



Lexington-Fayette Urban County Government
DEPARTMENT OF LAW

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June 11, 2010

JUN 14 2010

PUBLIC SERVICE
COMMISSION

Mr. Jeff Derouen
Executive Director
Public Service Commission
211 Sower Boulevard
P.O. Box 615
Frankfort, Kentucky 40602-0615

Re: Kentucky Public Service Case No. 2010-0036
(Kentucky-American Water Company)

Dear Mr. Derouen:

Enclosed for filing in the referenced matter are an original and one copy of the Lexington-Fayette Urban County Government's Notice of Filing Testimony and Direct Testimony, which have also been filed and served electronically on today's date in accordance with the Commission's order. All materials are included in the electronic filing, and the electronic filing is a true representation of the original document. Please contact me should you have any questions regarding this matter.

Yours very truly,

David J. Barberie
Attorney Senior

ENC

cc: Distribution List via E-mail

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JUN 14 2010

PUBLIC SERVICE
COMMISSION

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

ADJUSTMENT OF RATES OF KENTUCKY-)
AMERICAN WATER COMPANY)

CASE NO. 2010-00036

**LEXINGTON-FAYETTE URBAN COUNTY
GOVERNMENT'S NOTICE OF FILING TESTIMONY**

Comes now the Lexington-Fayette Urban County Government ("Lexington"), by counsel, and pursuant to the Commission's Scheduling Order and files this Notice of Filing Testimony in this action. Lexington hereby submits testimony (attached) from the following witness in support of its position in this case:

Richard A. Baudino

Respectfully submitted,

BY:



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FILING NOTICE AND CERTIFICATE

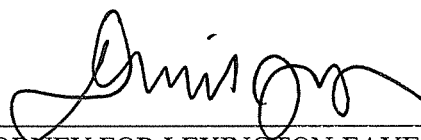
In accordance with Ordering Paragraph No. 5 of the Commission's February 16, 2010 Order, this is to certify that Lexington-Fayette Urban County Government's June 11, 2010 electronic filing of this testimony is a true and accurate copy of the documents to be filed in paper medium; that the electronic filing has been transmitted to the Commission on June 11, 2010; that an original and one copy of the filing will be delivered to the Commission on June 11, 2010; and that, on June 11, 2010, notification of the electronic filing will be provided to the Commission and the following via electronic mail:

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JUN 14 2010

BEFORE THE
PUBLIC SERVICE COMMISSION OF KENTUCKY
PUBLIC SERVICE
COMMISSION

IN THE MATTER OF:

THE APPLICATION OF KENTUCKY-AMERICAN)
WATER COMPANY FOR AN ADJUSTMENT OF) CASE NO. 2010-00036
RATES ON AND AFTER MARCH 28, 2010)

DIRECT TESTIMONY
AND EXHIBITS
OF
RICHARD A. BAUDINO

ON BEHALF OF
LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT
J. KENNEDY AND ASSOCIATES, INC.
ROSWELL, GEORGIA

June 2010

**BEFORE THE
PUBLIC SERVICE COMMISSION OF KENTUCKY**

IN THE MATTER OF:

**THE APPLICATION OF KENTUCKY-AMERICAN)
WATER COMPANY FOR AN ADJUSTMENT OF) CASE NO. 2010-00036
RATES ON AND AFTER MARCH 28, 2010)**

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**BEFORE THE
PUBLIC SERVICE COMMISSION OF KENTUCKY**

IN THE MATTER OF:

**THE APPLICATION OF KENTUCKY-AMERICAN)
WATER COMPANY FOR AN ADJUSTMENT OF) CASE NO. 2010-00036
RATES ON AND AFTER MARCH 28, 2010)**

DIRECT TESTIMONY OF RICHARD A. BAUDINO

I. QUALIFICATIONS AND SUMMARY

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

2 A. My name is Richard A. Baudino. My business address is J. Kennedy and Associates,
3 Inc. ("Kennedy and Associates"), 570 Colonial Park Drive, Suite 305, Roswell,
4 Georgia 30075.

5

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

7 A. I am a consultant with Kennedy and Associates.

8

9 **Q. Please describe your education and professional experience.**

10 A. I received my Master of Arts degree with a major in Economics and a minor in
11 Statistics from New Mexico State University in 1982. I also received my Bachelor
12 of Arts Degree with majors in Economics and English from New Mexico State in
13 1979.

14

15 I began my professional career with the New Mexico Public Service Commission
16 Staff in October 1982 and was employed there as a Utility Economist. During my
17 employment with the Staff, my responsibilities included the analysis of a broad range
18 of issues in the ratemaking field. Areas in which I testified included cost of service,

J. Kennedy and Associates, Inc.

1 rate of return, rate design, revenue requirements, analysis of sale/leasebacks of
2 generating plants, utility finance issues, and generating plant phase-ins.

3

4 In October 1989, I joined the utility consulting firm of Kennedy and Associates as a
5 Senior Consultant where my duties and responsibilities covered substantially the
6 same areas as those during my tenure with the New Mexico Public Service
7 Commission Staff. I became Manager in July 1992 and was named Director of
8 Consulting in January 1995. Currently, I am a consultant with Kennedy and
9 Associates.

10

11 Exhibit ____ (RAB-1) summarizes my expert testimony experience.

12 **Q. On whose behalf are you testifying?**

13 A. I am testifying on behalf of Lexington-Fayette Urban County Government
14 (“LFUCG”).

15 **Q. What is the purpose of your Direct Testimony?**

16 A. The purpose of my direct testimony is (1) to address the allowed return on equity and
17 overall cost of capital for Kentucky American Water Company (“KAWC” or
18 “Company”) and (2) address certain revenue requirement issues in the Company’s
19 filing. I will also respond to KAWC witness James Vander Weide and his
20 recommended return on equity.

21 **Q. Please summarize your Direct Testimony.**

1 A. Based on my independent analysis in this case, I recommend that the Public Service
2 Commission of Kentucky (“KPSC” or “Commission”) adopt an allowed return on
3 equity (“ROE”) of 9.50% for KAWC. My recommendation is based on the results of
4 several Discounted Cash Flow (“DCF”) analyses for two comparison groups of
5 utilities, one composed of regulated water utilities and one composed of regulated
6 natural gas distribution utilities. I also performed two Capital Asset Pricing Model
7 Analyses but did not incorporate them into my recommendation. My review of all of
8 the results from my DCF and CAPM analyses show that a 9.50% ROE for a low-risk
9 water utility such as KAWC is reasonable in today’s marketplace for stock
10 investment.

11

12 Turning to the Company's testimony, the Commission should reject the
13 recommended return on equity range of 10.8% - 12.10% of Dr. Vander Weide. I
14 explain in Section IV of my testimony how Dr. Vander Weide’s approaches to
15 estimating the ROE for KAWC greatly overstate the ROE results KAWC. In
16 particular:

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- Dr. Vander Weide failed to consider lower dividend growth forecasts for his water and gas utility proxy groups.
- Dr. Vander Weide’s sole reliance on earnings growth forecasts inflated his Discounted Cash Flow model results.
- Dr. Vander Weide’s risk premium results are overstated.
- Although I did not use the Capital Asset Pricing Model as a basis for my recommended ROE, the CAPM results provide further evidence that Dr. Vander Weide’s ROE range is greatly overstated.
- Dr. Vander Weide’s recommended range significantly exceeds the ROEs that have been allowed for other subsidiaries of American Water Works.

1 **II. REVIEW OF ECONOMIC AND FINANCIAL CONDITIONS**

2 **Q. Mr. Baudino, what has the trend been in long-term capital costs over the last**
3 **few years?**

4 A. Exhibit ____ (RAB-2) presents a graphic depiction of the trend in interest rates from
5 January 2000 through December 2009. The interest rates shown are for the 20-year
6 U.S. Treasury Bond and the average public utility bond from the Mergent Bond
7 Record. Exhibit ____ (RAB-2) shows that the yields on long-term Treasury and
8 utility bonds have declined since early 2000, although rates have been quite volatile.
9 Yields trended downward from 2002 through 2006, with the 20-year Treasury bond
10 yield declining from 5.69% to 4.78% at the end of December 2006. The yield on the
11 average public utility bond also decreased significantly over that time, falling from
12 7.83% in March 2002 to 5.83% in December 2006, a decline of 200 basis points.
13 Public utility bond yields fell far more than long-term Treasury yields over the last
14 four years.

15
16 2007 saw a rise in bond yields, fueled in part by investors' concerns over turmoil and
17 defaults associated with the sub-prime lending market. This accelerated in 2008, a
18 year in which world financial markets experienced tumultuous changes and volatility
19 not seen since the Great Depression. As noted in the SBBI 2009 Yearbook, both
20 large and small company stocks declined around 37% for the year.¹ Investors, in a

1 2009 Ibbotson SBBI Classic Yearbook, Morningstar, page 11.

1 flight to quality and safety, also pulled their funds out of those corporate bonds that
2 were perceived to be higher risk and invested in the safety of Treasury securities.
3 The 2009 SBBI Yearbook reported that long-term Treasury Bonds returned 25.87%
4 during 2008, while long-term corporate bonds returned 8.78%. Thus, bonds
5 significantly outperformed stocks in 2008.

6
7 The stocks of utilities did not fare well during the financial market upheaval of 2008.
8 The Dow Jones Utility Average was down from its opening level in January 2008 of
9 532.50 to 370.76 at the end of December, a decline of 30.4%. This decline was
10 smaller than the decline in the overall stock market. Utility bond yields also
11 increased significantly during the year, rising from 6.08% in January to a high of
12 7.80% in November. And as investors flocked to the safety of Treasury securities,
13 the yield spread between long-term Treasury securities and the index of public utility
14 bonds widened from 1.73% in January to 3.69% in December, the highest spread
15 during the entire period shown in Exhibit ___(RAB-2).

16
17 In 2009, utility bond yields fell significantly from November 2008 levels as did the
18 spread between public utility bond yields and long-term Treasuries. The average
19 utility bond yield in December 2009 was 5.86%, a decline of almost 200 basis points
20 from November 2008. At the end of December the yield spread between utility
21 bonds and the long-term Treasury bond declined substantially to 1.46%. This is
22 much closer to the historical spread.

23

1 So far in 2010, interest rates and bond yields have been relatively consistent with the
2 levels seen at the end of 2009. On May 28, 2010, the average public utility bond
3 yield was 5.68%, according to Moody's Credit Trends. And for the week ending
4 May 28, 2010 the 20-year Treasury yield was 3.99%, according to the June 1, 2010
5 H.15 release from the Federal Reserve. This yield represents a decline from the
6 Treasury Bond yield in December 2009, which was 4.40%.

7 **Q. How does the investment community regard the water utility industry as a**
8 **whole?**

9 A. In an article dated January 25, 2010, Standard and Poor's ("S&P") reported that it
10 was forecasting "generally stable credit quality in 2010 for U.S. investor-owned
11 water utility sector." S&P also noted that "[r]ated U.S. investor-owned water
12 utilities continue to demonstrate above-average access to debt financing and to
13 maintain adequate liquidity." S&P reported significant debt issuance by American
14 Water Works (\$250 million), Aqua Pennsylvania (\$75 million), and United Water
15 New Jersey (\$65 million), as well as an equity issuance of 1 million common shares
16 by York Water Company. Finally, S&P noted that there was little reluctance on the
17 part of lenders to provide financing under revolving credit agreements despite the
18 generally weakened condition of financial institutions and other lenders.

19
20 The Value Line Investment Survey noted in its recent report on the Water Utility
21 Industry that although there seems to be a more favorable regulatory landscape in
22 place for water utilities, "the group still faces a stiff headwind looking ahead."
23 Value Line cited concerns relating to new financing required for significant

1 infrastructure investments as well as potential increases in ongoing maintenance
2 costs. The majority of the water utility stocks “lack appreciation potential for both
3 the coming six to 12 months as well as the next 3 to 5 years.”
4

5 **Q. Briefly describe Kentucky American Water Company.**

6 A. KAWC is a subsidiary of American Water, the largest investor owned water
7 company in the United States. KAWC provides water service to approximately
8 118,800 customers and sewer service to approximately 700 customers in twelve
9 communities in Kentucky. KAWC uses American Water Capital Corp. (“AWCC”)
10 to place its long- and short-term debt issues. AWCC consolidates the financings of
11 American Water Works’ operating subsidiaries into larger debt issues in order to
12 attract lower debt cost than if the subsidiaries offered their own issuances
13 individually.
14

15 **Q. What are the debt and credit ratings of KAWC and American Water Works?**

16 A. KAWC does not have its own debt and credit ratings. American Water Works is
17 currently rated BBB+ by S&P and Baa2 by Moody’s. Both of these credit ratings
18 are solidly in the investment grade category.
19

20 **Q. Mr. Baudino, are you aware of any American Water Works financial**
21 **presentations that discuss the financial health and overall risks of the**
22 **Company?**

23 A. Yes. I downloaded a presentation from American Water’s web site entitled
24 “Institutional Investor Meetings May 2010” that discussed, among other things,

1 American Water's strategic outlook and direction, its historical earnings, total
2 shareholder return, and its regulated businesses. On page 18 of this presentation,
3 American Water noted the following about its regulated businesses:

- 4
- 5 • Largely residential customers base promotes consistent operating results.
 - 6 • Geographic presence hedges both weather and regulatory risk.
 - 7 • Scale enables multiple growth opportunities across service areas.
- 8

9 American Water also noted that it has access to necessary capital markets, in which it
10 raised \$242 million in primary equity in June 2009 and over \$830 million of debt
11 issued in 2009 and 2010. I have included relevant pages from this presentation in
12 Exhibit ___(RAB-3).

13

14 **Q. Mr. Baudino, what is your conclusion regarding the financial health and overall**
15 **risk of KAWC?**

16 A. KAWC is a low-risk water distribution utility that draws additional financial and
17 operating strength from its large parent company American Water. American
18 Water's credit ratings are solidly in the investment grade rating category. In
19 addition, KAWC is completing and putting into rate base its water supply and
20 treatment project that the KPSC approved in Case No. 2007-134. KAWC estimated
21 that the final cost of this project will be \$163.9 million. Completion of this very
22 large project will enable the Company to generate significant additional cash flow
23 and, other things being equal, somewhat relieve its ongoing financing requirements.
24 This, in turn, will serve to lower the overall risk of KAWC.

25

1 **III. DETERMINATION OF FAIR RATE OF RETURN**

2 **Q. Please describe the methods you employed in estimating a fair rate of return for**
3 **KAWC.**

4 A. I employed a Discounted Cash Flow (“DCF”) analysis for two groups of comparison
5 companies to estimate the cost of equity for KAWC’s regulated water distribution
6 operations. I also employed two Capital Asset Pricing Model (“CAPM”) analyses
7 using both historical and forward-looking data, although I did not use them to
8 formulate my recommendation in this case.

9

10 **Q. What are the main guidelines to which you adhere in estimating the cost of**
11 **equity for a firm?**

12 A. Generally speaking, the estimated cost of equity should be comparable to the returns
13 of other firms with similar risk structures and should be sufficient for the firm to
14 attract capital. These are the basic standards set out by the United States Supreme
15 Court in *Federal Power Comm’n v. Hope Natural Gas Co.*, 320 U.S. 591 (1944) and
16 *Bluefield W.W. & Improv. Co. v. Public Service Comm’n*, 262 U.S. 679 (1922).

17

18 From an economist’s perspective, the notion of “opportunity cost” plays a vital role
19 in estimating the return on equity. One measures the opportunity cost of an
20 investment equal to what one would have obtained in the next best alternative. For
21 example, let us suppose that an investor decides to purchase the stock of a publicly
22 traded utility. That investor made the decision based on the expectation of dividend
23 payments and perhaps some appreciation in the stock’s value over time; however,

1 that investor's opportunity cost is measured by what she or he could have invested in
2 as the next best alternative. That alternative could have been another utility stock, a
3 utility bond, a mutual fund, a money market fund, or any other number of investment
4 vehicles.

5
6 The key determinant in deciding whether to invest, however, is based on
7 comparative levels of risk. Our hypothetical investor would not invest in a particular
8 utility company stock if it offered a return lower than other investments of similar
9 risk. The opportunity cost simply would not justify such an investment. Thus, the
10 task for the rate of return analyst is to estimate a return that is equal to the return
11 being offered by other risk-comparable firms.

12 **Q. What are the major types of risk faced by utility companies?**

13 A. In general, risk associated with the holding of common stock can be separated into
14 three major categories: business risk, financial risk, and liquidity risk. Business risk
15 refers to risks inherent in the operation of the business. Volatility of the firm's sales,
16 long-term demand for its product(s), the amount of operating leverage, and quality of
17 management are all factors that affect business risk. The quality of regulation at the
18 state and federal levels also plays an important role in business risk for regulated
19 utility companies.

20
21 Financial risk refers to the impact on a firm's future cash flows from the use of debt
22 in the capital structure. Interest payments to bondholders represent a prior call on the
23 firm's cash flows and must be met before income is available to the common

1 shareholders. Additional debt means additional variability in the firm's earnings,
2 leading to additional risk.

3

4 Liquidity risk refers to the ability of an investor to quickly sell an investment without
5 a substantial price concession. The easier it is for an investor to sell an investment
6 for cash, the lower the liquidity risk will be. Stock markets, such as the New York
7 and American Stock Exchanges, help ease liquidity risk substantially. Investors who
8 own stocks that are traded in these markets know on a daily basis what the market
9 prices of their investments are and that they can sell these investments fairly quickly.

10 **Q. Are there any indices available to investors that quantify the total risk of a**
11 **company?**

12 A. Bond ratings are tools that investors use to assess the risk comparability of firms.
13 Bond rating agencies such as Moody's and Standard and Poor's perform detailed
14 analyses of factors that contribute to the risk of a particular investment. The end
15 result of their analyses is a bond rating that reflects these risks. This information can
16 then be used to select a comparison group for use in the Discounted Cash Flow
17 model.

18

19

20 **Discounted Cash Flow ("DCF") Model**

21 **Q. Please describe the basic DCF approach.**

1 A. The basic DCF approach is rooted in valuation theory. It is based on the premise that
2 the value of a financial asset is determined by its ability to generate future net cash
3 flows. In the case of a common stock, those future cash flows take the form of
4 dividends and appreciation in stock price. The value of the stock to investors is the
5 discounted present value of future cash flows. The general equation then is:

6
$$V = \frac{R}{(1+r)} + \frac{R}{(1+r)^2} + \frac{R}{(1+r)^3} + \dots + \frac{R}{(1+r)^n}$$

7 *Where:* $V = \text{asset value}$
8 $R = \text{yearly cash flows}$
9 $r = \text{discount rate}$

10

11 This is no different from determining the value of any asset from an economic point
12 of view; however, the commonly employed DCF model makes certain simplifying
13 assumptions. One is that the stream of income from the equity share is assumed to
14 be perpetual; that is, there is no salvage or residual value at the end of some maturity
15 date (as is the case with a bond). Another important assumption is that financial
16 markets are reasonably efficient; that is, they correctly evaluate the cash flows
17 relative to the appropriate discount rate, thus rendering the stock price efficient
18 relative to other alternatives. Finally, the model I employ also assumes a constant
19 growth rate in dividends. The fundamental relationship employed in the DCF
20 method is described by the formula:

21
$$k = \frac{D_1}{P_0} + g$$

22 *Where:* $D_1 = \text{the next period dividend}$
23 $P_0 = \text{current stock price}$
24 $g = \text{expected growth rate}$
25 $k = \text{investor-required return}$

1 Under the formula, it is apparent that “k” must reflect the investors’ expected return.
2 Use of the DCF method to determine an investor-required return is complicated by
3 the need to express investors’ expectations relative to dividends, earnings, and book
4 value over an infinite time horizon. Financial theory suggests that stockholders
5 purchase common stock on the assumption that there will be some change in the rate
6 of dividend payments over time. We assume that the rate of growth in dividends is
7 constant over the assumed time horizon, but the model could easily handle varying
8 growth rates if we knew what they were. Finally, the relevant time frame is
9 prospective rather than retrospective.

10

11 **Q. What was your first step in conducting your DCF analysis for KAWC?**

12 A. Since KAWC is an operating subsidiary of American Water, it does not have its own
13 publicly traded common stock and so its DCF ROE cannot be directly estimated.
14 Therefore, it is necessary to estimate a DCF ROE for the Company using a
15 comparison group of companies.

16 **Q. How did you approach the comparison group of companies in this proceeding?**

17 A. In this case, I chose to use the two comparison groups of companies used by Dr.
18 Vander Weide in his Direct Testimony.

19

20 The first group is a group of publicly traded water utilities included in the Value Line
21 Investment Survey. This comparison group ranges from very large investor-owned
22 companies like American Water and Aqua Water to much smaller companies. My

1 review of the Value Line reports for these companies indicated that this group of
2 companies can be used as one reasonable basis to estimate the cost of equity for
3 KAWC.

4

5 The second group of companies consisted of natural gas companies that, according to
6 Dr. Vander Weide, were engaged in the natural gas distribution business. For
7 purposes of this case, I believe it is reasonable to use a comparison group of natural
8 gas distribution companies for guidance in estimating the ROE for KAWC.

9

10 **Q. Did you accept all of the constituent companies in Dr. Vander Weide's water**
11 **utility group?**

12 A. No. I omitted Artesian because Value Line's expanded edition did not include a
13 report for that company. I also omitted Southwest Water because since Dr. Vander
14 Weide filed his testimony that company has agreed to a buyout by a group of private
15 investors.

16

17 **Q. Do you accept all of the constituent companies in Dr. Vander Weide's natural**
18 **gas group?**

19 A. No. Dr. Vander Weide constructed his natural gas proxy group from companies that
20 were included in Value Line's distribution group and diversified gas company group.
21 Value Line's group of diversified gas companies includes companies that are
22 significantly involved in businesses other than the regulated natural gas distribution
23 business. For the group of companies shown on Dr. Vader Weide's Exhibit
24 ____ (JVW-1), Schedule 2, the diversified gas companies are Energen Corp., EQT

1 Corp., MDU Resources, ONEOK Inc., and Questar Corp. According to the June
2 2010 issue of AUS Utility Reports, these companies have the following percentage
3 of their revenues coming from gas operations:

4
5 Energen Corp. 43%
6 EQT Corp. 91%
7 MDU Resources 5%
8 ONEOK, Inc. 17%
9 Questar Corp. 28%

10
11 It should be noted that EQT's businesses include significant exploration and
12 production activities, as well as natural gas gathering, transmission and storage. It is
13 not considered a natural gas distribution company.

14
15 These diversified gas companies should not be included in a gas distribution proxy
16 group. Their businesses are diverse, unregulated, and tend to be more risky. As
17 such, they are poor proxies for the low-risk water distribution operation of KAWC.

18
19 **Q. How did you approach the construction of an appropriate group of natural gas**
20 **distribution companies?**

21 A. I began with the group of gas companies used by Dr. Vander Weide and excluded
22 the diversified gas companies listed above. I then selected additional gas distribution
23 companies from Value Line's Natural Gas Distribution group that had 5-year
24 earnings and dividend growth forecasts from Value Line. This selection process
25 eliminated a number of smaller gas distributors that are covered in Value Lines'
26 expanded edition. I also excluded UGI Corp. because a minority of its revenues

1 comes from gas distribution operations. This resulted in the following gas
2 distribution comparison group:

3

4 AGL Resources
5 Atmos Energy
6 LaClede Group
7 New Jersey Resources
8 Nicor Inc.
9 NiSource, Inc.
10 Northwest Natural Gas
11 Piedmont Natural Gas
12 South Jersey Industries
13 Southwest Gas
14 WGL Holdings
15

16 This gas distribution comparison group is far more appropriate in terms of estimating
17 the ROE for KAWC than the natural gas company group used by Dr. Vander Weide.

18 **Q. What was your first step in determining the DCF return on equity for the**
19 **comparison groups?**

20 A. I first determined the current dividend yield, D_1/P_0 , from the basic equation. My
21 general practice is to use six months as the most reasonable period over which to
22 estimate the dividend yield.

23

24 **Q. Why is that your general practice?**

25 A. A six-month period smoothes out price fluctuations and provides a representative
26 “average” stock price for determining the dividend yield. This is especially
27 important now considering the recent volatility in the stock market.

28

1 **Q. Which six-month period did you use and what were the results?**

2 A. The six-month period I used covered the months from December 2009 through May
3 2010. I obtained historical prices and dividends from Yahoo! Finance. The
4 annualized dividend divided by the average monthly price represents the average
5 dividend yield for each month in the period.

6

7 The average dividend yield for the water company comparison group is 3.47%.
8 These calculations are shown on Exhibit ___(RAB-4).

9

10 The average dividend yield for the gas distribution company comparison group is
11 4.29%. The calculations are shown in Exhibit ___(RAB-6).

12

13 **Q. Having established the average dividend yield, how did you determine the**
14 **investors' expected growth rate for the comparison groups?**

15 A. The investors' expected growth rate, in theory, correctly forecasts the constant rate of
16 growth in dividends. The dividend growth rate is a function of earnings growth and
17 the payout ratio, neither of which is known precisely for the future. We refer to a
18 perpetual growth rate since the DCF model has no arbitrary cut-off point. We must
19 estimate the investors' expected growth rate because there is no way to know with
20 absolute certainty what investors expect the growth rate to be in the short term, much
21 less in perpetuity.

22

1 In this analysis, I relied on three major sources of analysts' forecasts for growth.
2 These sources are Value Line, Zacks, and Thomson Financial.

3 **Q. Please briefly describe Value Line, Zacks, and Thomson Financial.**

4 A. Value Line is an investment survey that is published for approximately 7,000
5 companies, both regulated and unregulated. It is updated quarterly and probably
6 represents the most comprehensive and widely used of all investment information
7 services. It provides both historical and forecasted information on a number of
8 important data elements. Value Line neither participates in financial markets as a
9 broker nor works for the utility industry in any capacity of which I am aware.

10

11 According to Zacks' website, Zacks "was formed in 1978 to compile, analyze, and
12 distribute investment research to both institutional and individual investors." Zacks
13 gathers opinions from a variety of analysts on earnings growth forecasts for
14 numerous firms including regulated utilities. The estimates of the analysts
15 responding are combined to produce consensus average and median estimates of
16 earnings growth.

17

18 Like Zacks, Thomson Financial also provides detailed investment research on
19 numerous companies. Thomson also compiles and reports consensus analysts'
20 forecasts of earnings growth. I also obtained these forecasts from Yahoo! Finance.

21 **Q. Why did you rely on analysts' forecasts in your analysis?**

1 A. Return on equity analysis is a forward-looking process. Five-year or ten-year
2 historical growth rates may not accurately represent investor expectations for
3 dividend growth. Analysts' forecasts for earnings and dividend growth provide
4 better proxies for the expected growth component in the DCF model than historical
5 growth rates. Analysts' forecasts are also widely available to investors and one can
6 reasonably assume that they influence investor expectations.

7 **Q. How did you utilize your data sources to estimate growth rates for the**
8 **comparison group?**

9 A. Exhibits ___(RAB-5) and ___(RAB-7) present the Value Line, Zacks, and Thomson
10 Financial forecasted growth estimates for the two comparison groups. These
11 earnings and dividend growth estimates for the comparison group are summarized on
12 Columns (1) through (5).

13

14 It should be noted that the Value Line reported forecasted dividend and earnings
15 growth rates for American Water were unrepresentative due to a lack of three years
16 of historical dividend and earnings per share data. Therefore, I calculated Value
17 Line's forecasted dividend and earnings per share growth rates using 2009 data as
18 the base year, then calculated a 5-year compound growth rate using Value Line's
19 forecasted dividend and earnings per share for the 2013 – 2015 time frame.

20

21 I also utilized the sustainable growth formula in estimating the expected growth rate.
22 The sustainable growth method, also known as the retention ratio method, recognizes

1 that the firm retains a portion of its earnings to fuel growth in dividends. These
2 retained earnings, which are plowed back into the firm's asset base, are expected to
3 earn a rate of return. This, in turn, generates growth in the firm's book value, market
4 value, and dividends. The sustainable growth method is calculated using the
5 following formula:

$$G = B * R$$

6
7 *Where:* $G = \text{expected retention growth rate}$
8 $B = \text{the firm's expected retention ratio}$
9 $R = \text{the expected return}$

10
11 In its proper form, this calculation is forward-looking. That is, the investors'
12 expected retention ratio and return must be used in order to measure what investors
13 anticipate will happen in the future. Value Line also includes the forecasted
14 retention growth rate in its individual company reports and these growth rates are
15 shown in Column (3) of Exhibits ___(RAB-5) and ___(RAB-7).

16
17 **Q. How did you calculate the expected growth rates for the water utility**
18 **comparison group?**

19 A. I calculated the expected growth rates for the group by using both the average and
20 the mean values for each source of the forecasted growth rates. These calculations
21 are shown on page 1 of Exhibit ___(RAB-5). I excluded any negative values from
22 the average growth rate calculations since long-term negative growth is inconsistent
23 with expected positive growth for regulated utilities and because including negative
24 growth rates would inappropriately reduce the average for the group.

25

1 The median growth rate is an important measure of central tendency and is not
2 influenced by excessively high or low (or negative) growth rates. Given the wide
3 dispersion of expected growth rates for the water utility comparison group, the
4 median is an especially important value to consider in the DCF analysis at this time.

5

6 **Q. Mr. Baudino, do you have concerns with respect to the expected growth rate**
7 **data shown in Exhibit ___(RAB-5)?**

8 A. Yes, I do.

9

10 First, there are no Value Line or Zack's forecasts available for the smaller water
11 utilities in the group. These companies include Connecticut Water, Middlesex
12 Water, Pennichuck Corp., SJW, and York Water. I conclude from this that
13 forecasting earnings and dividend growth for these smaller companies is a rather
14 uncertain task at this point in time.

15

16 Second, there are several unsustainably high Thomson earnings forecasts shown in
17 Columns (5) for American Water Works, Connecticut Water, and SJW. These
18 forecasts merely serve to inflate the average growth rate for the group and are totally
19 out of line with the other average growth rates and with recent historical growth rates
20 in dividends, earnings, and book value. I have shown these historical numbers for
21 the smaller water companies in Exhibit ___(RAB-5).

22

23 Because of these concerns, considerably more judgment will be required to estimate
24 the investor required return for the water utility comparison group at point this time.

1 **Q. How did you approach the calculation of earnings growth forecasts for the gas**
2 **distribution company group?**

3 A. For the gas distribution company comparison group, I looked at three different
4 methods for calculating the expected growth rates.

5

6 For Method 1, I calculated the average of all the growth rates for the companies in
7 my comparison group using Value Line, Zacks, and Thomson. I excluded negative
8 values because they are inconsistent with the assumption of constant positive growth
9 in the DCF formula.

10

11 For Method 2, I calculated the median growth rates for my comparison group. As is
12 the case with the water utility comparison group, the median growth rate for each
13 forecast provides additional valuable information regarding expected growth rates.

14

15 For Method 3, I omitted double-digit growth rates and growth rates that were near
16 zero (less than 1%) from the calculation of the averages. This is similar to omitting
17 the high and low values from the calculation. These calculations are shown on page
18 1 of Exhibit ____ (RAB-7).

19

20 **Q. Why did you eliminate high and low growth rate forecasts in Method 3?**

21 A. With respect to growth rates near zero, it is reasonable to conclude that investors
22 expect positive long-term earnings and dividend growth over time. Including growth
23 rates of 1% or less may understate expected growth for the comparison group.
24 Regarding double-digit growth rates, it is highly unlikely that investors would expect

1 such high growth rates over the long run for water utilities. Indeed, at this time all of
2 the growth forecasts are in the single digits and reflect the more conservative, less
3 risky financial profile of a regulated gas distribution industry. In fact in this
4 proceeding, my application of Method 3 increased the average dividend growth rate
5 for the group, but did not affect the other average growth rate calculations for the
6 group.

7 **Q. How did you proceed to determine the DCF return of equity for the two**
8 **comparison groups?**

9 A. To estimate the expected dividend yield (D_1) for the group, the current dividend
10 yield must be moved forward in time to account for dividend increases over the next
11 twelve months. I estimated the expected dividend yield by multiplying the current
12 dividend yield by one plus one-half the expected growth rate. I should note that for
13 Method 3 for the gas distribution comparison group, I excluded the dividend yields
14 for companies whose growth rates were excluded from each respective source.

15

16 I then added the expected growth rates to the expected dividend yield. The
17 calculations of the resulting DCF returns on equity for each method are presented on
18 page 2 of Exhibits ____ (RAB-5) and ____ (RAB-7).

19

20 **Q. Please explain how you calculated your DCF cost of equity estimates for the**
21 **water utility comparison group.**

22 A. Page 2 of Exhibit ____ (RAB-5) presents the DCF results using the average and

1 median group growth rates. I calculated both the average results for the group and
2 the midpoint, which is the average of the high and low estimate. The group results
3 ranged from 9.34% to 10.07%.

4

5 I should note that for the water utilities that did not have Value Line or Zack's
6 dividend and earnings growth estimates, I applied the average growth rate for the
7 group. Given the much lower recent historical 5-year growth rates for these
8 companies, it is reasonable and even generous to assume that forecasted growth for
9 these smaller companies will be on a par with the average of the other companies.

10 **Q. Please explain how you calculated your DCF cost of equity estimates for the gas**
11 **utility comparison group.**

12 A. Page 2 of Exhibit ____ (RAB-7) presents the DCF results utilizing the three different
13 methods. Method 1 utilizes the average growth rates for the comparison group. I
14 used the Value Line earnings and dividend growth forecasts and the consensus
15 analysts' forecasts. The average DCF result is 8.60% and the midpoint of the range
16 is 8.43%.

17

18 Method 2 employs the median growth rates from Value Line, Zacks, and Thomson.
19 For the comparison group, the average DCF result is 8.25% and the midpoint of the
20 results is 8.13%

21

1 Method 3 employs the growth rates for the group excluding double digit growth
2 forecasts and forecasts less than or equal to 1.0%. For the comparison group, the
3 average of the DCF results is 8.73% and the midpoint of the results is 8.69%.

4 **Capital Asset Pricing Model**

5 **Q. Briefly summarize the Capital Asset Pricing Model ("CAPM") approach.**

6 A. The theory underlying the CAPM approach is that investors, through diversified
7 portfolios, may combine assets to minimize the total risk of the portfolio.
8 Diversification allows investors to diversify away all risks specific to a particular
9 company and be left only with market risk that affects all companies. Thus, the
10 CAPM theory identifies two types of risks for a security: company-specific risk and
11 market risk. Company-specific risk includes such events as strikes, management
12 errors, marketing failures, lawsuits, and other events that are unique to a particular
13 firm. Market risk includes inflation, business cycles, war, variations in interest rates,
14 and changes in consumer confidence. Market risk tends to affect all stocks and
15 cannot be diversified away. The idea behind the CAPM is that diversified investors
16 are rewarded with returns based on market risk.

17
18 Within the CAPM framework, the expected return on a security is equal to the risk-
19 free rate of return plus a risk premium that is proportional to the security's market, or
20 non-diversifiable, risk. Beta is the factor that reflects the inherent market risk of a
21 security and measures the volatility of a particular security relative to the overall
22 market for securities. For example, a stock with a beta of 1.0 indicates that if the
23 market rises by 15%, that stock will also rise by 15%. This stock moves in tandem

1 with movements in the overall market. Stocks with a beta of 0.5 will only rise or fall
2 50% as much as the overall market. So with an increase in the market of 15%, this
3 stock will only rise 7.5%. Stocks with betas greater than 1.0 will rise and fall more
4 than the overall market. Thus, beta is the measure of the relative risk of individual
5 securities vis-à-vis the market.

6

7 Based on the foregoing discussion, the equation for determining the return for a
8 security in the CAPM framework is:

9

$$K = R_f + \beta(MRP)$$

10

Where: K = *Required Return on equity*

11

R_f = *Risk-free rate*

12

MRP = *Market risk premium*

13

β = *Beta*

14

15 This equation tells us about the risk/return relationship posited by the CAPM.
16 Investors are risk averse and will only accept higher risk if they receive higher
17 returns. These returns can be determined in relation to a stock's beta and the market
18 risk premium. The general level of risk aversion in the economy determines the
19 market risk premium. If the risk-free rate of return is 3.0% and the required return
20 on the total market is 15%, then the risk premium is 12%. Any stock's required
21 return can be determined by multiplying its beta by the market risk premium. Stocks
22 with betas greater than 1.0 are considered riskier than the overall market and will
23 have higher required returns. Conversely, stocks with betas less than 1.0 will have
24 required returns lower than the market as a whole.

1 **Q. In general, are there concerns regarding the use of the CAPM in estimating the**
2 **return on equity?**

3 A. Yes. As briefly discussed earlier, there is some controversy surrounding the use of
4 the CAPM.² There is evidence that beta is not the primary factor in determining the
5 risk of a security. For example, Value Line's "Safety Rank" is a measure of total
6 risk, not its calculated beta coefficient. Beta coefficients usually describe only a
7 small amount of total investment risk. Finally, a considerable amount of judgment
8 must be employed in determining the risk-free rate and market return portions of the
9 CAPM equation. The analyst's application of judgment can significantly influence
10 the results obtained from the CAPM. My past experience with the CAPM indicates
11 that it is prudent to use a wide variety of data in estimating returns. Of course, the
12 range of results may also be wide, indicating the difficulty in obtaining a reliable
13 estimate from the CAPM.

14
15 **Q. Is it nonetheless a useful tool?**

16 A. The CAPM is often presented in utility rate proceedings as one alternative method of
17 estimating the investor required return on equity. And, in my opinion, it provides
18 some useful supplemental evidence that may be considered by the analyst. However,
19 the DCF is a superior tool in the cost of capital toolbox, and I recommend that the
20 Commission place primary reliance on it in this proceeding.

21

2 For a more complete discussion of some of the controversy surrounding the use of the CAPM, refer to
A Random Walk Down Wall Street by Burton Malkiel, pp. 229 – 239, 1999 edition.

1 **Q. Turning to the formula above, where did you start your analysis?**

2 A. I started by calculating the market risk premium, which is the required return on the
3 market as a whole less the risk free rate of return.

4 **Q. How did you estimate the market return portion of the CAPM?**

5 A. The first source I used was the Value Line Investment Survey for Windows for May
6 28, 2010. Value Line provides a summary statistical report detailing, among other
7 things, forecasted growth in dividends, earnings, and book value for the nearly 7,000
8 companies Value Line follows in its expanded edition. For purposes of this case I
9 used the forecasted growth in book value and earnings and have presented these two
10 growth rates and the average on page 2 of Exhibit ____ (RAB-8). This is because
11 many of the companies in Value Line's expanded edition do not pay dividend and
12 have no current dividend yield. The average of the book value and earnings growth
13 rate forecasts is 10.74%. Combining this growth rate with the average expected
14 dividend yield of the Value Line companies of 0.65% results in an expected market
15 return of 11.39%. The detailed calculations are shown on page 1 Exhibit ____ (RAB-
16 8).

17
18 I also considered a supplemental check to this market estimate. Morningstar
19 publishes a study of historical returns on the stock market in its *Ibbotson S&P 500 2010*
20 *Valuation Yearbook*. Some analysts employ this historical data to estimate the
21 market risk premium of stocks over the risk-free rate. The assumption is that a risk
22 premium calculated over a long period of time is reflective of investor expectations

1 going forward. Exhibit ____ (RAB-9) presents the calculation of the market return
2 using the historical data.

3 **Q. Please address the use of historical earned returns to estimate the market risk**
4 **premium.**

5 A. The use of historic earned returns on the S&P 500 to estimate the current market risk
6 premium is rather suspect because it naively assumes that investors currently expect
7 historic risk premiums to continue unchanged into the future regardless of present or
8 forecasted economic conditions. Brigham, Shome, and Vinson noted the following
9 with respect to the use of historic risk premiums calculated using the returns as
10 reported by Ibbotson and Sinquefeld (referred to in the quote as "I&S"):

11

12 There are both conceptual and measurement problems with
13 using I&S data for purposes of estimating the cost of capital.
14 Conceptually, there is no compelling reason to think that
15 investors expect the same relative returns that were earned in
16 the past. Indeed, evidence presented in the following sections
17 indicates that relative expected returns should, and do, vary
18 significantly over time. Empirically, the measured historic
19 premium is sensitive both to the choice of estimation horizon
20 and to the end points. These choices are essentially arbitrary,
21 yet can result in significant differences in the final outcome.³

22

23 In summary, the use of historic earned returns should be viewed with a great deal of
24 caution. There is no real support for the proposition that an unchanging,

3 Brigham, E.F., Shome, D.K. and Vinson, S.R., "The Risk Premium Approach to Measuring a Utility's Cost of Equity," *Financial Management*, Spring 1985, pp. 33-45.

1 mechanically applied historical risk premium is representative of current investor
2 expectations and return requirements.

3 **Q. How did you determine the risk free rate?**

4 A. I used the average yields on the 20-year Treasury bond and five-year Treasury note
5 over the six-month period from November 2009 through April 2010. The 20-year
6 Treasury bond is often used by rate of return analysts as the risk-free rate, but it
7 contains a significant amount of interest rate risk. The five-year Treasury note
8 carries less interest rate risk than the 20-year bond and is more stable than three-
9 month Treasury bills. Therefore, I have employed both of these securities as proxies
10 for the risk-free rate of return. This approach provides a reasonable range over
11 which the CAPM may be estimated.

12 **Q. How did you determine the value for beta?**

13 A. I obtained the betas for the companies in the water utility comparison group from
14 most recent Value Line reports. The average of the Value Line betas for the water
15 utility group is .72.

16 **Q. Please summarize the CAPM results.**

17 A. The CAPM results using the 20-year and five-year Treasury bond yields and Value
18 Line market return data range from 8.89% to 9.46%.

19

20 The CAPM results using the historical Ibbotson data range from 7.83% to 9.21%.

21 These results are shown on Exhibit ____ (RAB-9).

1 **Conclusions and Recommendations**

2 **Q. Please summarize the cost of equity results from the analyses you performed.**

3 A. The cost of equity results from my DCF and CAPM analyses are as follows:

4

5 DCF, water utility comparison group: 9.34% - 10.07%

6 DCF, gas distribution company comparison group: 8.12% - 8.73%

7 CAPM, Value Line companies 8.89% - 9.46%

8 CAPM, historical returns 7.83% - 9.21%

9

10 **Q. What is your recommendation with respect to the investor required rate of**
11 **return for KAWC?**

12 A. Based on my DCF analyses, I recommend a ROE range of 9.0% - 10.0%. My
13 recommended allowed return on equity for KAWC in this proceeding 9.50%.

14

15 In my opinion, my recommended ROE range is supported by the various DCF
16 analyses I have presented. The upper end of the range is supported by the high end of
17 the DCF results for the water utility group. The low end of my recommended range
18 is supported by the upper end of the ROE results for the gas utility comparison
19 group. Those results are shown in Exhibit ___(RAB-7) and are associated with
20 Value Line and Zack's earnings growth forecasts, which are 8.9% - 9.2%.

21

22 In conclusion, a 9.50% allowed ROE is fair, even generous, for a low-risk water
23 utility such as KAWC.

1

2 **Q. Did you review KAWC's proposed capital structure and cost of debt?**

3 A. Yes. I reviewed the Company's proposed capital structure and cost of debt and have
4 accepted them. The following table presents my recommended overall cost of
5 capital for KAWC.

6

8

10

	<u>Percentage</u>	<u>Cost</u>	<u>Wtd. Cost</u>
Long-term Debt	52.06%	6.41%	3.34%
Short-term Debt	2.32%	2.09%	0.05%
Preferred Stock	1.65%	7.75%	0.13%
Common Equity	43.97%	9.50%	4.18%
Total	100.00%		7.69%

1 **IV. RESPONSE TO KAWC ROE TESTIMONY**

2

3 **Q. Have you reviewed the Direct Testimony of Dr. Vander Weide?**

4 A. Yes.

5

6 **Q. Please summarize your conclusions with respect to Dr. Vander Weide's testimony**
7 **and return on equity recommendation.**

8 A. My conclusions regarding Dr. Vander Weide's testimony and return on equity
9 recommendations are as follows.

10

11 First, Dr. Vander Weide's natural gas distribution group contains highly diversified
12 companies that do not have regulated gas distribution as their primary business.
13 Including these companies tended to inflate his DCF results. Further, these diversified
14 companies are very poor proxies for KAWC's lower-risk regulated water distribution
15 business.

16

17 Second, Dr. Vander Weide failed to include forecasted dividend growth in his DCF
18 analyses. Failing to include this important information led to a significant
19 overstatement of all of his DCF results.

20

21 Third, Dr. Vander Weide inappropriately used a quarterly DCF model. Dr. Vander
22 Weide's use of quarterly compounding overstated his DCF results.

23

1 Fourth, Dr. Vander Weide's risk premium results are overstated and should be rejected.

2

3 Fifth, Dr. Vander Weide's consideration of an adjustment for flotation costs is
4 inappropriate and should be rejected.

5

6 **General Comments on KAWC Recommended ROE Range and Cost of Equity**

7

8 **Q. Mr. Baudino, please provide your conclusions with respect to Dr. Vander Weide's**
9 **proposed ROE range and the Company's requested cost of equity of 11.5%.**

10 A. Both Dr. Vander Weide's proposed ROE range and KAWC's requested 11.5% cost of
11 equity are grossly overstated and would result in excessive rates to Kentucky customers
12 and inflated returns to American Water shareholders.

13

14 The remainder of my testimony will explain how Dr. Vander Weide's various ROE
15 analyses render cost of equity results that are completely out of line with investor
16 expected returns for KAWC's low risk water operations. At this point, however, it
17 would be helpful to provide the Commission with recent allowed returns in American
18 Water's other regulated jurisdictions. The Company provided this information in
19 response to LFUCG Data Request 1, number 7. I calculated the average of all the
20 recent allowed returns from the data provided by the Company.

Arizona-American Water Company	9.90%
California-American Water Company	10.20%
Hawaii-American Water Company	10.60%
Illinois American Water Company	10.38%
Indiana American Water Company	10.00%
Iowa American Water Company	10.40%
Long Island American Water Company	9.50%
Maryland-American Water Company	10.75%
Missouri American Water Company	10.00%
New Jersey-American Water Company	10.30%
New Mexico-American Water Company	10.25%
Ohio-American Water Company	10.88%
Pennsylvania American Water Company	10.80%
Tennessee-American Water Company	10.20%
Virginia American Water Company	10.50%
West Virginia American Water Company	10.00%
Average ROE Award	10.29%

1

2

3

4

5

6

7

8

Response to Vander Weide DCF Analyses

9

10 **Q. Please summarize Dr. Vander Weide's approach to the DCF model and its results.**

11 A. Dr. Vander Weide employed two comparison groups of companies to estimate the cost
12 of equity for KAWC. One group consisted of publicly traded water utilities and the
13 other was comprised of natural gas companies. Dr. Vander Weide confined his growth
14 rate analysis to earnings forecasts from IBES for the gas company group. For the water

1 utility group he used either IBES or Value Line earnings growth forecasts. He also
2 utilized quarterly compounding in his DCF calculations. Dr. Vander Weide did not
3 consider forecasted dividend growth for either group of companies.

4

5 **Q. Please address the two proxy groups used by Dr. Vander Weide.**

6 A. I addressed the shortcomings and problems with the water utility and gas utility groups
7 used by Dr. Vander Weide previously in my testimony. At this point, it would be
8 appropriate to point out that the diversified gas companies included in his gas company
9 group have some of the highest ROEs:

10

11	EQT Corp.	14.2%
12	MDU Resources	17.6%
13	ONEOK	14.1%

14

15 Clearly, the results for these companies are totally out of line with returns expected for
16 low-risk water utilities. Dr. Vander Weide even eliminated the highest and lowest
17 results on Exhibit ___(JVW-1), Schedule 2, both of which were returns from the
18 diversified gas companies. But overall, including these diversified gas companies
19 significantly raised his DCF results.

20

21 I also noted that there are excessive ROEs in Dr. Vander Weide's water company group
22 as well.

23

1	American Water Works	14.7%
2	California Water	13.3%
3	Connecticut Water	13.6%
4	Middlesex Water	13.0%
5	SJW Corp.	13.6%

6
7

8 Based on my DCF and CAPM analyses, as well as the recent allowed ROEs for
9 American Water subsidiaries that I presented earlier, ROE results in the 13% - 15%
10 range are clear outliers and are in no way indicative of returns expected by investors.
11 Once again, these returns inflate Dr. Vander Weide's ROE recommendation.

12

13 **Q. Should Dr. Vander Weide have included dividend growth forecasts in his DCF**
14 **analyses?**

15 A. Yes. Dr. Vander Weide erred in failing to include available dividend growth forecasts
16 from Value Line in his DCF analyses. With respect to regulated utility companies,
17 dividend growth provides the primary source of cash flow to the investor. It is certainly
18 the case that earnings growth fuels dividend growth and should be considered in
19 estimating the ROE using the DCF model; however, Value Line's dividend growth
20 forecasts are widely available to investors and can reasonably be assumed to influence
21 their expectations with respect to growth. I agree that earnings growth is the primary
22 factor considered by investors, but it should not be considered the only factor,
23 particularly if near-term dividend growth is expected to be less than longer-term
24 earnings growth.

25

26 **Q. Do Value Line's dividend growth forecasts suggest that near-term dividend**
27 **growth will be less than forecasted earnings growth?**

1 A. Yes, and this is the case for both the water utility and gas distribution utility comparison
2 groups. Exhibit ___(RAB-5), page 1 of 2, shows that both historical and expected
3 dividend growth rates are lower than forecasted earnings growth for the water company
4 group. This is also the case of the gas distribution group, whose growth rates are
5 presented on Exhibit ___(RAB-7), page 1 of 2.

6
7 As I mentioned earlier in my testimony, lower near-term dividend growth rates must be
8 considered and incorporated in the DCF analysis. Although earnings growth forecasts
9 are currently higher, the lower dividend growth rates expected over the next few years
10 will be incorporated into investors' expected return for the water and gas utilities in my
11 comparison groups. Relying on earnings growth rates alone, as Dr. Vander Weide has
12 done, will overstate investors' required returns and lead to an inflated DCF cost of
13 equity recommendation.

14
15 **Q. On page 14, Dr. Vander Weide rejects the annual DCF model and recommends**
16 **that the Commission accept a quarterly DCF calculation. Is a quarterly version of**
17 **the DCF model appropriate for determining the allowed ROE for regulated utility**
18 **companies?**

19 A. No. The quarterly DCF model proposed by Dr. Vander Weide is unnecessary,
20 overcompensates investors, and results in excessive costs for ratepayers.

21
22 I agree that dividends are paid quarterly and that investors have the ability to reinvest
23 those dividends. This means that through quarterly compounding, if a utility company
24 is allowed a 10% return on equity then investors will realize slightly more than a 10%

1 return due to the reinvestment effect. However, this effect does not need to be added to
2 the annual model that uses the 1 + 0.5 times growth adjustment that I used in my DCF
3 calculations. Including quarterly compounding in the DCF calculation would basically
4 compensate investors twice for the reinvestment effect.

5
6 Further, quarterly compounding is likely already accounted for in a company's stock
7 price since investors know that dividends are paid quarterly and that they may reinvest
8 those cash flows. Adding an incremental return for quarterly compounding merely
9 serves to inappropriately and unnecessarily enhance the expected return on equity.

10
11 **Q. Beginning on page 20 of his Direct Testimony, Dr. Vander Weide discussed his**
12 **inclusion of a flotation cost adjustment in his DCF analyses. Do you agree with a**
13 **flotation cost adjustment?**

14 A. No, I do not. I recommend that the Commission reject a flotation cost adjustment in
15 setting the cost of equity for KAWC.

16
17 In my opinion it is likely that flotation costs are already accounted for in current stock
18 prices and that adding an adjustment for flotation costs amounts to double counting. A
19 DCF model using current stock prices should already account for investor expectations,
20 if any, regarding the collection of flotation costs. Multiplying the dividend yield by a
21 3% flotation cost adjustment, for example, essentially assumes that the current stock
22 price is wrong and that it must be adjusted downward to increase the dividend yield and
23 the resulting cost of equity. I do not believe that this is an appropriate assumption.

1 Current stock prices most likely already account for flotation costs, to the extent that
2 such costs are even accounted for by investors.

3

4 **Risk Premium Model**

5

6 **Q. Please present your conclusions regarding the results of Dr. Vander Weide's ex-**
7 **ante risk premium analyses.**

8 A. Dr. Vander Weide's ex-ante risk premium results are overstated and cannot be relied
9 upon for setting KAWC's allowed ROE in this case. His results are overstated due
10 to:

11

- 12 1. Use of a "forecasted" A-rated bond yield.
- 13 14 2. Sole use of forecasted earnings growth to calculate the DCF return for the gas
15 group.
- 16 17 3. Inclusion of flotation costs.
- 18 19 4. Use of quarterly compounding in his DCF calculation.
- 20

21 I have already discussed items 2 through 4 previously in my testimony and they apply
22 to the manner in which Dr. Vander Weide calculated the DCF return for his comparable
23 group of gas distribution utilities. Dr. Vander Weide did not consider lower dividend
24 growth in calculating the DCF return for his comparable gas company group. This
25 omission likely overstates the expected DCF return for the group. And the inclusion of
26 flotation costs and quarterly compounding further inflates his group DCF results.
27 Taken together, all three of these problems overstate the risk premium he used in his
28 analysis.

1

2 **Q. How does the use of a forecasted A-rated bond yield overstate the risk premium**
3 **return on equity?**

4 A. Dr. Vander Weide added 50 basis points to the current A-rated bond yield to
5 approximate a forecasted A-rated bond yield at the end of 2010. This is an incorrect
6 approach to calculating a risk premium cost of equity. Current, observable bond yields
7 should be used for any risk premium analysis. Current bond yields reflect all relevant
8 current market information, including expectations about future interest rates. If
9 investors really expected A-rated utility bonds to be 50 basis points higher than they are
10 now, they likely would have already adjusted the current bond yield to avoid or
11 minimize capital losses in the future. Dr. Vander Weide's 50-basis point adjustment to
12 current A-rated bond yields should be rejected.

13

14 **Q. What are your conclusions with respect to Dr. Vander Weide's ex-post risk**
15 **premium approach?**

16 A. First, it is risky to assume that investors require an unchanging risk premium based on
17 long-term historical returns of stocks over bonds. Changing economic conditions will
18 likely affect investors' risk premium requirement. What investors require today may be
19 quite different from a long-term historical risk premium.

20

21 Second, Dr. Vander Weide calculated an historical risk premium using the S&P 500
22 stock portfolio, but failed to adjust this risk premium for risk premium expectations for
23 utility companies. Investor expected risk premiums for water utility stocks over bonds
24 are likely much lower than the expected risk premium for unregulated companies in the

1 S&P 500. Using the S&P 500 risk premium overstated the risk premium ROE for a
2 low-risk water company such as KAWC.

3

4 Third, Dr. Vander Weide's use of S&P utilities to calculate the expected risk premium
5 ROE for KAWC is also inappropriate. Low-risk water companies are likely to have a
6 lower expected return on equity than the S&P Utilities. And there is no support
7 whatsoever for Dr. Vander Weide's assumption of page 33, lines 11 through 13, of his
8 Direct Testimony that water utilities today "face risks that are somewhere in between
9 the average risk of the S&P Utilities and the S&P 500 over the years 1937 to 2009." If
10 anything, water distribution companies face lower risks than the S&P Utilities. Thus,
11 even the risk premium using the S&P Utilities will overstate the risk premium ROE for
12 regulated water companies.

13

14 Fourth, Dr. Vander Weide's ex-post risk premium results are overstated by 50 basis
15 points due to his inappropriate use of a "forecasted" A-rated bond. Subtracting 50 basis
16 points from his 10.5% result using the S&P Utilities risk premium renders a risk
17 premium ROE of 10.0%, excluding flotation costs.

18

19 **CAPM Analysis**

20

21 **Q. On page 42 of his Direct Testimony, Dr. Vander Weide cited a number of studies**
22 **in support of his proposition that the CAPM underestimates required returns for**
23 **securities with betas less than 1.0. On page 44, he concludes that the CAPM**

1 **should be given little or no weight because the average beta for his proxy group is**
2 **less than 1.0. Please address Dr. Vander Weide's testimony in this area.**

3 A. Although Dr. Vander Weide cited a number of studies on page 42, the problem is that
4 there is no evidence that the CAPM bias he alleges has any applicability to regulated
5 utility companies. Regulated water utilities have low betas because they are low in risk.
6 Thus, the average water utility group beta from my group, 0.72, reflects the lower risk
7 of regulated water distribution operations vis-à-vis the unregulated market. Dr. Vander
8 Weide failed to show any downward CAPM bias related to water utility betas.

9

10 **Q. On page 41 of his Direct Testimony, Dr. Vander Weide suggested the addition of a**
11 **size premium to his CAPM results to account for the small market capitalization**
12 **of water companies. Do you agree with the inclusion of a size premium?**

13 A. No. It is true that the Ibbotson Valuation Yearbooks for 2009 and 2010 discuss size
14 premiums, but they do not evaluate if any such size premium is applicable to regulated
15 utilities generally, or to regulated water companies specifically. Thus, the size
16 premiums shown on Table 4, page 41 of Dr. Vander Weide's Direct Testimony may
17 have no relevance whatsoever for lower-risk regulated water utilities.

18

1 **V. REVENUE REQUIREMENT ADJUSTMENTS**

2

3 **Q. Mr. Baudino, do you have revenue requirement adjustments to recommend to the**
4 **Commission?**

5 A. Yes, I have certain revenue requirement adjustments to recommend to the Commission
6 based on my review of KAWC's filing. I should note that my revenue requirement
7 review for purposes of this case was limited to a few issues and my testimony should
8 not be construed as agreeing with any other aspect of the Company's filing that I did
9 not address. LFUCG reserves the right to include other revenue requirement
10 adjustments that may be proposed by other parties in this proceeding.

11

12 *Service Company Labor Costs*

13

14 **Q. Please summarize the first revenue requirement adjustment that you propose.**

15 A. I recommend that the labor-related costs charged to KAWC from American Water
16 Works Service Company ("AWWSC") be reduced by \$2.145 million.

17

18 **Q. Why should the AWWSC labor-related costs be reduced in this proceeding?**

19 A. KAWC has not shown that the labor costs charged from AWWSC have been prudently
20 incurred.

21

22 **Q. Please explain.**

1 A. This issue was addressed in the Direct Testimony of Mr. Michael Miler, witness for
2 KAWC. Beginning on page 21 of this testimony, Mr. Miler attempted to justify the
3 increase in service company labor costs in this case and presented an analysis in Exhibit
4 MAM-7 that compared AWWSC labor-related costs included in the Company's filing
5 with the labor costs that KAWC would have incurred had it incurred the labor costs
6 itself as a stand-alone company. In Column 14 of Exhibit MAM-7, Mr. Miler's
7 analysis showed that the combined KAWC and AWWSC labor-related costs in the
8 filing, \$21.67 million, are \$2.146 million greater than the labor-related costs would
9 have been incurred had the AWWSC reorganizations and restructuring not taken place.
10 In other words, Mr. Miler's analysis demonstrates that if nothing had changed at
11 KAWC since 2001, labor-related costs would have been \$2.146 million lower than the
12 amount that the Company is asking for in this case.

13

14 **Q. Did Mr. Miler include adjustments that showed additional benefits?**

15 A. Yes, but in my opinion the four adjustments he included have nothing to do with
16 increased labor costs and would likely have been undertaken by American Water
17 Works and its service company anyway. These adjustments are explained on pages 24
18 and 25 of Mr. Miler's testimony and include:

19

- 20
- 21 • Establishment of the National Procurement Center in 2003.
 - 22 • Increased customer base of 17,784 since 2001 that would have added employees.
 - 23 • Capitalization of certain software costs billed through AWWC that would have
 - 24 been captured as capital costs if KAWC had paid for them locally.
 - 25 • Savings from using AWCC for cash management and financing activities.

26

27

1 These activities provide no justification for the higher labor costs incurred from
2 AWWSC and should have been undertaken by the service company and American
3 Water anyway to efficiently lower costs. KAWC and AWWSC have failed to justify
4 the significant increase in labor-related costs to KAWC.

5

6 **Q. Could the \$2.146 million of higher labor costs be even greater than shown by Mr.**
7 **Miler?**

8 A. Yes. Mr. Miler explained that he used certain labor cost inflation factors in his analysis,
9 but did not include any offsetting productivity increases, which would have lowered
10 KAWC's "would-have-been" labor costs even more. Please refer to Table 3 below,
11 which was taken from the Bureau of Labor Statistics web site and shows the yearly
12 increases in productivity as measured by output per hour for non-farm businesses.

13

Series Id:	PRS85006092					
Duration:	% change quarter ago, at annual rate					
Measure:	Output Per Hour					
Sector:	Nonfarm Business					
Years:	2000 to 2010					
Year	Qtr1	Qtr2	Qtr3	Qtr4	Annual	
2000	-1.5	9.4	0.1	4.0	3.4	
2001	-1.3	7.4	2.5	5.8	2.9	
2002	8.8	0.5	3.8	-0.3	4.6	
2003	3.7	5.3	9.7	1.5	3.7	
2004	0.9	3.7	0.7	0.8	2.8	
2005	4.0	-0.9	3.0	-0.1	1.7	
2006	2.7	0.3	-1.9	2.9	1.0	
2007	0.9	2.2	5.7	2.9	1.8	
2008	-0.5	3.0	1.1	2.2	2.0	
2009	0.9	7.6	7.8	6.3	3.7	
2010	2.8					

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Productivity increases serve to offset increases in labor costs because workers are more productive over time, meaning that more work can be done in the same amount of time or that the same amount of work can be done in less time or with fewer people. Mr. Miler's analysis did not include any productivity offset that would have reduced KAWC's stand-alone labor costs. This makes is highly likely that Mr. Miler's analysis overstates KAWC's would-have-been labor costs and understates the labor cost difference of \$2.146 million in Exhibit MAM-7.

Therefore, I recommend that the Commission disallow a minimum of \$2.146 million of AWWSC labor costs from KAWC's revenue requirement in this case.

1 **Labor Capitalization Ratio**

2

3 **Q. What labor capitalization ratio did KAWC use in its forecasted test year?**

4 A. The Company used a labor capitalization rate of 17.34% as described by KAWC
5 witness Miller in her Direct Testimony.

6

7 **Q. Is there evidence that the Company's forecasted labor capitalization ratio is too**
8 **low?**

9 A. Yes. In response to the Staff's Second Data Request, No. 13, the Company provided its
10 historical actual and budgeted capitalization ratios for the last 5 years. These ratios are
11 provided below:

12

	<u>Actual</u>	<u>Budget</u>
13 2005	15.54%	12.98%
14 2006	18.84%	19.00%
15 2007	21.34%	18.06%
16 2008	23.35%	18.12%
17 2009	19.64%	19.96%
18		
19		

20 In its Third Set of Information Requests, No. 4, Staff noted that the 5-year actual
21 average capitalization ratio for the Company is 19.472%. Again, this compares to
22 KAWC's requested ratio of 17.34%.

23

24 What this means for the Company's revenue requirement is that a lower capitalization
25 rate will mean higher labor costs in operating expenses and lower labor costs
26 capitalized to rate base. If the Company were to continue to actually capitalize its labor
27 expenses at the higher historical level, KAWC would overcollect its revenue

1 requirement because the amount of labor dollars in operating expenses would be lower
2 than what would be allowed under the 17.34% requested capitalization ratio.

3
4 **Q. Did KAWC provide adequate justification for using the lower 17.34% labor**
5 **capitalization ratio?**

6 A. No. In my opinion the Company has not justified using a budgeted labor capitalization
7 ratio that is significantly below its historical experience.

8
9 **Q. Should the Company's labor expenses reflect a higher capitalization ratio for the**
10 **future test year?**

11 A. Yes. I recommend that the Commission allow labor dollars in operating expenses
12 consistent with a higher labor capitalization ratio that the Company has historically
13 experienced.

14
15 In Staff's Third Set of Information Requests, No. 4, Staff requested the impact on the
16 Company's revenue requirement from revising the capitalization rate from 17.624% to
17 18.742%. The Company responded that this revision would result in a reduction to
18 revenue requirements of \$0.211 million. I have included the Company's response to
19 this information request in Exhibit ___(RAB-10).

20
21 My concern is that there may have been a typographical error in the Staff's Information
22 request because the 18.742% revised capitalization ratio does not appear to be tied to
23 the historical 5-year average, which is 19.472%. Thus, the \$0.211 revenue requirement
24 reduction presented by the Company is likely understated.

1

2 At a minimum, then, I recommend that the Commission reduce the Company's labor
3 expenses by at least \$0.211 million and require the Company to recalculate the revenue
4 requirement reduction of increasing the labor capitalization ratio to the historical
5 average of 19.472%.

6

7 **Q. Does this complete your testimony?**

8 **A. Yes.**

**BEFORE THE
PUBLIC SERVICE COMMISSION OF KENTUCKY**

IN THE MATTER OF:

**THE APPLICATION OF KENTUCKY-AMERICAN)
WATER COMPANY FOR AN ADJUSTMENT OF) CASE NO. 2010-00036
RATES ON AND AFTER MARCH 28, 2010)**

**EXHIBITS
OF
RICHARD A. BAUDINO**

**ON BEHALF OF
LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT**

**J. KENNEDY AND ASSOCIATES, INC.
ROSWELL, GEORGIA**

June 2010

RESUME OF RICHARD A. BAUDINO

EDUCATION

New Mexico State University, M.A.

Major in Economics
Minor in Statistics

New Mexico State University, B.A.

Economics
English

Twenty seven years of experience in utility ratemaking. Broad based experience in revenue requirement analysis, cost of capital, utility financing, phase-ins, auditing and rate design. Has designed revenue requirement and rate design analysis programs.

REGULATORY TESTIMONY

Preparation and presentation of expert testimony in the areas of:

Cost of Capital for Electric, Gas and Water Companies
Electric, Gas, and Water Utility Cost Allocation and Rate Design
Revenue Requirements
Gas and Electric industry restructuring and competition
Fuel cost auditing
Ratemaking Treatment of Generating Plant Sale/Leasebacks

RESUME OF RICHARD A. BAUDINO

EXPERIENCE

1989 to

Present: Kennedy and Associates: Consultant - Responsible for consulting assignments in the area of revenue requirements, rate design, cost of capital, economic analysis of generation alternatives, gas industry restructuring and competition.

1982 to

1989: New Mexico Public Service Commission Staff: Utility Economist - Responsible for preparation of analysis and expert testimony in the areas of rate of return, cost allocation, rate design, finance, phase-in of electric generating plants, and sale/leaseback transactions.

CLIENTS SERVED

Regulatory Commissions

Louisiana Public Service Commission
Georgia Public Service Commission
New Mexico Public Service Commission

Other Clients and Client Groups

Ad Hoc Committee for a Competitive Electric Supply System	PSI Industrial Group
Air Products and Chemicals, Inc.	Large Power Intervenors (Minnesota)
Arkansas Electric Energy Consumers	Tyson Foods
Arkansas Gas Consumers	West Virginia Energy Users Group
AK Steel	The Commercial Group
Armco Steel Company, L.P.	Wisconsin Industrial Energy Group
Assn. of Business Advocating Tariff Equity	South Florida Hospital and Health Care Assn.
CF&I Steel, L.P.	PP&L Industrial Customer Alliance
Climax Molybdenum Company	Philadelphia Area Industrial Energy Users Gp.
General Electric Company	West Penn Power Intervenors
Industrial Energy Consumers	Duquesne Industrial Intervenors
Kentucky Industrial Utility Consumers	Met-Ed Industrial Users Gp.
Lexington-Fayette Urban County Government	Penelec Industrial Customer Alliance
Large Electric Consumers Organization	Penn Power Users Group
Newport Steel	Columbia Industrial Intervenors
Northwest Arkansas Gas Consumers	U.S. Steel & Univ. of Pittsburg Medical Ctr.
Maryland Industrial Group	Multiple Intervenors
Occidental Chemical	Maine Office of Public Advocate
	Missouri Office of Public Counsel

**Expert Testimony Appearances
of
Richard A. Baudino
As of June 2010**

Date	Case	Jurisdct.	Party	Utility	Subject
3/83	1780	NM	New Mexico Public Service Commission	Boles Water Co.	Rate design, rate of return.
10/83	1803, 1817	NM	New Mexico Public Service Commission	Southwestern Electric Coop	Rate design.
11/84	1833	NM	New Mexico Public Service Commission	El Paso Electric Co.	Service contract approval, rate design, performance standards for Palo Verde nuclear generating system
1983	1835	NM	New Mexico Public Service Commission	Public Service Co. of NM	Rate design.
1984	1848	NM	New Mexico Public Service Commission	Sangre de Cristo Water Co.	Rate design.
02/85	1906	NM	New Mexico Public Service Commission	Southwestern Public Service Co.	Rate of return.
09/84	1907	NM	New Mexico Public Service Commission	Jornada Water Co.	Rate of return.
11/85	1957	NM	New Mexico Public Service Commission	Southwestern Public Service Co.	Rate of return.
04/86	2009	NM	New Mexico Public Service Commission	El Paso Electric Co.	Phase-in plan, treatment of sale/leaseback expense.
06/86	2032	NM	New Mexico Public Service Commission	El Paso Electric Co.	Sale/leaseback approval.
09/86	2033	NM	New Mexico Public Service Commission	El Paso Electric Co.	Order to show cause, PVNGS audit.
02/87	2074	NM	New Mexico Public Service Commission	El Paso Electric Co.	Diversification.
05/87	2089	NM	New Mexico Public Service Commission	El Paso Electric Co.	Fuel factor adjustment.
08/87	2092	NM	New Mexico Public Service Commission	El Paso Electric Co.	Rate design.
10/88	2146	NM	New Mexico Public Service Commission	Public Service Co. of New Mexico	Financial effects of restructuring, reorganization.
07/88	2162	NM	New Mexico Public Service Commission	El Paso Electric Co.	Revenue requirements, rate design, rate of return.

**Expert Testimony Appearances
of
Richard A. Baudino
As of June 2010**

Date	Case	Jurisdct.	Party	Utility	Subject
01/89	2194	NM	New Mexico Public Service Commission	Plains Electric G&T Cooperative	Economic development.
1/89	2253	NM	New Mexico Public Service Commission	Plains Electric G&T Cooperative	Financing.
08/89	2259	NM	New Mexico Public Service Commission	Homestead Water Co.	Rate of return, rate design.
10/89	2262	NM	New Mexico Public Service Commission	Public Service Co. of New Mexico	Rate of return.
09/89	2269	NM	New Mexico Public Service Commission	Ruidoso Natural Gas Co.	Rate of return, expense from affiliated interest.
12/89	89-208-TF	AR	Arkansas Electric Energy Consumers	Arkansas Power & Light Co.	Rider M-33.
01/90	U-17282	LA	Louisiana Public Service Commission	Gulf States Utilities	Cost of equity.
09/90	90-158	KY	Kentucky Industrial Utility Consumers	Louisville Gas & Electric Co.	Cost of equity.
09/90	90-004-U	AR	Northwest Arkansas Gas Consumers	Arkansas Western Gas Co.	Cost of equity, transportation rate.
12/90	U-17282 Phase IV	LA	Louisiana Public Service Commission	Gulf States Utilities	Cost of equity.
04/91	91-037-U	AR	Northwest Arkansas Gas Consumers	Arkansas Western Gas Co.	Transportation rates.
12/91	91-410-EL-AIR	OH	Air Products & Chemicals, Inc., Armco Steel Co., General Electric Co., Industrial Energy Consumers	Cincinnati Gas & Electric Co.	Cost of equity.
05/92	910890-EI	FL	Occidental Chemical Corp.	Florida Power Corp.	Cost of equity, rate of return.
09/92	92-032-U	AR	Arkansas Gas Consumers	Arkansas Louisiana Gas Co.	Cost of equity, rate of return, cost-of-service.
09/92	39314	ID	Industrial Consumers for Fair Utility Rates	Indiana Michigan Power Co.	Cost of equity, rate of return.

**Expert Testimony Appearances
of
Richard A. Baudino
As of June 2010**

Date	Case	Jurisdict.	Party	Utility	Subject
09/92	92-009-U	AR	Tyson Foods	General Waterworks	Cost allocation, rate design.
01/93	92-346	KY	Newport Steel Co.	Union Light, Heat & Power Co.	Cost allocation.
01/93	39498	IN	PSI Industrial Group	PSI Energy	Refund allocation.
01/93	U-10105	MI	Association of Businesses Advocating Tariff Equality (ABATE)	Michigan Consolidated Gas Co.	Return on equity.
04/93	92-1464-EL-AIR	OH	Air Products and Chemicals, Inc., Armco Steel Co., Industrial Energy Consumers	Cincinnati Gas & Electric Co.	Return on equity.
09/93	93-189-U	AR	Arkansas Gas Consumers	Arkansas Louisiana Gas Co.	Transportation service terms and conditions.
09/93	93-081-U	AR	Arkansas Gas Consumers	Arkansas Louisiana Gas Co.	Cost-of-service, transportation rates, rate supplements; return on equity, revenue requirements.
12/93	U-17735	LA	Louisiana Public Service Commission Staff	Cajun Electric Power Cooperative	Historical reviews; evaluation of economic studies.
03/94	10320	KY	Kentucky Industrial Utility Customers	Louisville Gas & Electric Co.	Trimble County CWIP revenue refund.
4/94	E-015/GR-94-001	MN	Large Power Intervenors	Minnesota Power Co.	Evaluation of the cost of equity, capital structure, and rate of return.
5/94	R-00942993	PA	PG&W Industrial Intervenors	Pennsylvania Gas & Water Co.	Analysis of recovery of transition costs.
5/94	R-00943001	PA	Columbia Industrial Intervenors	Columbia Gas of Pennsylvania	Evaluation of cost allocation, rate design, rate plan, and carrying charge proposals.

**Expert Testimony Appearances
of
Richard A. Baudino
As of June 2010**

Date	Case	Jurisdiction	Party	Utility	Subject
7/94	R-00942986	PA	Armco, Inc., West Penn Power Industrial Intervenors	West Penn Power Co.	Return on equity and rate of return.
7/94	94-0035- E-42T	WV	West Virginia Energy Users' Group	Monongahela Power Co.	Return on equity and rate of return.
8/94	8652	MD	Westvaco Corp.	Potomac Edison Co.	Return on equity and rate of return.
9/94	930357-C	AR	West Central Arkansas Gas Consumers	Arkansas Oklahoma Gas Corp.	Evaluation of transportation service.
9/94	U-19904	LA	Louisiana Public Service Commission	Gulf States Utilities	Return on equity.
9/94	8629	MD	Maryland Industrial Group	Baltimore Gas & Electric Co.	Transition costs.
11/94	94-175-U	AR	Arkansas Gas Consumers	Arkla, Inc.	Cost-of-service, rate design, rate of return.
3/95	RP94-343- 000	FERC	Arkansas Gas Consumers	NorAm Gas Transmission	Rate of return.
4/95	R-00943271	PA	PP&L Industrial Customer Alliance	Pennsylvania Power & Light Co.	Return on equity.
6/95	U-10755	MI	Association of Businesses Advocating Tariff Equity	Consumers Power Co.	Revenue requirements.
7/95	8697	MD	Maryland Industrial Group	Baltimore Gas & Electric Co.	Cost allocation and rate design.
8/95	95-254-TF U-2811	AR	Tyson Foods, Inc.	Southwest Arkansas Electric Cooperative	Refund allocation.
10/95	ER95-1042 -000	FERC	Louisiana Public Service Commission	Systems Energy Resources, Inc.	Return on Equity.
11/95	I-940032	PA	Industrial Energy Consumers of Pennsylvania	State-wide - all utilities	Investigation into Electric Power Competition.
5/96	96-030-U	AR	Northwest Arkansas Gas Consumers	Arkansas Western Gas Co.	Revenue requirements, rate of return and cost of service.

**Expert Testimony Appearances
of
Richard A. Baudino
As of June 2010**

Date	Case	Jurisdct.	Party	Utility	Subject
7/96	8725	MD	Maryland Industrial Group	Baltimore Gas & Electric Co., Potomac Electric Power Co. and Constellation Energy Corp.	Return on Equity.
7/96	U-21496	LA	Louisiana Public Service Commission	Central Louisiana Electric Co.	Return on equity, rate of return.
9/96	U-22092	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Return on equity.
1/97	RP96-199-000	FERC	The Industrial Gas Users Conference	Mississippi River Transmission Corp.	Revenue requirements, rate of return and cost of service.
3/97	96-420-U	AR	West Central Arkansas Gas Corp.	Arkansas Oklahoma Gas Corp.	Revenue requirements, rate of return, cost of service and rate design.
7/97	U-11220	MI	Association of Business Advocating Tariff Equity	Michigan Gas Co. and Southeastern Michigan Gas Co.	Transportation Balancing Provisions
7/97	R-00973944	PA	Pennsylvania American Water Large Users Group	Pennsylvania-American Water Co.	Rate of return, cost of service, revenue requirements.
3/98	8390-U	GA	Georgia Natural Gas Group and the Georgia Textile Manufacturers Assoc.	Atlanta Gas Light	Rate of return, restructuring issues, unbundling, rate design issues.
7/98	R-00984280	PA	PG Energy, Inc.	PGE Industrial Intervenors	Cost allocation.
8/98	U-17735	LA	Louisiana Public Service Commission	Cajun Electric Power Cooperative	Revenue requirements.
10/98	97-596	ME	Maine Office of the Public Advocate	Bangor Hydro-Electric Co.	Return on equity, rate of return.
10/98	U-23327	LA	Louisiana Public Service Commission	SWEPCO, CSW and AEP	Analysis of proposed merger.
12/98	98-577	ME	Maine Office of the Public Advocate	Maine Public Service Co.	Return on equity, rate of return.
12/98	U-23358	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Return on equity, rate of return.

**Expert Testimony Appearances
of
Richard A. Baudino
As of June 2010**

Date	Case	Jurisdct.	Party	Utility	Subject
3/99	98-426	KY	Kentucky Industrial Utility Customers, Inc.	Louisville Gas and Electric Co	Return on equity.
3/99	99-082	KY	Kentucky Industrial Utility Customers, Inc.	Kentucky Utilities Co.	Return on equity.
4/99	R-984554	PA	T. W. Phillips Users Group	T. W. Phillips Gas and Oil Co.	Allocation of purchased gas costs.
6/99	R-0099462	PA	Columbia Industrial Intervenors	Columbia Gas of Pennsylvania	Balancing charges.
10/99	U-24182	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Cost of debt.
10/99	R-00994782	PA	Peoples Industrial Intervenors	Peoples Natural Gas Co.	Restructuring issues.
10/99	R-00994781	PA	Columbia Industrial Intervenors	Columbia Gas of Pennsylvania	Restructuring, balancing charges, rate flexing, alternate fuel.
01/00	R-00994786	PA	UGI Industrial Intervenors	UGI Utilities, Inc.	Universal service costs, balancing, penalty charges, capacity assignment.
01/00	8829	MD	Maryland Industrial Gr. & United States	Baltimore Gas & Electric Co.	Revenue requirements, cost allocation, rate design.
02/00	R-00994788	PA	Penn Fuel Transportation	PFG Gas, Inc., and	Tariff charges, balancing provisions.
05/00	U-17735	LA	Louisiana Public Service Comm.	Louisiana Electric Cooperative	Rate restructuring.
07/00	2000-080	KY	Kentucky Industrial Utility Consumers	Louisville Gas and Electric Co.	Cost allocation.
07/00	U-21453 U-20925 (SC), U-22092 (SC) (Subdocket E)	LA	Louisiana Public Service Comm.	Southwestern Electric Power Co.	Stranded cost analysis.
09/00	R-00005654	PA	Philadelphia Industrial And Commercial Gas Users Group.	Philadelphia Gas Works	Interim relief analysis.
10/00	U-21453 U-20925 (SC), U-22092 (SC) (Subdocket B)	LA	Louisiana Public Service Comm.	Entergy Gulf States, Inc.	Restructuring, Business Separation Plan.

**Expert Testimony Appearances
of
Richard A. Baudino
As of June 2010**

Date	Case	Jurisdiction	Party	Utility	Subject
11/00	R-00005277 (Rebuttal)	PA	Penn Fuel Transportation Customers	PFG Gas, Inc. and North Penn Gas Co.	Cost allocation issues.
12/00	U-24993	LA	Louisiana Public Service Comm.	Entergy Gulf States, Inc.	Return on equity.
03/01	U-22092	LA	Louisiana Public Service Comm.	Entergy Gulf States, Inc.	Stranded cost analysis.
04/01	U-21453 (SC), U-20925 (SC), U-22092 (SC) (Subdocket B) (Addressing Contested Issues)	LA	Louisiana Public Service Comm.	Entergy Gulf States, Inc.	Restructuring issues.
04/01	R-00006042	PA	Philadelphia Industrial and Commercial Gas Users Group	Philadelphia Gas Works	Revenue requirements, cost allocation and tariff issues
11/01	U-25687	LA	Louisiana Public Service Comm.	Entergy Gulf States, Inc.	Return on equity.
03/02	14311-U	GA	Georgia Public Service Commission	Atlanta Gas Light	Capital structure.
08/02	2002-00145	KY	Kentucky Industrial Utility Customers	Columbia Gas of Kentucky	Revenue requirements.
09/02	M-00021612	PA	Philadelphia Industrial And Commercial Gas Users Group	Philadelphia Gas Works	Transportation rates, terms, and conditions.
01/03	2002-00169	KY	Kentucky Industrial Utility Customers	Kentucky Power	Return on equity.
02/03	02S-594E	CO	Cripple Creek & Victor Gold Mining Company	Aquila Networks – WPC	Return on equity.
04/03	U-26527	LA	Louisiana Public Service Commission	Entergy Gulf States, Inc.	Return on equity.
10/03	CV020495AB	GA	The Landings Assn., Inc.	Utilities Inc. of GA	Revenue requirement & overcharge refund
03/04	2003-00433	KY	Kentucky Industrial Utility Customers	Louisville Gas & Electric	Return on equity, Cost allocation & rate design

**Expert Testimony Appearances
of
Richard A. Baudino
As of June 2010**

Date	Case	Jurisdic.	Party	Utility	Subject
03/04	2003-00434	KY	Kentucky Industrial Utility Customers	Kentucky Utilities	Return on equity
4/04	04S-035E	CO	Cripple Creek & Victor Gold Mining Company, Goodrich Corp., Holcim (U.S.) Inc., and The Trane Co.	Aquila Networks – WPC	Return on equity.
9/04	U-23327, Subdocket B	LA	Louisiana Public Service Commission	Southwestern Electric Power Company	Fuel cost review
10/04	U-23327 Subdocket A	LA	Louisiana Public Service Commission	Southwestern Electric Power Company	Return on Equity
06/05	050045-EI	FL	South Florida Hospital and HealthCare Assoc.	Florida Power & Light Co.	Return on equity
08/05	9036	MD	Maryland Industrial Group	Baltimore Gas & Electric Co.	Revenue requirement, cost allocation, rate design, Tariff issues.
01/06	2005-0034	KY	Kentucky Industrial Utility Customers, Inc.	Kentucky Power Co.	Return on equity.
03/06	05-1278-E-PC-PW-42T	WV	West Virginia Energy Users Group	Appalachian Power Company	Return on equity.
04/06	U-25116	LA	Louisiana Public Service Commission	Entergy Louisiana, LLC	Transmission Issues
07/06	U-23327	LA	Louisiana Public Service Commission	Southwestern Electric Power Company	Return on equity, Service quality
08/06	ER-2006-0314	MO	Missouri Office of the Public Counsel	Kansas City Power & Light Co.	Return on equity, Weighted cost of capital
08/06	06S-234EG	CO	CF&I Steel, L.P. & Climax Molybdenum	Public Service Company of Colorado	Return on equity, Weighted cost of capital
01/07	06-0960-E-42T	WV	West Virginia Energy Users Group	Monongahela Power & Potomac Edison	Return on Equity
01/07	43112		AK Steel, Inc.	Vectren South, Inc.	Cost allocation, rate design
05/07	2006-661		Maine Office of the Public Advocate	Bangor Hydro-Electric	Return on equity, weighted cost of capital.
09/07	07-07-01		Connecticut Industrial Energy Consumers	Connecticut Light & Power	Return on equity, weighted cost of capital

**Expert Testimony Appearances
of
Richard A. Baudino
As of June 2010**

Date	Case	Jurisdct.	Party	Utility	Subject
10/07	05-UR-103		Wisconsin Industrial Energy Group, Inc.	Wisconsin Electric Power Co.	Return on equity
11/07	29797		Louisiana Public Service Commission	Cleco Power LLC & Southwestern Elec. Power	Lignite Pricing, support of settlement
01/08	07-551-EL-AIR		Ohio Energy Group	Ohio Edison, Cleveland Electric, Toledo Edison	Return on equity
03/08	07-0585, 07-0585, 07-0587, 07-0588, 07-0589, 07-0590, (consol.)	IL	The Commercial Group	Ameren	Cost allocation, rate design
04/08	07-0566	IL	The Commercial Group	Commonwealth Edison	Cost allocation, rate design
06/08	R-2008-2011621	PA	Columbia Industrial Intervenors	Columbia Gas of PA	Cost and revenue allocation, Tariff issues
07/08	R-2008-2028394	PA	Philadelphia Area Industrial Energy users Group	PECO Energy	Cost and revenue allocation, Tariff issues
07/08	R-2008-2039634	PA	PPL Gas Large Users Gp.	PPL Gas	Retainage, LUGF Pct.
08/08	6680-UR-116	WI	Wisconsin Industrial Energy Group	Wisconsin P&L	Cost of Equity
08/08	6690-UR-119	WI	Wisconsin Industrial Energy Group	Wisconsin PS	Cost of Equity
09/08	ER-2008-0318	MO	The Commercial Group	AmerenUE	Cost and revenue allocation
10/08	R-2008-2029325	PA	U.S. Steel & Univ. of Pittsburgh Med. Ctr.	Equitable Gas Co.	Cost and revenue allocation
10/08	08-G-0609	NY	Multiple Intervenors	Niagara Mohawk Power	Cost and Revenue allocation

**Expert Testimony Appearances
of
Richard A. Baudino
As of June 2010**

Date	Case	Jurisdic.	Party	Utility	Subject
12/08	27800-U	GA	Georgia Public Service Commission	Georgia Power Company	CWIP/AFUDC issues, Review financial projections
03/09	ER08-1056	FERC	Louisiana Public Service Commission	Entergy Services, Inc.	Capital Structure
04/09	E002/GR-08-1065		The Commercial Group	Northern States Power	Cost and revenue allocation and rate design
05/09	08-0532		The Commercial Group	Commonwealth Edison	Cost and revenue allocation
07/09	080677-EI		South Florida Hospital and Health Care Assn.	Florida Power & Light	Cost of equity, capital structure, Cost of short-term debt
07/09	U-30975	LA	Louisiana PSC	Cleco LLC, Southwestern Public Service Co.	Lignite mine purchase
10/09	4220-UR-116WI		Wisconsin Industrial Energy Group	Northern States Power	Class cost of service, rate design
10/09	M-2009-2123945	PA	PP&L Industrial Customer Alliance	PPL Electric Utilities	Smart Meter Plan cost allocation
10/009	M-2009-2123944	PA	Philadelphia Area Industrial Energy Users Group	PECO Energy Company	Smart Meter Plan cost allocation
10/09	M-2009-2123951	PA	West Penn Power Industrial Intervenors	West Penn Power	Smart Meter Plan cost allocation
11/09	M-2009-2123948	PA	Duquesne Industrial Intervenors	Duquesne Light Company	Smart Meter Plan cost allocation
11/09	M-2009-2123950	PA	Met-Ed Industrial Users Gp. Penelec Industrial Customer Alliance, Penn Power Users Group	Metropolitan Edison, Pennsylvania Electric Co., Pennsylvania Power Co.	Smart Meter Plan cost allocation
03/10	09-1352-E-42T	WV	West Virginia Energy Users Gp.	Monongahela Power, Potomac Edison	Return on equity, rate of return
03/10	E015/GR-09-1151	MN	Large Power Intervenors	Minnesota Power	Return on equity, rate of return
04/10	2009-00459	KY	Kentucky Industrial Utility Consumers	Kentucky Power	Return on equity

**Expert Testimony Appearances
of
Richard A. Baudino
As of June 2010**

Date	Case	Jurisdic.	Party	Utility	Subject
04/10	2009-00548 2009-00549	KY	Kentucky Industrial Utility Consumers	Louisville Gas and Electric, Kentucky Utilities	Return on equity
05/10	10-0261-E- GI	WV	West Virginia Energy Users Group	Appalachian Power Co./ Wheeling Power Co.	EE/DR Cost Recovery, Allocation, & Rate Design
05/10	R-2009- 2149262	PA	Columbia Industrial Intervenors	Columbia Gas of PA	Class cost of service & cost allocation
06/10	2010-00036	KY	Lexington-Fayette Urban County Government	Kentucky American Water Company	Return on equity, rate of return, revenue requirements

HISTORICAL BOND YIELDS AVERAGE PUBLIC UTILITY BOND VS 20-YEAR TREASURY BOND

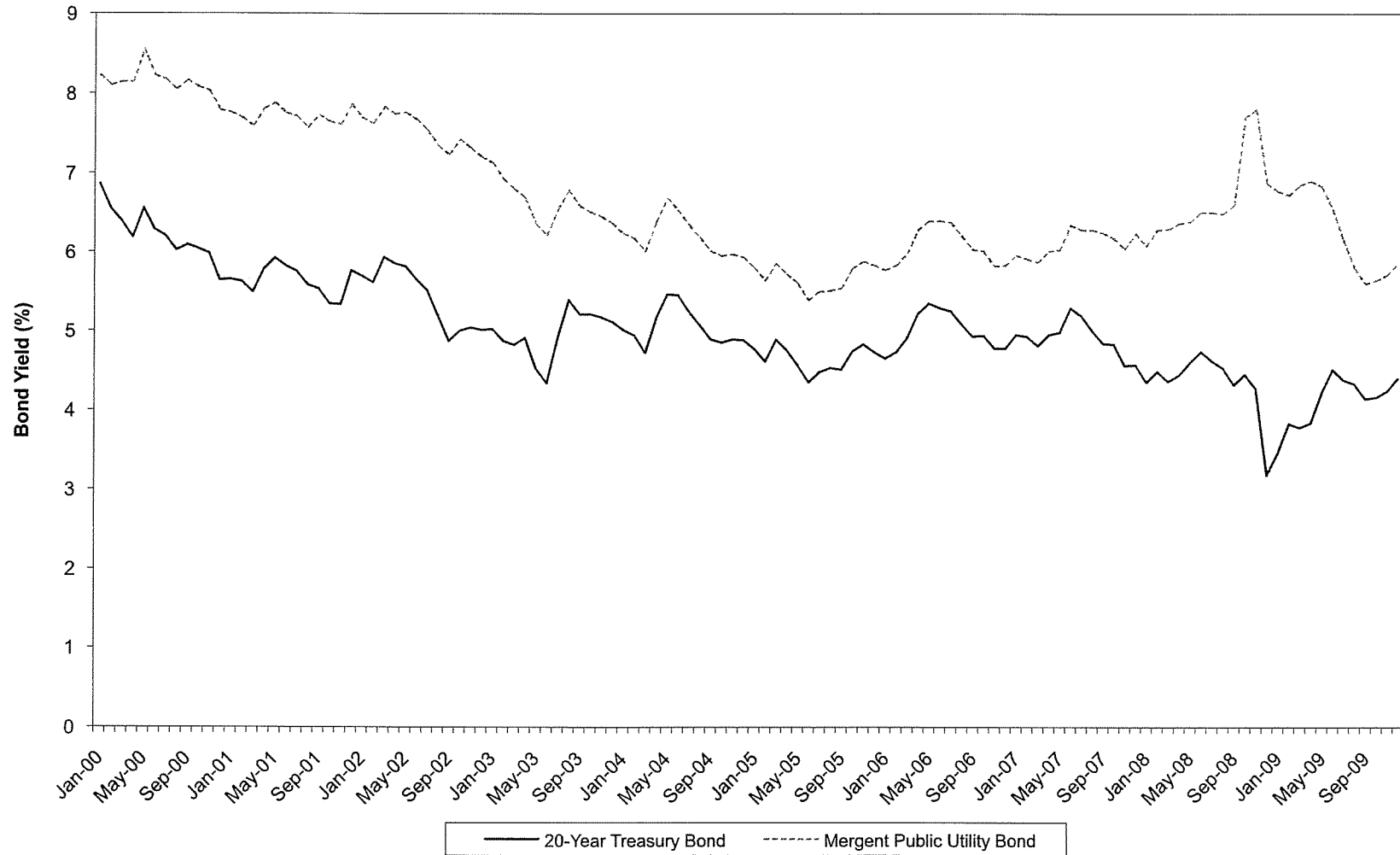
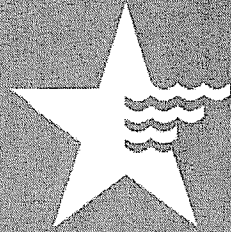
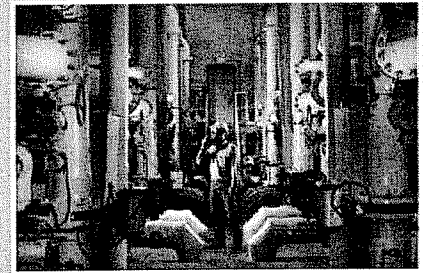


Exhibit ____ (RAB-3)



AMERICAN WATER

Institutional Investor Meetings
May 2010



Our Strategic Direction

Realizing Today's Value

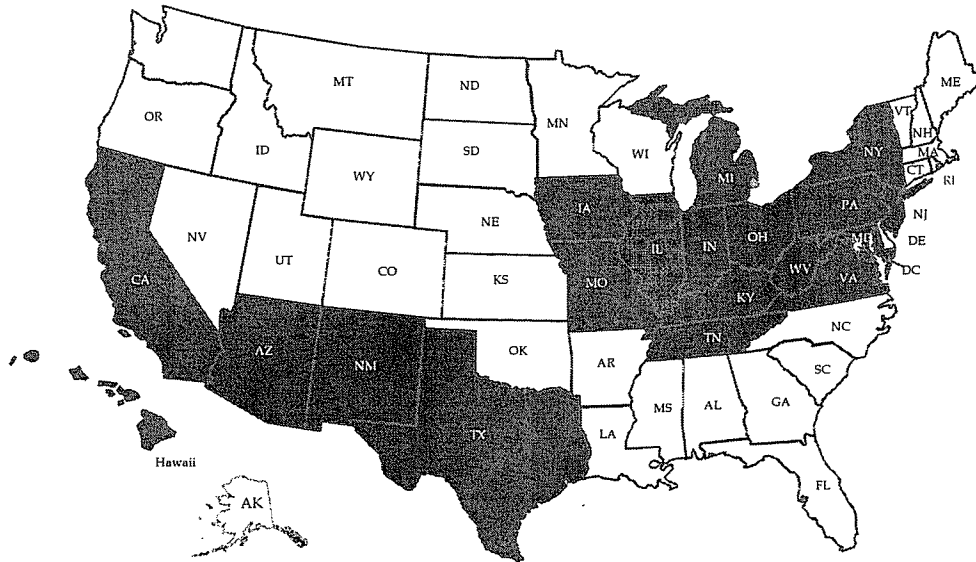
- Earn an appropriate rate of return on our investments
- Promote constructive regulatory frameworks
- Attain consistent and predictable financial performance through Regulatory, Weather and Economic Diversity
- Realize operating efficiencies through economies of scale and management of expenses

Investing for Long-Term Growth

- Efficiently allocate capital to regulated water and wastewater investments
- Grow Regulated Businesses through focused acquisitions
- Pursue “regulated-like” opportunities & complementary lines of business
- Focus on operating efficiencies



American Water's Regulated Presence



- Largely residential customer base promotes consistent operating results
- Geographic presence hedges both weather and regulatory risk
- Scale enables multiple growth opportunities across service areas

State	Customers Served	% of Total	2009 Revenues (\$ mm)	% of Total	Rate Base Approved per Last Rate Case	Date of Last Rate Case
New Jersey	644,273	19.3%	\$560.3	25.4%	1,697,048	12/8/2008
Pennsylvania	652,277	19.6%	459.8	20.8%	1,840,166	11/7/2009
Missouri	457,496	13.7%	203.8	9.2%	740,075	11/28/2008
Illinois	308,476	9.3%	197.4	8.9%	607,357	4/23/2010
Indiana	283,088	8.5%	157.4	7.1%	655,933	4/30/2010
California	171,854	5.2%	142.7	6.5%	290,930	7/9/2009
West Virginia	172,006	5.2%	120.2	5.5%	414,693	3/26/2009
Various	641,459	19.2%	365.7	16.6%	998,148	
Total Regulated Business	3,330,929	100%	\$2,207.3	100%	7,244,350	

Note: Numbers may not total due to rounding.

May 2010



Rate Case Summary- 2009 Through May 3, 2010

	<u>Docket / Case Number</u>	<u>Date Filed</u>	<u>Amount Filed</u>	<u>ROE Requested</u>	<u>Effective Date for new rates</u>	<u>ROE Granted</u>	<u>Amount Granted</u>
West Virginia	08-0900-W-42T	5/30/2008	\$14.8	11.75%	3/26/2009	10.00%	\$5.2
New Mexico	08-00134-UT	6/30/2008	\$2.2	11.75%	5/20/2009	10.25%	\$1.4
AWWM (NJ)	WR08080550	8/1/2008	\$3.0	11.50%	5/21/2009	10.30%	\$1.6
California (ROE)	A 08-05-003	5/1/2008	\$2.8	11.50%	5/6/2009	10.20%	\$0.1
Kentucky	2008-00427	10/31/2008	\$18.5	11.50%	6/1/2009	10.00%	\$10.3
Michigan	N/A	6/22/2009	\$0.2	10.50%	7/1/2009	10.50%	\$0.2
Calif (Monterey Water)	A 08-01-027	1/30/2008	\$35.3	11.50%	5/11/2009	10.20%	\$12.1
California (Monterey WW)	A 08-01-023	1/30/2008	\$1.8	11.50%	7/9/2009	10.20%	\$1.7
California (Gen Office)	A 08-01-024	1/30/2008	\$6.4	11.50%	5/11/2009	10.20%	\$2.2
Maryland	9187	4/30/2009	\$0.8	11.75%	9/10/2009	10.75%	\$0.6
Iowa	RPU-2009-0004	4/30/2009	\$9.4	12.20%	7/27/2009	10.50%	\$6.1
Pennsylvania	R-2009-2097323	4/24/2009	\$58.1	12.00%	11/7/2009	10.80%	\$30.8
Texas	2008-0910-UCR	2/21/2008	\$0.9	12.00%	11/30/2009	12.00%	\$0.5
Arizona (multiple)	W-01303A-08-0227	5/1/2008	\$20.0	11.75%	12/1/2009	9.90%	\$8.1
Illinois	Docket No. 09-0319	5/29/2009	\$58.6	12.25%	4/23/2010	10.38%	\$41.4
New Mexico (Edgewood)	Case No. 09-00156-UT	8/21/2009	\$0.7	12.25%	5/10/2010	10.00%	\$0.5
Indiana	Case No. 43680	4/1/2009	\$46.9	12.00%	05/03/2010	10.00%	\$31.5
Total General Rate Cases							\$154.3
Total Infrastructure Surcharges 2009 to date							\$32.3
Total Additional Revenues Due to Rates Activity at 5/3/2010							\$186.6

May 2010



AMERICAN WATER

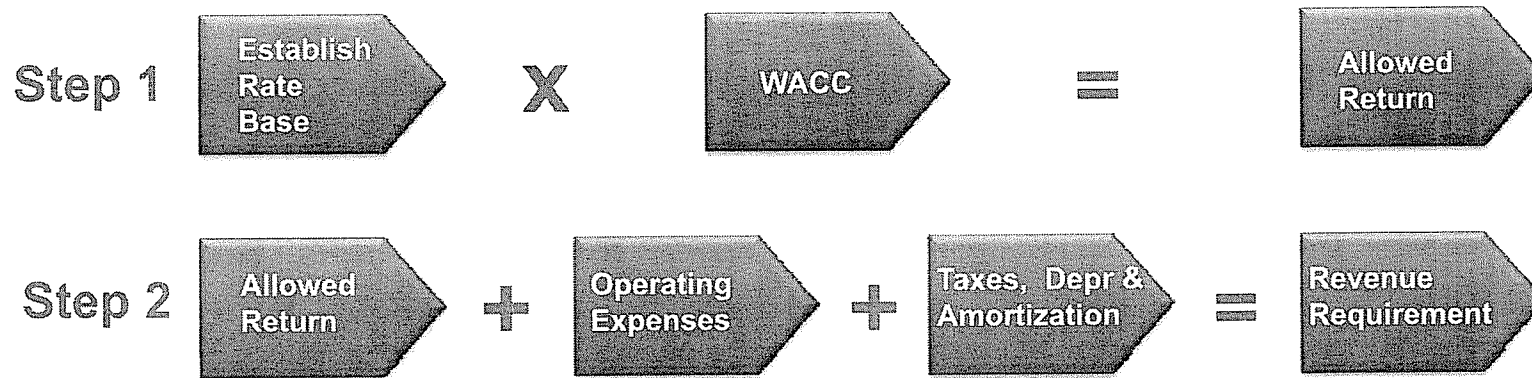
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Rate of Return Regulation in the United States

Prudent Investment Drives Need for Rate Cases



American Water has experience in securing appropriate rates of return and promoting constructive regulatory frameworks



**KENTUCKY AMERICAN WATER COMPANY
WATER UTILITY COMPARISON GROUP
AVERAGE PRICE, DIVIDEND AND DIVIDEND YIELD**

		May-10	Apr-10	Mar-10	Feb-10	Jan-10	Dec-09
American States Water	High Price (\$)	39.440	39.610	35.310	33.670	36.420	36.860
	Low Price (\$)	32.610	34.790	32.140	31.200	33.010	32.790
	Avg. Price (\$)	36.025	37.200	33.725	32.435	34.715	34.825
	Dividend (\$)	0.260	0.260	0.260	0.260	0.260	0.260
	Mo. Avg. Div.	2.89%	2.80%	3.08%	3.21%	3.00%	2.99%
	6 mos. Avg.	2.99%					
American Water Works	High Price (\$)	22.130	22.220	22.390	23.000	23.770	23.030
	Low Price (\$)	19.410	20.750	20.390	21.200	21.390	21.340
	Avg. Price (\$)	20.770	21.485	21.390	22.100	22.580	22.185
	Dividend (\$)	0.210	0.210	0.210	0.210	0.210	0.210
	Mo. Avg. Div.	4.04%	3.91%	3.93%	3.80%	3.72%	3.79%
	6 mos. Avg.	3.86%					
Aqua America	High Price (\$)	18.730	18.640	17.730	17.570	17.880	17.890
	Low Price (\$)	16.520	17.550	16.570	16.450	16.590	16.320
	Avg. Price (\$)	17.625	18.095	17.150	17.010	17.235	17.105
	Dividend (\$)	0.145	0.145	0.145	0.145	0.145	0.145
	Mo. Avg. Div.	3.29%	3.21%	3.38%	3.41%	3.37%	3.39%
	6 mos. Avg.	3.34%					
California Water	High Price (\$)	39.700	39.550	37.970	37.680	38.090	38.210
	Low Price (\$)	34.540	37.420	35.340	35.250	35.320	36.180
	Avg. Price (\$)	37.120	38.485	36.655	36.465	36.705	37.195
	Dividend (\$)	0.298	0.298	0.298	0.298	0.295	0.295
	Mo. Avg. Div.	3.21%	3.10%	3.25%	3.27%	3.21%	3.17%
	6 mos. Avg.	3.20%					
Connecticut Water	High Price (\$)	24.280	24.000	24.920	23.700	25.120	26.450
	Low Price (\$)	20.570	22.950	22.380	21.570	22.100	22.660
	Avg. Price (\$)	22.425	23.475	23.650	22.635	23.610	24.555
	Dividend (\$)	0.228	0.228	0.228	0.228	0.228	0.228
	Mo. Avg. Div.	4.07%	3.88%	3.86%	4.03%	3.86%	3.71%
	6 mos. Avg.	3.90%					
Middlesex Water	High Price (\$)	18.700	18.320	17.770	17.440	18.000	17.910
	Low Price (\$)	16.020	16.720	16.630	16.300	16.160	16.030
	Avg. Price (\$)	17.360	17.520	17.200	16.870	17.080	16.970
	Dividend (\$)	0.180	0.180	0.180	0.180	0.180	0.180
	Mo. Avg. Div.	4.15%	4.11%	4.19%	4.27%	4.22%	4.24%
	6 mos. Avg.	4.19%					

**KENTUCKY AMERICAN WATER COMPANY
WATER UTILITY COMPARISON GROUP
AVERAGE PRICE, DIVIDEND AND DIVIDEND YIELD**

		May-10	Apr-10	Mar-10	Feb-10	Jan-10	Dec-09
Pennichuck Water	High Price (\$)	24.410	23.500	23.510	21.100	21.520	24.500
	Low Price (\$)	21.120	22.200	20.490	19.000	19.700	20.440
	Avg. Price (\$)	22.765	22.850	22.000	20.050	20.610	22.470
	Dividend (\$)	0.180	0.180	0.180	0.180	0.175	0.175
	Mo. Avg. Div.	3.16%	3.15%	3.27%	3.59%	3.40%	3.12%
	6 mos. Avg.	3.28%					
SJW Corp.	High Price (\$)	28.190	28.240	26.430	22.750	23.950	22.970
	Low Price (\$)	23.170	24.990	22.070	21.600	21.930	21.020
	Avg. Price (\$)	25.680	26.615	24.250	22.175	22.940	21.995
	Dividend (\$)	0.170	0.170	0.170	0.170	0.165	0.165
	Mo. Avg. Div.	2.65%	2.55%	2.80%	3.07%	2.88%	3.00%
	6 mos. Avg.	2.83%					
York Water Company	High Price (\$)	14.450	14.240	14.340	14.080	15.000	15.240
	Low Price (\$)	12.830	13.600	13.560	13.040	13.040	14.210
	Avg. Price (\$)	13.640	13.920	13.950	13.560	14.020	14.725
	Dividend (\$)	0.128	0.128	0.128	0.128	0.128	0.128
	Mo. Avg. Div.	3.75%	3.68%	3.67%	3.78%	3.65%	3.48%
	6 mos. Avg.	3.67%					

Average Dividend Yield 3.47%

Source: Yahoo! Finance

**KENTUCKY AMERICAN WATER COMPANY
WATER UTILITY COMPARISON GROUP
DCF Growth Rate Analysis**

<u>Company</u>	(1) Value Line <u>DPS</u>	(2) Value Line <u>EPS</u>	(3) Value Line <u>B x R</u>	(4) <u>Zacks</u>	(5) Thomson <u>Financial</u>
American States Water	3.00%	6.50%	5.00%	4.00%	4.00%
American Water Works	4.05%	6.34%	2.50%	8.43%	10.25%
Aqua America	5.50%	11.50%	7.00%	7.33%	7.50%
California Water Service Group	1.00%	6.50%	6.00%	6.00%	5.55%
Connecticut Water Services	N/A	N/A	N/A	N/A	15.00%
Middlesex Water Company	N/A	N/A	N/A	N/A	8.00%
Pennichuck Corp.	N/A	N/A	N/A	N/A	9.00%
SJW Corp.	N/A	N/A	N/A	N/A	10.00%
York Water Company	N/A	N/A	N/A	N/A	6.00%
Averages excluding negative values	3.39%	7.71%	5.13%	6.44%	8.37%
Median Values	3.52%	6.50%	5.50%	6.67%	8.00%

**Sources: Zack's and First Call/Thomson Earnings Reports, retrieved May 28, 2010
Value Line Investment Survey, April 23, 2010**

Five-Year Historical Growth Rates			
	<u>DPS</u>	<u>EPS</u>	<u>Book Value</u>
Connecticut Water Services	1.50%	-0.50%	3.00%
Middlesex Water Company	1.50%	3.50%	5.50%
Pennichuck Corp.	1.00%	1.00%	3.50%
SJW Corp.	5.50%	3.00%	8.00%
York Water Company	6.00%	5.50%	8.50%
Average excluding negative values	3.10%	3.25%	5.70%

**RETURN ON EQUITY CALCULATION
WATER UTILITY COMPARISON GROUP**

	(1) Value Line <u>Dividend Gr.</u>	(2) Value Line <u>Earnings Gr.</u>	(3) Zack's <u>Earning Gr.</u>	(4) First Call <u>Earning Gr.</u>	(5) Average of <u>All Gr. Rates</u>
Method 1:					
Dividend Yield	3.47%	3.47%	3.47%	3.47%	3.47%
Growth Rate	3.39%	7.71%	6.44%	8.37%	6.48%
Expected Div. Yield	<u>3.53%</u>	<u>3.61%</u>	<u>3.59%</u>	<u>3.62%</u>	<u>3.59%</u>
DCF Return on Equity	6.92%	11.32%	10.03%	11.99%	10.07%
Midpoint of Results					9.45%
Method 2:					
Dividend Yield	3.47%	3.47%	3.47%	3.47%	3.47%
Median Growth Rate	3.52%	6.50%	6.67%	8.00%	6.17%
Expected Div. Yield	<u>3.54%</u>	<u>3.59%</u>	<u>3.59%</u>	<u>3.61%</u>	<u>3.58%</u>
DCF Return on Equity	7.06%	10.09%	10.26%	11.61%	9.75%
Midpoint of Results					9.34%

**KENTUCKY AMERICAN WATER COMPANY
GAS DISTRIBUTION COMPANY COMPARISON GROUP
AVERAGE PRICE, DIVIDEND AND DIVIDEND YIELD**

		May-10	Apr-10	Mar-10	Feb-10	Jan-10	Dec-09
AGL Resources	High Price (\$)	40.080	40.000	38.830	36.860	37.240	37.520
	Low Price (\$)	34.720	37.720	36.330	34.260	34.910	34.510
	Avg. Price (\$)	37.400	38.860	37.580	35.560	36.075	36.015
	Dividend (\$)	0.440	0.440	0.440	0.440	0.430	0.430
	Mo. Avg. Div.	4.71%	4.53%	4.68%	4.95%	4.77%	4.78%
	6 mos. Avg.	4.74%					
Atmos Energy	High Price (\$)	29.920	30.150	29.240	28.190	29.820	30.320
	Low Price (\$)	25.860	28.710	27.480	26.330	27.600	27.350
	Avg. Price (\$)	27.890	29.430	28.360	27.260	28.710	28.835
	Dividend (\$)	0.335	0.335	0.335	0.335	0.335	0.335
	Mo. Avg. Div.	4.80%	4.55%	4.72%	4.92%	4.67%	4.65%
	6 mos. Avg.	4.72%					
LaCleve Gas	High Price (\$)	35.890	35.420	34.630	33.730	34.500	34.920
	Low Price (\$)	32.050	33.710	32.880	30.810	31.990	31.400
	Avg. Price (\$)	33.970	34.565	33.755	32.270	33.245	33.160
	Dividend (\$)	0.395	0.395	0.395	0.395	0.395	0.395
	Mo. Avg. Div.	4.65%	4.57%	4.68%	4.90%	4.75%	4.76%
	6 mos. Avg.	4.72%					
New Jersey Resources	High Price (\$)	38.630	39.010	38.170	37.040	37.960	38.550
	Low Price (\$)	34.300	36.950	36.430	33.490	36.020	35.280
	Avg. Price (\$)	36.465	37.980	37.300	35.265	36.990	36.915
	Dividend (\$)	0.340	0.340	0.340	0.340	0.340	0.340
	Mo. Avg. Div.	3.73%	3.58%	3.65%	3.86%	3.68%	3.68%
	6 mos. Avg.	3.70%					
Nicor Inc.	High Price (\$)	43.710	44.700	43.750	41.890	42.830	43.390
	Low Price (\$)	38.630	41.860	41.820	37.990	40.000	39.280
	Avg. Price (\$)	41.170	43.280	42.785	39.940	41.415	41.335
	Dividend (\$)	0.465	0.465	0.465	0.465	0.465	0.465
	Mo. Avg. Div.	4.52%	4.30%	4.35%	4.66%	4.49%	4.50%
	6 mos. Avg.	4.47%					
NiSource Inc.	High Price (\$)	16.730	16.800	16.030	15.290	15.690	15.820
	Low Price (\$)	14.130	15.860	14.860	14.250	14.240	14.330
	Avg. Price (\$)	15.430	16.330	15.445	14.770	14.965	15.075
	Dividend (\$)	0.230	0.230	0.230	0.230	0.230	0.230
	Mo. Avg. Div.	5.96%	5.63%	5.96%	6.23%	6.15%	6.10%
	6 mos. Avg.	6.01%					

**KENTUCKY AMERICAN WATER COMPANY
GAS DISTRIBUTION COMPANY COMPARISON GROUP
AVERAGE PRICE, DIVIDEND AND DIVIDEND YIELD**

		May-10	Apr-10	Mar-10	Feb-10	Jan-10	Dec-09
Northwest Natural Gas	High Price (\$)	48.570	49.180	47.540	44.840	45.820	46.470
	Low Price (\$)	41.900	46.070	44.230	41.050	42.790	42.820
	Avg. Price (\$)	45.235	47.625	45.885	42.945	44.305	44.645
	Dividend (\$)	0.415	0.415	0.415	0.415	0.415	0.415
	Mo. Avg. Div.	3.67%	3.49%	3.62%	3.87%	3.75%	3.72%
	6 mos. Avg.	3.68%					
Piedmont Natural Gas	High Price (\$)	27.970	28.520	28.040	25.980	27.100	27.840
	Low Price (\$)	24.500	27.010	25.950	23.870	25.510	23.660
	Avg. Price (\$)	26.235	27.765	26.995	24.925	26.305	25.750
	Dividend (\$)	0.280	0.280	0.280	0.270	0.270	0.270
	Mo. Avg. Div.	4.27%	4.03%	4.15%	4.33%	4.11%	4.19%
	6 mos. Avg.	4.18%					
South Jersey Industries	High Price (\$)	45.840	46.000	42.500	40.500	39.250	40.240
	Low Price (\$)	41.170	41.980	39.630	37.190	37.390	36.090
	Avg. Price (\$)	43.505	43.990	41.065	38.845	38.320	38.165
	Dividend (\$)	0.330	0.330	0.330	0.330	0.330	0.330
	Mo. Avg. Div.	3.03%	3.00%	3.21%	3.40%	3.44%	3.46%
	6 mos. Avg.	3.26%					
Southwest Gas	High Price (\$)	32.910	32.580	30.700	28.820	29.400	29.480
	Low Price (\$)	28.120	30.060	28.830	26.280	27.600	26.330
	Avg. Price (\$)	30.515	31.320	29.765	27.550	28.500	27.905
	Dividend (\$)	0.250	0.238	0.238	0.238	0.238	0.238
	Mo. Avg. Div.	3.28%	3.04%	3.20%	3.46%	3.34%	3.41%
	6 mos. Avg.	3.29%					
WGL	High Price (\$)	36.570	36.120	35.020	33.340	34.070	34.580
	Low Price (\$)	33.000	34.330	32.880	31.000	31.630	31.430
	Avg. Price (\$)	34.785	35.225	33.950	32.170	32.850	33.005
	Dividend (\$)	0.378	0.378	0.368	0.368	0.368	0.368
	Mo. Avg. Div.	4.35%	4.29%	4.34%	4.58%	4.48%	4.46%
	6 mos. Avg.	4.42%					
Average Dividend Yield		4.29%					

Source: Yahoo! Finance

**KENTUCKY AMERICAN WATER COMPANY
GAS DISTRIBUTION COMPANY COMPARISON GROUP
DCF Growth Rate Analysis**

<u>Company</u>	(1) Value Line DPS	(2) Value Line EPS	(3) Value Line B x R	(4) Zacks	(5) Thomson Financial
AGL Resources	2.50%	3.50%	5.00%	4.00%	5.07%
Atmos Energy	2.00%	5.50%	4.50%	4.67%	4.20%
LaClede Group	2.50%	2.50%	5.00%	3.00%	3.50%
New Jersey Resources	5.50%	6.50%	8.50%	N/A	5.10%
Nicor Inc.	0.00%	2.50%	4.00%	3.67%	2.70%
NiSource, Inc.	0.50%	5.00%	2.50%	3.00%	2.63%
Northwest Natural Gas	5.50%	4.50%	4.00%	5.13%	4.83%
Piedmont Natural Gas	3.50%	3.50%	4.00%	6.33%	3.70%
South Jersey Industries	6.00%	7.00%	7.50%	9.50%	7.50%
Southwest Gas	5.00%	8.00%	5.00%	6.00%	3.30%
WGL Holdings	3.00%	2.50%	4.00%	3.05%	3.05%
Averages excluding negative values	3.27%	4.64%	4.91%	4.84%	4.14%
Median Values	3.00%	4.50%	4.50%	4.34%	3.70%
Averages excl. > or =10% & < or = 1%	3.94%	4.64%	4.91%	4.84%	4.14%
Sources: Zack's and First Call/Thomson Earnings Reports, retrieved May 28, 2010 Value Line Investment Survey, June 11, 2010					

**RETURN ON EQUITY CALCULATION
GAS DISTRIBUTION COMPANY COMPARISON GROUP**

	(1) Value Line Dividend Gr.	(2) Value Line Earnings Gr.	(3) Zack's Earning Gr.	(4) First Call Earning Gr.	(5) Average of All Gr. Rates
<u>Method 1:</u>					
Dividend Yield	4.29%	4.29%	4.29%	4.29%	4.29%
Growth Rate	3.27%	4.64%	4.84%	4.14%	4.22%
Expected Div. Yield	<u>4.36%</u>	<u>4.39%</u>	<u>4.39%</u>	<u>4.38%</u>	<u>4.38%</u>
DCF Return on Equity	7.63%	9.03%	9.23%	8.52%	8.60%
Midpoint of Results					8.43%
<u>Method 2:</u>					
Dividend Yield	4.29%	4.29%	4.29%	4.29%	4.29%
Median Growth Rate	3.00%	4.50%	4.34%	3.70%	3.88%
Expected Div. Yield	<u>4.35%</u>	<u>4.38%</u>	<u>4.38%</u>	<u>4.37%</u>	<u>4.37%</u>
DCF Return on Equity	7.35%	8.88%	8.72%	8.07%	8.25%
Midpoint of Results					8.12%
<u>Method 3:</u>					
Dividend Yield	4.13%	4.29%	4.29%	4.29%	4.25%
Growth Rate Excl. Rates > 10% & < or = 1%	3.94%	4.64%	4.84%	4.14%	4.39%
Expected Div. Yield	<u>4.21%</u>	<u>4.39%</u>	<u>4.39%</u>	<u>4.38%</u>	<u>4.34%</u>
DCF Return on Equity	8.15%	9.03%	9.23%	8.52%	8.73%
Midpoint of Results					8.69%

**KENTUCKY AMERICAN WATER COMPANY
Capital Asset Pricing Model Analysis
Water Utility Comparison Group**

20-Year Treasury Bond, Value Line Beta

<u>Line No.</u>		<u>Value Line</u>
1	Market Required Return Estimate	
2	Expected Dividend Yield	0.65%
3	Expected Growth	<u>10.74%</u>
4	Required Return	11.39%
5	Risk-free Rate of Return, 20-Year Treasury Bond	
6	Average of Last Six Months	4.44%
8	Risk Premium	
9	@ 6 Month Average RFR (Line 4 minus Line 6)	6.95%
10	Comparison Group Beta	0.72
11	Comparison Group Beta * Risk Premium	
12	@ 6 Month Average RFR (Line 10 * Line 9)	5.02%
13	CAPM Return on Equity	
14	@ 6 Month Average RFR (Line 12 plus Line 6)	9.46%

5-Year Treasury Bond, Value Line Beta

1	Market Required Return Estimate	
2	Expected Dividend Yield	0.65%
3	Expected Growth	<u>10.74%</u>
4	Required Return	11.39%
5	Risk-free Rate of Return, 5-Year Treasury Bond	
6	Average of Last Six Months	2.40%
8	Risk Premium	
9	@ 6 Month Average RFR (Line 4 minus Line 6)	8.98%
10	Comparison Group Beta	0.72
11	Comparison Group Beta * Risk Premium	
12	@ 6 Month Average RFR (Line 9 * Line 10)	6.49%
13	CAPM Return on Equity	
14	@ 6 Month Average RFR (Line 12 plus Line 6)	8.89%

KENTUCKY AMERICAN WATER COMPANY
Capital Asset Pricing Model Analysis
Water Utility Comparison Group

Supporting Data for CAPM Analyses

20 Year Treasury Bond Data

	<u>Avg. Yield</u>
November-09	4.24%
December-09	4.40%
January-10	4.50%
February-10	4.48%
March-10	4.49%
April-10	<u>4.53%</u>
6 month average	4.44%

5 Year Treasury Bond Data

	<u>Avg. Yield</u>
November-09	2.23%
December-09	2.34%
January-10	2.48%
February-10	2.36%
March-10	2.43%
April-10	<u>2.58%</u>
6 month average	2.40%

Value Line Market Growth Rate Data:

Forecasted Data:	
Earnings	12.96%
Book Value	<u>8.51%</u>
Average	10.74%
Source: Value Line Investment Survey for Windows, May 28, 2010	

Comparison Group Betas:

	<u>Value Line Beta</u>
American States Water	0.80
American Water Works	0.65
Aqua America	0.65
California Water Service Group	0.75
Connecticut Water Services	0.80
Middlesex Water Company	0.75
Pennichuck Corp.	0.50
SJW Corp.	0.95
York Water Company	<u>0.65</u>
Group Average Beta	0.72

Sources: Value Line reports

KENTUCKY AMERICAN WATER COMPANY
Capital Asset Pricing Model Analysis
Historic Market Premium

	<u>Geometric Mean</u>	<u>Arithmetic Mean</u>
Long-Term Annual Return on Stocks	9.80%	11.80%
Long-Term Annual Income Return on Long-Term Government Bonds	<u>5.10%</u>	<u>5.20%</u>
Historical Market Risk Premium	4.70%	6.60%
Comparison Group Beta, Value Line	<u>0.72</u>	<u>0.72</u>
Beta * Market Premium	3.39%	4.77%
Current 20-Year Treasury Bond Yield	<u>4.44%</u>	<u>4.44%</u>
CAPM Cost of Equity	<u>7.83%</u>	<u>9.21%</u>

Source: *Ibbotson SBBI 2010 Valuation Yearbook*, Morningstar

Exhibit ____ (RAB-10)

KENTUCKY-AMERICAN WATER COMPANY
CASE NO. 2010-00036
COMMISSION STAFF'S THIRD SET OF INFORMATION REQUESTS

Witness: Sheila Miller/Michael A. Miller/Keith Cartier

4. Refer to Kentucky-American's responses to the Commission Staff's Second Information Request, Item 13(a).
 - a. The average actual capitalization rate for the five-year period is 19.472 percent, which is approximately 2.118 percent greater than the five-year average budgeted capitalization rate of 17.624 percent. Given that, for the five-year period from 2005 through 2009, Kentucky-American under-budgeted its capitalization rate by 2.118 percent, explain why the forecasted capitalization should not be adjusted by this factor.
 - b. Provide the impact that revising the forecasted capitalization rate from 17.624 percent to 18.742 percent would have upon Kentucky-American's revenue requirement. Include copies of all workpapers, assumptions, and calculations used to calculate the revenue requirement impact.

Response:

- a. The response to PSC-2-13, the response that generated the average numbers reflected in this question, was developed using hours (not dollars). The Company's experience in 2009 produced a result much closer to Plan than in prior years and reflects the Company's continuing efforts to improve actual to budget results. Attached to this response is a schedule that calculates the capital payroll ratio based on payroll dollars. This produced a capitalized payroll dollar ratio of 18.65%. On the attached schedule we then reflected the additional payroll dollars for the 6 new employees at the KRS II plant and the KRS superintendant with a capital rate of 5% (a large portion of this time was capitalized in 2009 due to assisting in managing the construction of the new treatment plant). This resulted in a capitalization rate of 17.72% versus the 17.34% used by the Company in its application. The Company believes that after operation of the new plant the 17.34% capitalization rate accurately reflects what will be in place in the forecasted test-year once the KRS II treatment plant is in service.
- b. Revising the forecasted capitalization rate from 17.34% to 18.742% results in a reduction of \$211,276 to the Company's revenue requirement. Please refer to the attached working papers. While the Company has provided the information as requested, the Company continues to believe its 17.34% capitalization rate is appropriate for the forecasted test-year. See the response to part a. above.

For the electronic version, refer to KAW_R_PSCDR3#4_052810.pdf.

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In The Matter Of: :
The Application of Kentucky-American Water : Case No. 2010-00036
Company for an Adjustment of Rates On and After :
March 28, 2010 :

AFFIDAVIT OF RICHARD A. BAUDINO

STATE OF NORTH CAROLINA)
COUNTY OF FORSYTH)

Richard A. Baudino being first duly sworn, deposes and states that:

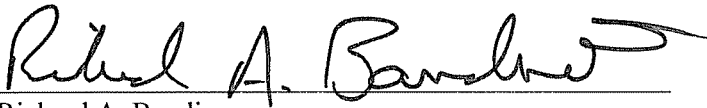
1. He is a consultant with Kennedy & Associates;
2. He is the witness who sponsors the accompanying testimony entitled "Direct Testimony and Exhibits of Richard A. Baudino;"

Exhibits of Richard A. Baudino;"

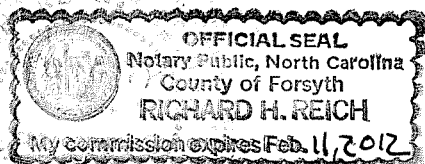
3. Said testimony was prepared by him and under his direction and supervision;
4. If inquiries were made as to the facts and schedules in said testimony he would respond as therein

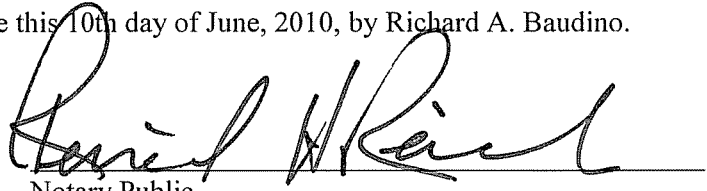
set forth; and

5. The aforesaid testimony and schedules are true and correct to the best of his knowledge, information and belief.


Richard A. Baudino

Subscribed and sworn to or affirmed before me this 10th day of June, 2010, by Richard A. Baudino.




Notary Public
Richard H. Reich
1001 W. Fourth Street
Winston-Salem, NC 27101