### **Question 1:**

At Schedule 3 of your rebuttal testimony, you provide an updated Discounted Cash Flow Analysis for your proxy group of water utilities at February 2013. Have you performed a more recent update based on the April 19, 2013 edition of Value Line and other more current information? If you have done so, please provide a copy of the update.

### **Response:**

Dr. Vander Weide has not updated the Discounted Cash Flow analysis for his proxy group of water utilities since the time of his rebuttal testimony.

### **Question 2:**

At pages 21 and 22 of your rebuttal testimony, you discuss "more recent research" regarding the accuracy of analysts' forecasts.

- a. Are the articles listed in Table 3 on page 22 the more recent research to which you refer?
- b. Are you aware of any articles published since 2006 that address whether analysts' forecasts are biased toward optimism?
- c. If you are aware of any articles published since 2006 that address whether analysts' forecasts are biased toward optimism, please list those articles and briefly summarize them.

### **Response:**

- a. Dr. Vander Weide uses the phrases, "earlier research" and "more recent research," on page 22 of his Rebuttal Testimony, to differentiate the articles cited in Table 3 that were published before and after 1997.
- b. Yes.
- c. Because analysts' forecasts are a popular topic in the finance/accounting research literature, and the studies reported in the literature are typically complex, it would be excessively time consuming and costly for Dr. Vander Weide to list and summarize all the articles in the literature since 2006 that address whether analysts' forecasts are biased toward optimism. However, Dr. Vander Weide notes that he is unaware of evidence in the literature that would cause him to change his conclusions regarding analysts' optimism stated in Answer 56 of his Rebuttal Testimony. He also notes that the issue of analysts' optimism or lack thereof is less important than the issue of what growth forecasts are incorporated in stock prices. If analysts' growth forecasts are incorporated in stock prices, analysts' growth forecasts should be used to estimate the growth component of the DCF Model, regardless of whether the growth forecasts turn out to be optimistic or pessimistic ex post.

### **Question 3:**

- a. Confirm that it is it your position is that analysts are not optimistic or self-serving in their growth forecasts, but intentionally exclude information that would tend to cause actual earnings results to be lower in comparison.
- b. In your opinion, are investors aware of the items that affect actual earnings, accounting write-offs and special charges that affect actual earnings, and that analysts exclude such from their forecasts?

### **Response:**

- a. Dr. Vander Weide confirms his opinion that: (1) analysts' ex ante growth forecasts are generally not optimistic; and (2) analysts' ex ante growth forecasts pertain to normalized earnings growth in the sense that the forecasts generally exclude the impact of accounting write-offs and special charges.
- b. In Dr. Vander Weide's opinion, investors are generally aware of factors that affect actual earnings. Investors are also generally aware that analysts' exclude non-recurring items, such as accounting write-offs and special charges, from earnings forecasts.

### **Question 4:**

Table 3 of your rebuttal testimony indicates that one of the articles concludes that analysts' forecasts show evidence of declining optimism and another concludes that analysts' forecasts are pessimistic. At page 21 of your rebuttal testimony, you state that the forecasts were pessimistic for the last four years. To what do the articles attribute the analysts' declining optimism and pessimism?

### **Response:**

The Brown article (1997) suggests that the disappearance of optimism in earnings forecasts for large firms in his sample is perhaps attributable to:

mitigation of the big-bath phenomenon or a lessening of the tendency of these firms' managers to manipulate earnings in a way to generate a large number of small positive (relative to small negative) surprises. [Brown, Lawrence, "Analyst Forecasting Errors: Additional Evidence," *Financial Analysts Journal*, November-December 1997, 83]

The Ciccone article (2005) suggests that "the almost continuous reductions in analyst forecast dispersion, error, and optimism during the time period 1990 through 2001 ... come about due to staggering advances in forecasting loss firm earnings." [Ciccone, Stephen J., "Trends in Analyst Earnings Forecast Properties," *International Review of Financial Analysis*, 14 (2005), 20]

### **Question 5:**

In your direct and rebuttal testimony, you indicate that the Capital Asset Pricing Model (CAPM) underestimates required returns for securities or portfolios with betas less than 1.0. At page 28 of your Rebuttal Testimony, you refer to two Fama and French studies which indicate that actual portfolio returns are higher for portfolios with betas less than 1.0 than what the CAPM predicted. Of what research findings, if any, are you aware that support the continued relevance of beta in determining investors' expected return?

#### **Response:**

Dr. Vander Weide is unaware of articles that would cause him to change his opinion expressed in Answer 67 of his Rebuttal Testimony that:

the financial literature strongly supports the proposition that the CAPM underestimates the cost of equity for companies such as public utilities with betas less than 1.0. Since the CAPM significantly underestimates the cost of equity for companies with betas less than 1.0, and both Dr. Woolridge's and my proxy companies have betas that are significantly less than 1.0, I further conclude that the Commission should give little or no weight to the results of the CAPM at this time.

### **Question 6:**

What alternate methods of performing CAPM analysis exist that provide results that you would consider more reasonable in estimating investors' required return on equity?

### **Response:**

Dr. Vander Weide believes that the CAPM may be used to estimate the cost of equity if: (1) forecasted interest rates are used to estimate the risk-free rate in times when yields on long-term government bonds are being restricted by Federal Reserve monetary policy; (2) betas that are relatively close to 1.0 are used to estimate beta; and (3) the analyst recognizes that the risk premium on the market portfolio tends to move inversely with interest rates.

### **Question 7:**

In your direct testimony, you provide CAPM estimates of 9.6 and 10.1 percent.

- a. Do you believe these results to be so low as to be unreasonable?
- b. Are these results inconsistent with the most recent Return on Equity awards shown in Kentucky-American Water Company's Response to Item 23 of Commission Staff's Second Request for Information? Why?

#### **Response:**

- a. Dr. Vander Weide believes that 9.6 percent and 10.1 percent are not reasonable estimates of Kentucky-American Water Company's cost of equity at this time.
- b. Dr. Vander Weide is aware that the average allowed return on equity for American Water Works' subsidiaries provided in response to Item 23 of Commission Staff's Second Request for Information is within the range of the CAPM estimates of 9.6 percent and 10.1 percent. However, based on the studies and evidence provided in his testimony, Dr. Vander Weide believes that Kentucky-American Water Company's cost of equity is in the range 10.4 percent to 11.4 percent.

### **Question 8:**

At page 42 of your rebuttal testimony, you discuss economists' projections that future interest rates will be higher than current interest rates.

- a. How far in the future are economists projecting that interest rates will begin to rise?
- b. Are economists projecting significant increases in interest rates?
- c. What is the current yield to maturity on A-rated utility bonds?

#### **Response:**

a. Interest rates on 10-year Treasury notes have increased by approximately fifty basis points over the last year, from 1.62 percent in June 2012 to 2.12 percent at the week ending June 7, 2013 (data from Federal Reserve). According to the Energy Information Administration forecasts released April 15 – May 2, 2013, the yield on 10-year Treasury notes is forecast to increase by approximately 275 basis points from 2013 to 2017. The yield on AA-rated utility bonds is forecast to increase by approximately 250 basis points over the period 2013 to 2017 (see following table).

### **Energy Information Administration Interest Rate Forecasts**

INTEREST RATES (PERCENT, NOMINAL)					
	2013	2014	2015	2016	2017
10-Year Treasury Note	2.130326	2.978848	3.941709	4.698130	4.836761
AA Utility Bond Rate	4.449601	5.216984	6.161687	6.775268	6.875439

- b. Yes. Please see response to subpart (a).
- c. The average yield to maturity on Moody's A-rated utility bonds at June 12, 2013, was 4.45 percent. Dr. Vander Weide believes that the current utility bond yield should not be used in his risk premium studies to estimate the cost of equity because current rates have been artificially lowered due to the Federal Reserve's policy of keeping interest rates low in order to stimulate the economy.

### **Question 9:**

On or about May 24, 2013, Standard & Poor's reported that it had upgraded the corporate credit rating on American Water Works Company and certain of its subsidiaries from BBB+ to A- with a stable outlook. Does this report affect your analysis and testimony in this case? If yes, what effect does it have on your analysis and testimony?

### **Response:**

No, in Dr. Vander Weide's opinion, the change in the corporate credit rating has no material impact on the cost of equity for Kentucky American Water. As for the effect of the one-notch upgrade in American Water Works' corporate credit rating on the Company's cost of debt, please see the Company's response to Hearing Data Request No.