, 2018.

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

9 A. The purpose of my rebuttal testimony is to address concerns raised in the direct testimony
10 of Attorney General/Lexington-Fayette Urban County Government ("AG/LFUCG")
11 Witness Lane Kollen with respect to excess accumulated deferred income taxes
12 ("EADIT") that have resulted from the reductions in the federal and state income tax
13 rates pursuant to the Tax Cuts and Jobs Act ("TCJA") and Kentucky House Bill 487
14 (2018) ("HB 487").

15 - First, I present and discuss the Company's updated estimates of the EADIT
16 balances produced by the federal and state tax reductions, the Company's
17 amortization of EADIT included in the Forecast Year Revisions filed with its
18 Base Period Update, and the breakdown of "protected" and "unprotected"
19 plant-related EADIT used for the Company's updated balances and
20 amortizations.

21 - Second, I address Mr. Kollen's unsupported recommendation of a three-year
22 amortization period for "unprotected" EADIT balances – that is, EADIT that
23 is not subject to federal normalization requirements – and I explain why

1 Kentucky-American's amortization periods for those balances are more
2 appropriate.

3 - Third, I address Mr. Kollen's contention that EADIT related to federal tax
4 repairs deductions governed by the Company's IRS Consent Agreement
5 should be amortized over three years, and I explain why these EADIT
6 balances should be amortized over periods calculated using the average rate
7 assumption method ("ARAM").

8

9 **Updated EADIT Estimates and Amortization**

10

11 **Q. On page 33, line 13 of his direct testimony, Mr. Kollen states that the EADIT**
12 **balances submitted with Kentucky-American's direct case are accurate, implying**
13 **they may be used for ratemaking purposes. Do you agree?**

14 A. No. As I explained in my direct testimony (p.8), the EADIT amounts provided in
15 Kentucky-American's original filing in this case were reasonable estimates used for
16 financial accounting purposes to close the books as of the respective period of enactment.
17 I further explained (pp.12-13) that in order to determine EADIT balances and
18 amortization periods suitable for ratemaking purposes, the Company would first have to
19 complete its upgrade and reimplementation of its PowerPlant and PowerTax systems. I
20 then indicated that estimates suitable for setting rates in this case would likely become
21 available and be incorporated into the base period update filing planned for mid-April
22 2019.

23

1 **Q. Was Kentucky-American able to update its estimates of the EADIT that resulted**
2 **from the TCJA's reduction of the federal income tax rate?**
3 A. Yes. The EADIT balance that resulted from the TCJA's reduction of the federal tax rate
4 is now estimated to be $30,371,969, of which $29,208,088 is attributable to utility plant
5 investments (plant related), and $1,163,881 is attributable to other aspects of utility
6 operations (non-plant). These EADIT balances are shown on Schedule JRW-R1 attached
7 to this testimony.
8
9 **Q. Was Kentucky-American able to update its estimates of the EADIT that resulted**
10 **from Kentucky House Bill 487's reduction of the state income tax rate?**
11 A. Yes. Total State of Kentucky EADIT is now estimated to be $1,374,713, of which
12 $1,384,208 is attributable to utility plant investments (plant related), and ($9,495) is
13 attributable to other aspects of utility operations (non-plant). These EADIT balances are
14 also shown on Schedule JRW-R1 attached to this testimony.
15
16 **Q. Could these estimates change?**
17 A. Yes. While these estimates are based on actual tax positions taken on tax returns for tax
18 years before the dates the respective legislation was enacted, the taxing jurisdiction may
19 issue guidance that would cause Kentucky-American to propose adjustments affecting the
20 amount of EADIT accrued prior to the date of enactment. Similarly, the taxing
21 jurisdiction may audit returns for those years and propose adjustments that would change
22 the amount of accrued EADIT. Therefore, the underlying tax positions and EADIT

1 balances are subject to change through the statute of limitations period, which is 3-4
2 years.
3
4 Q. **Did the Company include the revenue requirement impacts of normalization or**
5 **amortization of its estimated EADIT balances in its forecast year revisions when it**
6 **filed its Base Period Update on April 15, 2019?**
7 A. Yes. The Company has included a negative amortization expense amount, and the
8 corresponding increase in rate base, in the forecast year revisions filed with its Base
9 Period Update.
10 The Company used the Average Rate Assumption Method ("ARAM") to
11 determine the normalization periods for all federal and state EADIT related to plant in
12 service as of the date of the enactment of the respective legislation. The Company used a
13 20 year period to amortize EADIT related to all other items. In both cases, the
14 normalization/amortization was computed beginning January 1, 2018, the effective date
15 of the TCJA and HB 487. For the period from January 1, 2018 until the start of the
16 forecast year for this case (the "stub period"), the amortization/normalization was treated
17 as deferred, and the Company is proposing to amortize it over a three-year period
18 beginning at the start of the forecast year. The negative amortization/normalization into
19 tax expense included in the forecast year revisions is $910,239 and was made with a
20 corresponding increase to rate base. This amount grossed up to its pre-tax revenue
21 requirement constitutes a reduction to the revenue requirement of $1,212,841. The
22 amortization of the excess EADIT into tax expense during the course of the forecast year
23 will increase rate base by an equal amount, which will result in the negative amortization

1 expense being offset in part by an increase to the revenue requirement due the offsetting
2 change to rate base. Schedule JRW-2R attached to this testimony breaks down the
3 EADIT balance based on the method and, where applicable, the life used to normalize or
4 amortize that balance into cost of service. Schedule JRW-3R summarizes the resulting
5 normalization/amortization.
6
7 **Q. Does the EADIT amortization appear in the Summary of Forecast Year Revisions**
8 **filed with the Base Period Update?**
9 A. Yes. The Summary shows the grossed-up EADIT Stub Period State and Federal
10 amortization, the EADIT State Amortization, and the EADIT Federal Amortization,
11 which comprise the reduction to the forecast year revenue requirement of $1,212,841.
12
13 **Q. On page 35 of his direct testimony, Mr. Kollen expresses a concern that the**
14 **Company has yet to break plant in service-related EADIT into protected and**
15 **unprotected balances. Has Kentucky-American now done so?**
16 A. Yes. Attached to this testimony as Schedule JRW-4R is the Company's inventory of
17 plant in service-related federal EADIT balances. Based on available tax guidance, the
18 inventory indicates which of the federal EADIT balances should be treated as protected
19 for tax purposes, and which should be treated as unprotected for tax purposes.
20 "Protected" line items are identified with a "Y"; "unprotected" line items are identified

1 with an "N"; and where additional guidance is needed and expected to be issued in the
2 future,[1] a question mark (?) has been added.
3 The EADIT balance labeled "1012 Fed – COR" is the EADIT related to the
4 difference between how cost of removal is accounted for book purposes versus tax
5 purposes. There is conflicting IRS guidance with respect to whether this item should be
6 treated as "protected" or "unprotected".[2] Kentucky-American has coded this item as
7 protected, but has noted the need for additional guidance with a question mark (?).
8 The EADIT balance labeled "1012 Fed – M/L" is the EADIT related to
9 differences generated by applying book depreciation methods and life versus tax
10 depreciation methods and life. IRS guidance is clear that this balance is to be treated as
11 "protected," and Kentucky-American has coded this item accordingly.
12 The three plant in service-related EADIT balances related to repairs (1012 Fed –
13 Repair 481a, 1012 Fed – Repair M/L, and 1012 Fed – Tax Repairs) are the EADIT
14 related to a book/tax difference arising from the Company repair method of accounting.
15 As discussed below and in my direct testimony, Kentucky-American believes it should,
16 consistent with its reading of its IRS Consent Agreement, treat all three of these EADIT
17 balances as protected. The balance labeled 1012 Fed – Repair M/L is the EADIT related
18 to repair property for which the Company claimed accelerated (including bonus)
19 depreciation prior to changing its method. This EADIT resulted from having originally
20 claimed accelerated depreciation with respect to the subject property. Executing a
21 method change recasting the property as a tax repair in a later year should not render that

[1] *See* Office of Tax Policy and Internal Revenue Service, 2018-2019 Priority Guidance Plan, 2nd Quarter Update, Part 1, No. 11 (rel. Apr. 5, 2019) (https://www.irs.gov/pub/irs-utl/2018-2019_pgp_2nd_quarter_update.pdf).
[2] IRC Section 168(i)(9)(A)(ii) – Question to be addressed is COR negative salvage subject to normalization pursuant to this clarifying section of the code.

1 EADIT balance unprotected. Kentucky-American has coded this item as protected
2 without a question mark as it appears to fit even Witness Kollen's referenced test of
3 arising "due to" accelerated depreciation (discussed below). The other two repairs-
4 related 1012 Fed balances have been designated with a question mark to indicate the need
5 for additional guidance from the IRS.

6 The EADIT balance labeled 1012 Fed – Taxable CIAC is EADIT related to the
7 book to tax difference related to taxable contributions in aid of construction. The IRS has
8 been consistent in treating this balance as protected,[3] and Kentucky-American has coded
9 this item as protected. EADIT balance labeled NOLC EADIT is related to the net
10 operating loss carryforward as of December 31, 2017, and while the IRS has consistently
11 indicated that a taxpayer subject to the tax normalization rules must determine what
12 portion of that balance is related to having claimed protected items and thus is also
13 protected, Kentucky-American is unaware of IRS guidance specific to a rate change like
14 what occurred in the context of the TCJA. Therefore, Kentucky-American coded this
15 balance as protected, but indicated that more guidance is needed with respect to this
16 determination.

17 As noted above, Kentucky-American has used ARAM to determine the
18 amortization periods for all plant in service-related EADIT, not just protected federal
19 EADIT. Schedule JRW-5R provides the balance of unprotected federal and state plant in
20 service-related EADIT – ($2,621,456) – that Kentucky American has amortized using
21 ARAM. Schedule JRW-5R also provides the balance of federal EADIT – ($2,759,537) –
22 which KAWC believes the IRS needs to weigh in on before it can be treated as

[3] Cumulative Bulletin Notice 87-82, 1987-2 CB 389 December 3, 1987 Section V.

unprotected without risking a normalization violation or a violation of the IRS Consent Agreement.

Amortization of "Unprotected" EADIT

Q. Mr. Kollen recommends that all "unprotected" EADIT be amortized over three years. What is his rationale for such a short amortization period?

A. The only rationale offered in his testimony is that the three-year period is "consistent with the Company's proposed amortization period for rate case expenses." When asked in discovery to provide the basis of this proposal, he responded as follows:

> Mr. Kollen recommends the same three-year amortization period for the "unprotected" excess ADIT that the Company requests for rate case expenses. The Company's request for a three-year amortization period is based on its estimate of the number of years until its rates are reset in its next base rate case. The Commission has complete discretion as to the amortization period for unprotected excess ADIT. The objective is to refund the amounts that were collected from customers in prior years in a reasonably short period of time to match the customers who paid these taxes as closely as possible.

When asked whether the average amortization life of the excess ADIT should be used rather than the proposed three-year amortization period, he responded this way:

> No. There no longer is a relationship between the underlying temporary differences and the excess ADIT regardless of whether it is unprotected or protected, except for the requirements imposed by the TCJA for the protected amounts. These are now regulatory liabilities for the refunds due to customers and should be returned to customers as soon as possible, subject to the limitations imposed by the TCJA for the protected amounts.[4]

[4] Attorney General's Responses to Staff Data Requests (First Set), Response to Question No. 4.

1 **Q. Does Mr. Kollen's explanation provide the Commission with a reasonable basis to**
2 **determine an amortization period to use Kentucky American EADIT balances?**
3 A. No. First, the rationale for amortizing rate case expenses over three years has nothing to
4 do with the appropriate period to amortize EADIT tax benefits that accrued as a matter of
5 investing in utility property the cost of which will be recovered over its remaining life of
6 over 30 years. Second, Mr. Kollen's statement that "[t]here no longer is a relationship
7 between the underlying temporary differences and the excess ADIT" is cut from whole
8 cloth. To the contrary, the EADIT is a permanent tax benefit which relates the deduction
9 of costs not yet recovered in rates from customers, and it should be returned to those
10 customers who will be required to pay the costs of the investments to which those
11 permanent differences relate. That causal relationship between the EADIT tax benefit
12 and the utility investments that gave rise to it is not broken by the passage of the TCJA.
13 **Q. Is Mr. Kollen's recommendation of a three-year amortization period for**
14 **unprotected excess ADIT consistent with Commission precedent?**
15 A. No. It is my understanding that the Commission has historically approved full
16 normalization of deferred taxes into utilities' rates,[5] and that Kentucky-American has
17 consistently normalized plant in service-related EADIT produced by tax changes that
18 have occurred since the 1986 Tax Reform Act. Since the passage of the TCJA, the

[5] *See Rate Adjustment of Western Kentucky Gas Company*, Case No. 90-013, Order at 6 (Ky. PSC Sept. 13, 1990) ("The Commission has allowed full tax normalization for rate-making purposes for Western[.]"); *General Adjustment in Electric Rates of Kentucky Power Company*, Case No. 8734, Order at 23-23 (Ky. PSC Sept. 20, 1983) ("Mr. D'Onofrio testified that in recent years Kentucky Power has moved closer to full normalization of book/tax timing difference and in this proceeding he requested that the Commission allow Kentucky Power to complete this normalization to reflect the change to clearing accounts and uncollectible accounts. The Commission is of the opinion that it is appropriate to normalize these timing differences and therefore has approved Kentucky Power's request to implement such accounting coincident with the issuance of this Order."); *An Adjustment of Gas Rates of the Union Light, Heat and Power Company*, Case No. 8373, Order at 25 (Ky. PSC Apr. 16, 1982) ("ULH&P has consistently followed, and this Commission has consistently recognized, full normalization of the differences between book and tax depreciation in determining ULH&P's cost of service in past rate cases as well as in this case.").

1 Commission has approved unprotected excess ADIT amortization periods ranging from
2 18 to 10 years, depending on the individual circumstances presented.[6]
3
4 **Q. What is your recommendation for amortization of unprotected plant in service-**
5 **related EADIT, and non-plant in service-related EADIT?**
6 A. My recommendation, and what Kentucky-American has done in its Base Period Update,
7 is to use ARAM to normalize all state and federal EADIT related to plant in service, and
8 a 20-year amortization period for non-plant in service-related EADIT. Both calculations
9 begin January 1, 2018 with the resulting stub period amount deferred and amortized over
10 3 years beginning at the start of the forecast year.
11
12 **Q. Why use ARAM to normalize all EADIT related to plant in service without a clear**
13 **legal requirement to do so?**
14 A. Kentucky-American believes it is the long-term best interest of both the Company and its
15 customers to do so. This EADIT is a permanent tax benefit accrued as a result of the
16 Company making investments in plant in service and claiming tax deductions in excess
17 of book at a time when the federal corporate income tax rate was 35% and the top state
18 income tax rate was 6%, which as a result of the enactment of federal and state legislation
19 will reverse as book depreciation is recovered as a cost from customers when the tax rates

[6] *See Kentucky Indus. Util. Customers, Inc. v. Kentucky Power Co.,* Case No. 2018-00035, Order at 6 (Ky. P.S.C. Jun. 28, 2018) (18 years); *In the Matter of: Electronic Investigation of the Impact of the Tax Cuts and Job Act on the Rates of Delta Natural Gas Co., Inc.*, Case No. 2018-00040, Order at 5 (Ky. P.S.C. Sept. 21, 2018) (15 years); *Kentucky Indus. Util. Customers, Inc. v. Kentucky Utils. Co. et al.*, Case No. 2018-00034 Order at 15-16 (Ky. P.S.C. Sept. 28, 2018) (15 years); *Kentucky Indus. Util. Customers, Inc. v. Duke Energy Kentucky, Inc.,* Case No. 2018-00036, Order at 13 (Ky. P.S.C. Oc. 31, 2018) (10 years); *In the Matter of: Electronic Application of Duke Energy Kentucky, Inc. for: 1) An Adjustment of the Electric Rates, etc.*, Case No. 2017-00321, Order at 8 (Ky. P.S.C. Apr. 13, 2018) (10 years).

1 will be 21% and 5% respectively. Kentucky-American believes this permanent
2 difference, which relates the deduction of costs not yet recovered in rates from customers,
3 should be returned to those customers who will be required to pay the costs of the plant to
4 which those permanent differences and associated tax benefits relate. The use of ARAM
5 closely aligns the normalization of these permanent differences to the investment that
6 gave rise to the benefit, and thus to the customers who will bear the cost of that
7 investment over its life. The use of ARAM will lower the total cost of capital recovered
8 from customers over the underlying useful life of the plant in service investment. The
9 use of ARAM also will add to the stability of cost of service rates over the useful life of
10 the property. Alternatively, severing the amortization of EADIT from the related plant
11 in service, as Mr. Kollen recommends, will increase cost of service recovered from
12 customers over the life of the property, distribute a tax benefit to customers that is
13 disproportionate to the cost to which the benefit relates, and thus benefit customers
14 during the abbreviated amortization period to the detriment of customers who continue to
15 pay for these investments over the property's remaining useful life. Moreover,
16 accelerating the period of amortization would decrease- cash flow from operations,
17 requiring additional debt and potentially equity financing, thus, as Witness Ann Bulkley
18 explains in her rebuttal, potentially having an even greater negative impact on the
19 company's credit rating and cost to attract and acquire capital.
20
21 **Q. Why did the Company use a 20-year period to amortize EADIT balances not related**
22 **plant in service?**

1 A. The 20-year period is reasonable and appropriate for several reasons. First, a 20-year
2 amortization period is consistent with the life of the underlying assets and liabilities.
3 These EADIT balances are related to deductions claimed with respect to three primary
4 types of assets and liabilities: regulated deferred assets and liabilities, plant not yet in
5 service or plant related amounts subject to refund, and assets and liabilities related to
6 providing employee benefit programs. The vast majority of the EADIT balance that falls
7 into these categories would be associated with assets and liabilities that will reverse over
8 periods greater than 15 years, with a substantial portion reversing over 30 years. Thus, it
9 is reasonable to match the reversal or recovery period of the incurred costs that gave rise
10 to the EADIT to the period the EADIT tax benefit is amortized. Second, a 20-year
11 amortization period minimizes the rate shock at the end of the amortization period as well
12 as minimizing the potential impact the resulting negative cash flow from operations could
13 have on the utilities cost of capital. Third, a 20-year amortization period is directionally
14 consistent with the Commission's decisions in other cases, where amortization periods of
15 10-18 years were used.
16
17 **Federal Tax Repairs EADIT**
18 Q. **Mr. Kollen recommends that the Commission find that all of the EADIT associated**
19 **with the repairs deduction is "unprotected" and that, notwithstanding the Consent**
20 **Agreement, the Commission amortize this excess ADIT amount over the three-year**
21 **amortization period he recommends for all Kentucky-American unprotected excess**
22 **ADIT. Should the Commission adopt his recommendation?**

1 A. No. First, Mr. Kollen's recommendation, if adopted, could result in a violation of the
2 Consent Agreement. Kentucky-American believes the uncertainty related to the
3 application of its Consent Agreement with respect to this question will be addressed in
4 the next 6-18 months as a result of additional IRS guidance becoming available.
5 Kentucky-American suggests the Commission as a matter of prudence should wait for
6 this uncertainty to be addressed. Second, Mr. Kollen's recommendation could result in a
7 normalization violation apart from the Consent Agreement. As noted above, one of the
8 tax repairs balances (1012 Fed – Repair M/L on Attachment JRW-2R) flows from
9 previously-claimed accelerated tax depreciation including bonus depreciation and thus
10 appears to fit even Witness Kollen's narrow test for "protected" ADIT. Third, Kentucky
11 American does not believe a three-year amortization period is appropriate for plant in
12 service-related EADIT, for all the reasons cited elsewhere in this testimony.
13
14 **Q. How would adoption of Mr. Kollen's recommendation result in a violation of the**
15 **Consent Agreement?**
16 A. Mr. Kollen proposes to amortize the EADIT associated with the repairs deduction over
17 three years. His proposal amounts to a flow through method of accounting, because
18 EADIT related to the tax repair deductions is related to investments in utility plant that
19 have a remaining average useful life of 30 years. The investment in plant is what gave
20 rise to the tax deduction when the tax rate was 35%, and investment or cost of that plant
21 will be recovered from customers over a remaining average useful life of 30 years.
22 Therefore, the three years has no correlation to the recovery of the underlying cost, and
23 would be inconsistent with a normalized method of accounting.

The only reason that Kentucky-American was permitted to change its method of accounting for the repairs deduction is because the IRS approved that change in method through the Consent Agreement. The Consent Agreement approves the proposed change in method to implement the repairs deduction, but it does so conditionally. It is the condition the IRS imposed which makes all the difference.

The Consent Agreement states in unambiguous terms:

> 9) If any item of property subject to the taxpayer's Form 3115 is public utility property within the meaning of § 168(i)(10) or former § 167(l(3)(A):
>
> A) A normalization method of accounting (within the meaning of § 168(i)(9), former § 168(e)(3)(B), or former § 167(l) (3)(G), as applicable) must be used for such public utility property.

The property that was the subject of the change in method was unquestionably "public utility property" as defined in 26 U.S.C. § 168(i)(10). "Public utility property" so defined is "property used predominantly in the trade or business of the furnishing or sale of . . . water, or sewage disposal services . . . if the rates for such furnishing or sale, as the case may be, have been established or approved by a . . . public utility commission." All of the property that was the subject of the Form 3115 was and is booked as utility plant in service, used and useful in the provision of water or sewage disposal service, and Kentucky-American's rates are approved by this Commission.

Since it is all "public utility property," a "normalization method (within the meaning of §168(i)(9) . . .) must be used." Such a method is one that matches the deduction for income tax expense purposes to ratemaking cost of service, with the balance being

1 reflected in deferred taxes. In addition, as part of the execution of such a tax accounting
2 method accounting change there is an adjustment, known as an IRC 481(a) adjustment,
3 made to restate what you did in the past for property placed in service prior to the method
4 change that, pursuant to the new method, would be considered a tax repair.
5
6 **Q. Beginning on page 31 and concluding on page 32 of his direct testimony, Witness**
7 **Kollen purports to describe the effect a change in tax rate has on accumulated**
8 **deferred income taxes. Is his description accurate and complete?**
9 A. No. Witness Kollen characterizes ADIT as a collection of costs from customers resulting
10 in a temporary capital contribution, presumably to associate the ADIT and EADIT with
11 taxes and costs collected in prior periods from customers, and to disassociate the ADIT
12 and EADIT from the underlying costs that have yet to be collected and will be collected
13 in future years over the remaining life of the underlying assets and liabilities (the reversal
14 period). However, as a practicing tax professional with extensive regulated utility
15 industry experience, I understand ADIT to be the product of cumulative book to tax
16 differences that can and do exist without any collection from customers having been
17 made for the underlying item of income or expense, or even can exist without any
18 collection having been made from customers at all. ADIT is a balance receivable from,
19 or payable due to, the respective taxing jurisdiction. By its very nature it is, in effect, an
20 interest free loan from the government and is treated as such, either as a reduction to rate
21 base or a reduction in computing a utility's cost of capital. EADIT occurred because the
22 respective taxing authority lowered the tax rate at which the underlying book tax
23 difference would reverse and loan would be repaid. This had the effect of lowering the

1 cost of the investment to be recovered from customers over its life. ARAM matches that
2 reversal period used to recover the cost of the assets.
3
4 **Q. On page 35 of his direct testimony, Mr. Kollen asserts that "[t]he only protected**
5 **property related excess ADIT is due to accelerated tax depreciation." How do you**
6 **respond?**
7 A. Mr. Kollen offers this definition as a simple bright-line test of what is protected, but in
8 my more than 30 years of relevant tax experience the IRS, acting within its regulatory
9 authority, has interpreted what is "due to" accelerated depreciation more broadly than Mr.
10 Kollen's very narrow interpretation might indicate. This is evidenced by the significant
11 number of times the IRS has been called on to provide guidance on this subject, and by
12 the expectation that more guidance is needed.
13 Furthermore, as discussed above and in my direct testimony at pages 10-12, the
14 Company's IRS Consent Agreement requires the repairs deduction to be accounted-for
15 subject to a normalized method of accounting (i.e., ARAM). Given the IRS's general
16 discretion in regulating tax matters, Kentucky-American is not comfortable acting in
17 direct conflict with a literal reading of a purposeful condition set in a consent agreement
18 governing a tax method change. Because of the potential consequences to the utility and
19 its customers should a tax normalization violation and/or a violation of the Consent
20 Agreement occur, Kentucky-American believes that it is prudent to err on the side of
21 caution and classify an item as "protected" in order to preserve those ongoing tax benefits
22 for its customers.
23

Q. Mr. Kollen argues at p. 36, lines 9-18, that the Consent Agreement does not expressly address or control the disposition of <u>excess</u> ADIT related to the repairs deduction. He then argues, at page 36, line 19, through page 37, line 16, that even if it does address the disposition of excess ADIT, this provision of the Consent Agreement is invalid because it is inconsistent with the TCJA. Is either argument correct?

A. No. The Consent Agreement's requirement that a normalization method of accounting be used to account for tax repairs would not exclude, in the case of a tax rate change, the EADIT benefit. The language of the Consent Agreement requires a normalization method "*within the meaning of §168(i)(9).*" (emphasis added). The TCJA tells us precisely what does not qualify as such a normalization method:

> A normalization method of accounting shall not be treated as being used with respect to any public utility property for purposes of section 167 or 168 of the Internal Revenue Code of 1986 if the taxpayer, in computing its cost of service for ratemaking purposes and reflecting operating results in its regulated books of accounts, reduces the excess tax reserve more rapidly or to a greater extent than such reserve would be reduced under the average rate assumption method.[7]

This identical language is found in §203(e)(1) of the Tax Reform Act of 1986 and so was the law of the land when the IRS included this condition in the Consent Agreement. The language from the Consent Agreement brings within it these provisions of the TCJA and the Tax Reform Act of 1986. By using this precise language, the Consent Agreement contemplates what occurs if there is a tax rate change.

[7] **TCJA, §13001(d)(1).**

1 **Q. What would occur if the Commission were to accept Mr. Kollen's proposal and the**
2 **IRS were later to deem it a violation of the consent agreement?**
3 A. Given that normalization "within the meaning of 26 U.S.C. § 168" was required as a
4 condition to granting the repairs deduction election, Tax Reform Act § 203(e) and TCJA
5 §13001(d)(1) require that we not reduce the EADIT any more quickly than would result
6 under ARAM. If the IRS found the Commission ordered return of EADIT in violation of
7 this requirement, it would deem the Company to be in breach of the Consent Agreement,
8 and the permission granted relative to the method of accounting for repairs would be
9 rendered null and void. The IRS would require Kentucky-American to change its method
10 of accounting to the method that existed before the change occurred in 2008. This
11 change back to the old method would be required to be applied to the earliest open tax
12 year. For Kentucky-American this would be the year beginning January 1st 2015. The
13 federal corporate income tax rate tax rate in 2015 was 35%. This means that not only
14 would there no longer be the zero cost capital for the repairs, but there would be no
15 EADIT to even give back to customers through reducing income tax expense. Given the
16 risk of such an action by the IRS, the requirement to self-report such uncertainties in tax
17 positions, and the fact the IRS has not approved our method as a result of an audit, it
18 would be foolish to disregard a requirement in the Consent Agreement and present the
19 IRS with the opening to take such a drastic action. In my opinion it better serves our
20 customers' interests to return the excess to customers using ARAM than to violate the
21 Consent Agreement, give the excess to the IRS and eliminate a substantial source of zero-
22 cost capital for the Company.
23

1 **Q. Are there reasons to use ARAM for the repairs deduction other than avoiding a**
2 **violation of the Consent Agreement?**

3 A. Yes. There are several reasons why an amortization period shorter than ARAM is not
4 proper. Here are a few:

5 (a) As explained above, a portion of those balances (1012 Fed – Repair M/L on
6 Attachment JRW-2R) flows from previously-claimed accelerated tax depreciation
7 including bonus depreciation and thus appears to be "protected" ADIT, the
8 amortization of which over a period shorter than produced by ARAM would
9 result in a normalization violation.

10 (b) The flow back should provide tax benefits to customers smoothly over the life and
11 the cost recovery period of the investment rather than abruptly and arbitrarily over
12 a shorter period.

13 (c) The flow-back should avoid inter-generational inequities created in adopting a
14 flow through method of accounting for EADIT related to tax repairs..

15

16 (d) The flow-back should promote stable and lower utility rates over the long term.

17

18 **Q. If the TCJA had not been enacted, what would the flow back look like?**

19 A. When looking at the repairs deduction, these dollars would normally flow back to the
20 customers as the underlying life of the assets turned around. The assets that these
21 deductions relate to are typically long lived utility assets with remaining book lives
22 exceeding on average 30 years. The deferred taxes are purely the result of timing
23 differences – the tax deduction has been taken more quickly than the expense is incurred
24 for regulatory purposes. Assume a utility installed a capital asset at the beginning of
25 Year 1 with a 40-year life but which qualified for the repairs deduction. At the end of
26 Year 1, the entire investment would be deducted for tax purposes, but for regulatory

1 purposes only one year of depreciation expense would be recorded. The deferred tax this
2 situation creates would slowly reverse over the remaining 39 years, as no deduction
3 would be taken for tax purposes but each year an additional year of depreciation expense
4 would be recorded for regulatory purposes. If the TCJA had not been enacted, the
5 customers would receive this benefit as the asset is depreciated for book purposes. There
6 is no dispute that the book to tax difference related to repairs will reverse as a result of
7 recording book depreciation and recovering the cost from customers. There is no good
8 reason why the benefit should flow back any more quickly just because of the TCJA. As
9 I discuss above, Kentucky-American believes this longer amortization period is in the
10 best interest of our customers. Total costs collected from customers will be less over the
11 life of the property, and the EADIT benefit will be shared with the customers who will
12 pay for the investments in plant that gave rise to the EADIT benefit. Utility rates and the
13 resulting cashflow will be more stable which favors having access to capital at a lower
14 cost.
15
16 **Q. Why would the Commission want to provide the benefits of excess deferred taxes to**
17 **customers over the life of the investment?**
18 A. As discussed above, by using ARAM to determine EADIT amortization periods
19 customers are provided with the tax benefit over the life of the investment. In contrast,
20 flowing EADIT through over a shorter period front-loads the benefit. Return to my
21 example of the single repairs deduction. Under a proposal to flow it back over Mr.
22 Kollen's proposed three-year period, for the next three years rates would be held
23 artificially low as the excess deferred taxes are amortized over this abbreviated

1 timeframe. Then there would be an immediate rate spike as the abbreviated amortization
2 ends, producing an increase of approximately $4 million annually, which includes an
3 increase in rate base caused by the deferred taxes that will have been flowed back
4 entirely. Using the three-year amortization period means the customers will be charged
5 more after that period because the amortizations will no longer be an offset to tax
6 expense and the rate base will be higher. This would create significant volatility in
7 customer rates. Kentucky-American believes that using ARAM and providing the tax
8 benefits to customers smoothly over the life of the investment is in the best interest of our
9 customers.

10

11 **Q. How does the pass back of excess deferred taxes affect inter-generational equity?**

12 A. The normalization concept prevents the inter-generational inequity that can occur when
13 the flow-through method is used. If Kentucky-American uses an immediate or close-to-
14 immediate flow-through method, current customers receive the entire refund and
15 disproportionally benefit. Again, return to my example of the single repairs deduction.
16 Under a three-year amortization, customers during the first three years see 100% of the
17 benefit from the TCJA, whereas the customers over the remainder of the life of the asset
18 see none of the benefit. But the asset giving rise to the benefit will serve all of them.
19 What is also inequitable for those later customers is the accelerated increase in rate base.
20 The entirety of the EADIT will have already been returned over the first five years,
21 resulting in a larger rate base and a greater revenue requirement for the remainder of the
22 life of the asset giving rise to the benefit. Future customers are unfairly penalized
23 because they may not receive any refund, and yet pay for the cost of the utility asset over

its remaining useful life. Normalization ensures that tax benefits are spread to all customers who benefit from Kentucky-American's long-life assets and not just current customers. Kentucky-American therefore believes that the normalization concept should be applied to the repairs deduction and the amortization periods for this EADIT should be calculated pursuant to ARAM.

Q. How would a normalization approach to the return of the EADIT associated with the repairs deduction affect the originally anticipated payment to the government?

A. Under a policy of normalization for the return of excess deferred taxes, Kentucky-American would be required to pay the money no longer owed to the government to its customers instead, but in approximately the same time frame as Kentucky-American originally expected to pay it to the government. A shorter period of time would mean that Kentucky we would have to secure the capital to pay back the funds more quickly. It is not as if EADIT is money that is on deposit in a bank. These are funds that have been invested in needed infrastructure to serve our customers. If required to pay the funds back more quickly than originally anticipated, we must secure the capital to make those payments from other sources – either external capital or internally generated funds. All else being equal, the added need for capital will entail additional costs, driving up utility rates. In an era when water utilities need to attract capital for needed infrastructure, this would not be a prudent use of funds.

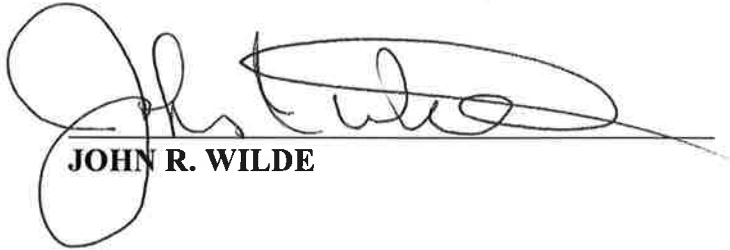
Q. Please summarize the Company's position with respect to the amortization of Kentucky-American's EADIT.

1 A. For all of the reasons I have stated, Kentucky-American believes it is in the best long-
2 term interest of our customers to use ARAM to calculate the amortization periods for all
3 plant in service-related EADIT, and to amortize all other EADIT over a 20-year period.
4 If the Commission determines that ARAM should be used to amortize only "protected"
5 federal EADIT and EADIT subject to normalization pursuant to the Consent Agreement,
6 then the balance of unprotected federal and state plant in service-related EADIT –
7 ($2,621,456) – could be amortized over 20 years rather than pursuant to an ARAM
8 calculation. However, we do not recommend amortizing any repairs-related EADIT
9 over a period shorter than that produced by ARAM absent further guidance by the IRS.
10
11 **Q. Does this conclude your testimony?**
12 A. Yes.

VERIFICATION

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

The undersigned, **John R. Wilde**, being duly sworn, deposes and says he is the Vice President, Tax Strategy and Compliance for American Water Works Service Company, Inc., that he has personal knowledge of the matters set forth in the foregoing testimony, and the answers contained therein are true and correct to the best of his information, knowledge, and belief.



JOHN R. WILDE

Subscribed and sworn to before me, a Notary Public in and before said County and State, this 18th day of April, 2019.

(SEAL)

Notary Public

My Commission Expires:

ANN G. ALFANO
NOTARY PUBLIC OF NEW JERSEY
ID # 50014130
My Commission Expires 4/15/2020

Kentucky American Water Company
Excess Deferred Income Taxes

Case No: 2018-00358

JRW-1R

Plant and Non-Plant related EADIT Balances

Total		TCJA Total		State Total		Total	
		Gross	Net	Gross	Net	Gross	Net
Plant In Service (EADIT)	Total	(42,491,634)	(31,889,971)	(1,996,760)	(1,498,568)	(44,488,394)	(33,388,539)
NOLC EADIT	Total	1,035,114	776,853	-	-	1,035,114	776,853
Plant not in Service (EADIT)	Total	2,538,347	1,905,030	152,379	114,360	2,690,726	2,019,390
Plant EADIT	Total	(38,918,173)	(29,208,088)	(1,844,381)	(1,384,208)	(40,762,554)	(30,592,296)
Non-Plant EADIT	Total	(1,550,807)	(1,163,881)	12,652	9,495	(1,538,156)	(1,154,386)
Total EADIT	**Total**	**(40,468,980)**	**(30,371,969)**	**(1,831,729)**	**(1,374,713)**	**(42,300,710)**	**(31,746,682)**

Kentucky American Water Company Case No: 2018-00358
Excess Deferred Income Taxes

JRW-2R

EADIT Balances by Method or Method and Period

Total		TCJA Total		State Total		Total	
		Gross	Net	Gross	Net	Gross	Net
Plant In Service (EADIT)	ARAM	(42,491,634)	(31,889,971)	(1,996,760)	(1,498,568)	(44,488,394)	(33,388,539)
NOLC EADIT	ARAM	1,035,114	776,853	-	-	1,035,114	776,853
Subtotal	ARAM	(41,456,520)	(31,113,118)	(1,996,760)	(1,498,568)	(43,453,280)	(32,611,686)
Plant not in Service (EADIT)	20 yr Amortization	2,538,347	1,905,030	152,379	114,360	2,690,726	2,019,390
Subtotal	Plant	(38,918,173)	(29,208,088)	(1,844,381)	(1,384,208)	(40,762,554)	(30,592,296)
Non-Plant EADIT	20 yr Amortization	(1,550,807)	(1,163,881)	12,652	9,495	(1,538,156)	(1,154,386)
Subtotal	20 yr Amortization	987,540	741,149	165,031	123,855	1,152,570	865,004
Total EADIT	**Total**	**(40,468,980)**	**(30,371,969)**	**(1,831,729)**	**(1,374,713)**	**(42,300,710)**	**(31,746,682)**

Kentucky American Water
Excess ADIT
Years 2018, 2019 and 2020
Rate Case Update 4/15/2019

Schedule **JRW-3R**

	2018 Excess		**2019 Excess**		**2020 Excess**		**Pre Test Period Excess**		**B4 proration Test Period Excess**	
	Federal	State	Federal	State	Federal	State				
Total Subject to ARAM	563,626	39,537	600,028	44,982	625,840	46,339				
Total Subject to 20 Year Amortization	(32,154)	(5,787)	(32,154)	(5,787)	(32,154)	(5,787)				
Total Federal and State Excesses	531,472	33,750	567,874	39,195	593,686	40,552				
With Gross up	708,157	44,970	756,661	52,226	791,054	54,033				
RATE CASE ANALYSIS	Federal	State	Federal	State	Federal	State	Federal	State	Federal	State
Jan 1 2018 - Dec 31 2018	708,157	44,970					708,157	44,970		
Jan 1 2019 - Feb 28 2019			126,110	8,704			126,110	8,704		
March 1 2019 - Jun 30 2019			252,220	17,409			252,220	17,409		
July 1 2019 - Dec 31 2019			378,330	26,113					378,330	26,113
Jan 1 2020 - Jun 30 2020					395,527	27,016			395,527	27,016
Total Regulatory Liability movement	708,157	44,970	756,661	52,226	395,527	27,016	1,086,488	71,083	773,857	53,129
Pre-Tax Normalization / Amortization (Per Month)							30,180	1,975	64,488	4,427
								Annual	**1,136,018**	**76,823**
									Total	**1,212,841**
After Tax Normalization / Amortization	531,472	33,750	567,874	39,195	296,843	20,276	815,409	53,348	580,780	39,874
Per Month							22,650	1,482	48,398	3,323
								Annual	**852,583**	**57,656**
									Total	**910,239**

1012-Kentucky American Water Co
PowerTax Deferred Tax Summary

2018-00358
JRW-4R

			75.05%
		Total Net	**Total Gross**
1012 Fed - COR	Y?	2,386,384	3,179,725
1012 Fed - M/L	Y	(27,035,468)	(36,023,276)
1012 Fed - AFUDC Debt	N	(1,353,083)	(1,802,909)
1012 Fed - AFUDC Equity	N	(838,482)	(1,117,232)
1012 Fed - Asset Acq Adj	N	(562,616)	(749,655)
1012 Fed - CPI	N	288,655	384,617
1012 Fed - Historical Other	N	(2,910,138)	(3,877,599)
1012 Fed - Inter-Co Adj	N	241,479	321,758
1012 Fed - Non-Tax CAC	N	4,011,297	5,344,833
1012 Fed - Repair 481a	Y?	(2,827,732)	(3,767,798)
1012 Fed - Repair M/L	Y	(1,357,034)	(1,808,174)
1012 Fed - Tax Repairs	Y?	(3,095,042)	(4,123,973)
1012 Fed - Taxable CIAC	Y	1,161,810	1,548,048
Total PowerTax		(31,889,970)	(42,491,635)
Net Operating Loss (Plant In Service)	Y?	776,853	1,035,114
Total Plant In Service		**(31,113,118)**	**(41,456,520)**

Kentucky American Water Company
Excess Deferred Income Taxes

Case No: 2018-00358

JRW-5R

EADIT balance where ARAM was applied where ARAM is not required. (Unprotected)

		TCJA Total		State Total		Total	
Total		Gross	Net	Gross	Net	Gross	Net
Plant In Service (EADIT)	ARAM	(1,496,187)	(1,122,888)	(1,996,760)	(1,498,568)	(3,492,947)	(2,621,456)

Additional EADIT balance where ARAM was applied where ARAM may not be required.

		TCJA Total		State Total		Total	
Total		Gross	Net	Gross	Net	Gross	Net
Plant In Service (EADIT)	ARAM	(3,676,932)	(2,759,537)	-	-	(3,676,932)	(2,759,537)
					Total	(7,169,879)	(5,380,993)