Exhibit No.:

Issues: Return on Equity
Witness: Billie Sue LaConte

Sponsoring Party: BJC Healthcare
Type of Exhibit: Direct Testimony

Case No.: WR-2011-0337

SR-2011-0338

Date Testimony Prepared: November 17, 2011

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of Missouri-American Water Company's)	
Request for Authority to Implement A General Rate)	File No. WR-2011-0337
Increase for Water and Sewer Service Provided in)	File No. SR-2011-0338
Missouri Service Areas)	

DIRECT TESTIMONY AND SCHEDULES

OF

BILLIE SUE LACONTE

ON BEHALF OF

BJC HEALTHCARE

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of Missouri-American Water Company's Request for Authority to Implement A General Rate Increase for Water and Sewer Service Provided in Missouri Service Areas)	File No. WR-2011-0337 File No. SR-2011-0338
Affidavit of Billie S. LaConte	2
STATE OF MISSOURI)	
COUNTY OF ST. LOUIS)	
Billie S. LaConte, being of lawful age and duly affirmed	d, states the following:
 My name is Billie S. LaConte. I am a consultant in and regulation and a member of Drazen Consulting 	
2. Attached hereto and made a part hereof for all pu consisting of Pages 1 through 15, Appendix A and 9	
3. I have reviewed the attached Direct Testimony and is true and correct to the best of my knowledge ar	
	Sillil Stalon Se
	Billie S. LaConte
Duly affirmed before me this 17 th day of November, 2011.	
CONTRIBUTION SERVICE ACCURATE ACC	Sheryl M. Lenelon
	Notary Public

My commission expires on July 6, 2015.

TABLE OF CONTENTS

1	BJC's Recommended Return on Equity	2
	BJC Discounted Cash Flow Method	
	DCF Model	
	Capital Asset Pricing Model	
	Risk Factors	

WR-2011-0337 SR-2011-0338 Direct Testimony-Billie S. LaConte Page 1 of 15

CASE NO. WR-2011-0337, SR-2011-0338

1		Introduction and Overview
2	Q	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
3	Α	Billie S. LaConte, 8000 Maryland Avenue, Suite 1210, St. Louis, Missouri.
4	Q	WHAT IS YOUR OCCUPATION?
5	Α	I am a consultant in the field of public utility economics and regulation and a member of
6		Drazen Consulting Group, Inc.
7	Q	PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.
8	Α	These are given in Appendix A.
9	Q	ON WHOSE BEHALF ARE YOU SUBMITTING THIS TESTIMONY?
10	Α	I am presenting it on behalf of BJC Healthcare.
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1 BJC's Recommended Return on Equity

2 Q WHAT RETURN ON EQUITY DID YOU CALCULATE FOR MAWC?

- 3 A Based on my analysis, I have determined a return on equity of 9.0%. The components of
- 4 this are shown in Table 1.

Table 1

Recommended Return on Equity

Method	<u>Median</u>	Avg.
DCF Method-Constant Growth (Analyst Growth) DCF Method-Constant Growth (GDP Growth)	9.8% 8.4	10.1% 8.7
DCF Method-Two-stage Growth (GDP Growth) CAPM	8.2 9.1	8.4 9.2
Average	8.9%	9.1%

5 Q HOW DID YOU CALCULATE THE RECOMMENDED RETURN ON EQUITY?

- 6 A I used two Discounted Cash Flow (DCF) methods and the Capital Asset Pricing Method
- 7 (CAPM). These are all standard methods (or formulas) that have been used for years.
- Where people differ is in the choices of the inputs: the group of comparable companies;
- 9 the time period for calculating stock price; the estimated growth rate (or rates); the risk
- associated with various stocks and so on. Those choices affect the numerical results.
- Where I differ from MAWC is in the *values* of some inputs and, therefore, the results.

- 1 BJC Discounted Cash Flow Method
- 2 Q PLEASE DISCUSS YOUR DCF ANALYSES.
- 3 A The Discounted Cash Flow methods I used to estimate MAWC's RoE are:
- The constant growth model using growth estimates from analysts and long-term
- 5 GDP growth estimates; and
- The two-stage DCF model that uses analysts' growth estimates and long-term
- 7 GDP growth estimates.
- 8 DCF Model
- 9 Q PLEASE DESCRIBE THE DCF MODEL.
- 10 A The DCF model is used by investors to determine the present value of a stock, based on
- future cash flows (dividends), which are discounted by the stock's known return and its
- 12 forecast growth rate. The formula is:

$$P = \frac{D}{r-g}$$

- 13 Where
- P is the current stock price
- 15 D is the dividend yield
- 16 r is the rate of return
- g is the growth rate
- 18 We can re-arrange the formula thus:

$$r = \frac{D}{P} + g$$

1 In other words, the expected return equals (1) the current dividend rate, plus (2) the 2 expected growth in dividends. The expected growth in dividends is also measured by 3 the expected growth in earnings. 4 Q HOW DID YOU DETERMINE THE VALUES FOR THE STOCK PRICE, GROWTH RATE AND 5 **DIVIDEND?** The stock prices are based on the average stock prices from August 10, 2011 to 6 Α 7 November 10, 2011, from Yahoo Finance. The growth rates are the forecast EPS growth 8 rate for the next five years from Value Line Investment Analyzer (Value Line), Reuters 9 and Yahoo Finance. The dividends are based on estimated dividends for 2011, also from 10 Value Line. WHAT COMPANIES DID YOU INCLUDE IN YOUR DCF ANALYSIS? 11 Q 12 Α I used the same list of regulated public water utilities as used by MAWC's witness, 13 Pauline Ahern.

Table 2

Regulated Public Water Utilities

American States Water
American Water Works
Aqua America
Artesian Resources Corporation
California Water
Connecticut Water Services
Middlesex Water
SJW Corporation
York Water Company

- 1 Q WHAT IS YOUR ESTIMATED ROE USING THE SINGLE STAGE DCF WITH ANALYSTS'
- 2 **GROWTH ESTIMATES?**
- 3 A The estimated RoEs are:

Table 3
Estimated RoE Single Stage DCF
with Analyst Growth Rates

<u>Utility</u>	Estimated <u>RoE</u>
American States Water	9.8%
American Water Works	12.6
Aqua America	11.1
Artesian Resources Corp.	8.6
California Water	12.8
Connecticut Water Services	8.3
Middlesex Water	5.5
SJW Corporation	13.4
York Water Co.	9.1%
Average	10.1
Median	9.8%

- 4 Q PLEASE DESCRIBE YOUR ROE ESTIMATE USING THE SINGLE STAGE DCF METHOD AND
- 5 **LONG-TERM GDP GROWTH.**
- 6 A This is similar to my first DCF analysis, except the long-term forecast growth in GDP is
- 7 used for the growth component.

1 Q WHY IS THIS USED?

- The underlying assumption is that mature, established companies can grow at a rate
 that is similar to or lower than the GDP growth rate. While some companies in the
 economy will grow faster than GDP for a while, this cannot happen consistently over a
 long period.
- 6 Q HOW DID YOU DETERMINE THE FORECAST LONG-TERM GDP GROWTH RATE?
- 7 A The long-term GDP growth rate of 5.2% is based on The Congressional Budget Office's 8 report *The Budget and Economic Outlook: Fiscal Years 2011-2021*, page 29, Table 2-1.

9 Q WHAT IS THE ROE USING THIS METHOD?

10 A The estimated RoE is:

Table 4
Estimated RoE Single Stage DCF
with Long-term GDP Growth

<u>Utility</u>	Estimated <u>RoE</u>
American States Water	8.4%
American Water Works	8.3
Aqua America	8.1
Artesian Resources Corp.	9.6
California Water	8.7
Connecticut Water Services	9.3
Middlesex Water	9.4
SJW Corporation	7.8
York Water Co.	8.3
Average	8.7
Median	8.4%

1 Q PLEASE DESCRIBE YOUR TWO-STAGE DCF ANALYSES.

The two-stage DCF method uses analysts' forecast growth rates for dividends for the first stage (1-4 years) and the long-term GDP growth rate for the second stage (5 years and beyond) to calculate the growth in dividends. Using these inputs, the model calculates the required internal rate of return to meet these dividend growth rates, or the return on equity.

Q WHY IS THE TWO-STAGE METHOD USED?

Analysts' growth forecasts for the first stage (next 4 years) may not be sustainable for the long-term. The two-stage model recognizes short-term growth (whether it be lower or higher than the long-term), but also accounts for a more realistic, long-term growth rate. For example, the average growth rate for California Water is 9.3% and for SJW Corporation, 10.75%. These are not sustainable compared to a forecast GDP growth rate of 5.2%. If a group of companies were to grow indefinitely at a rate that exceeds GDP, they would eventually exceed the GDP. Analysts' growth rates should be viewed in conjunction with other growth estimates to achieve a reasonable forecast of expected earnings.

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1 Q WHAT IS YOUR ESTIMATED ROE USING THE TWO-STAGE DCF METHOD?

2 A The estimated RoE is 8.2% using the two-stage model.

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Table 5
Estimated RoE Using Two-Stage DCF Method

<u>Utility</u>	Estimated <u>RoE</u>
American States Water	8.2%
American Water Works	8.2
Aqua America	8.1
Artesian Resources Corporation	9.4
California Water	8.4
Connecticut Water Services	8.8
Middlesex Water	8.9
SJW Corporation	7.7
York Water Company	7.9
Average	8.4
Median	8.2%

Compared to the single stage method, the two-stage method provides a more realistic expectation of growth, in the short-term and the long-term. A regulated utility's RoE that is based solely on analysts' short-term forecasts may overstate (or understate) the expected RoE. For example, the single stage DCF using analysts' forecasts produces a RoE of 5.5% for Middlesex Water, and a RoE of 9.4% using forecast GDP, or a 390 basis point difference. The two-stage method produces a RoE of 8.9%. The lower short-term growth is recognized, but it does not dictate the estimated RoE for the long-term.

1	Capit	tal Asset Pricing Model
2	Q	PLEASE DESCRIBE THE CAPM.
3	Α	The CAPM is a risk premium method that is used to estimate the return on equity.
4		The formula for the CAPM is:
5		Expected RoE = Risk-free Rate + Beta * Market Risk Premium
6		The Market Risk Premium is the difference between the return on the market on
7		average (i.e., all stocks) and the risk-free rate. Thus, it is the risk premium that reflects
8		the risk on an average stock. The beta is the price volatility of a particular stock relative
9		to the market as a whole, as defined below. Thus, the risk premium for a specific stock
10		equals the market average risk premium times the beta. Since utility stock betas are
11		lower than average, the risk premium for a utility stock is lower than the average market
12		risk premium. Multiplying the beta times the Market Risk Premium gives the risk
13		premium appropriate for the company (or group of comparable companies) being
14		studied.

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4.38%.

WHAT IS THE RISK-FREE RATE?

The risk-free rate is the forecast yield on 30-year U.S. Treasury bonds for May, 2012,

1	Q	WHAT MARKET RISK PREMIUM (MRP) DID YOU USE IN YOUR ANALYSIS?
2	Α	I used 6.7%. This is the historical MRP, as shown in Ibbotson's Stocks, Bonds, Bills and
3		Inflation, 2010 Yearbook.
4	Q	WHAT IS BETA?
5	Α	Beta (B) measures the volatility of a security in comparison to the market as a whole. A
6		beta equal to 1.00 means that a stock's price fluctuates exactly the same as the market
7		as a whole. A beta higher than 1.00 implies the stock's price is more volatile than the
8		market; a beta less than 1.00 implies the security's price is less volatile than the market.
9		For example, the beta for the Las Vegas Sands, a casino company, is 2.70, whereas the
10		beta for American Water Works (MAWC's parent corporation) is 0.65.
11	Q	HOW DID YOU DETERMINE BETA?
12	Α	To determine the beta, I reviewed the betas of the same group of companies that I used
13		in my DCF analysis. Based on this proxy group, the median beta is 0.70 and the average
14		beta is 0.72.

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1	Q	BASED ON YOUR ANALYSIS, WHAT IS THE RETURN ON EQUITY FOR MAWC USING THE
2		CAPM?
3	Α	The return on equity for MAWC, using a risk-free rate of 4.38%, a beta of 0.7 and market
4		risk premium of 6.7%, is:
5		4.38% + 0.7 * 6.7% = 9.1%.
6	Q	DID YOU ADJUST THE BETA?
7	Α	No. The betas I used are from Value Line, which have already been adjusted.
8	Q	WHY ARE THE BETAS ADJUSTED?
9	Α	Over the long-term, it has been shown that companies with betas that are less than one
10		are under-estimated, that is, their risk is actually higher than the risk defined by the beta
11		and companies with betas greater than one are over-estimated, that is, their risk is
12		lower than the risk as shown by its beta. To account for this, betas are adjusted, using
13		the following formula:
14		Adjusted beta = Beta * .75 + (Market Beta*.25) or
15		=.75 Beta + .25 (the Market Beta is 1)
16		If a company has a beta below one, the adjustment will reflect its increased risk and if
17		the company's beta is above one, the adjustment will reflect its lower risk. Since the

1	Value Line betas have been adjusted and therefore reflect each utility's risk, there is no
2	need to "re-adjust" them.

Risk Factors

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- 4 Q ARE THERE OTHER FACTORS TO CONSIDER WHEN DETERMINING THE COMPANY'S
- 5 **ROE?**
- 6 A Yes, the Company's risk profile, including business risk and financial risk, may affect a utility's estimated RoE.
- 8 Q PLEASE COMMENT ON MAWC'S BUSINESS RISK PROFILE.
- As a regulated utility, MAWC's business risk profile is strong. Its parent company's business risk profile, per Standard and Poor's (S&P), is excellent (see Schedule PMA-10, Page 2). S&P uses five basic characteristics to determine business risk, including regulation, markets, operation, competitiveness and management. Regulated water utilities usually have an excellent or strong business risk, since they have a defined service territory that is generally not affected by competition, they provide an essential service and they have regulators that want to support the utility's financial profile.

WHAT FACTORS ARE PART OF THE REGULATION COMPONENT OF BUSINESS RISK? 1 Q 2 These factors include consistency, predictability, efficiency and timeliness of state public Α 3 service commissions and the reduction of regulatory lag. For example, MAWC's Infrastructure System Replacement Surcharge (ISRS) significantly reduces its regulatory 4 lag. The ISRS allows MAWC to collect the cost of new infrastructure in between rate 5 6 cases. This lowers the company's risk because it can collect its costs sooner rather than 7 later. 8 Q PLEASE DISCUSS THE COMPANY'S FINANCIAL RISK.

S&P's criteria, see Schedule PMA-10, Page 2). Compared to the group of comparable

companies, its financial risk is similar.

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12 Q DOES YOUR PROPOSED ROE ADVERSELY AFFECT MAWC'S FINANCIAL RISK?

A No. It will not affect the company's financial ratios to the extent that its bond rating would be lowered. MAWC's financial ratios using my recommended RoE of 9.0% versus their proposed RoE of 11.3% are:

MAWC's parent company's (American Water Works) financial risk is aggressive (using

Table 6

Key Financial Ratios

	FFO/ <u>Debt</u>	Debt/ <u>EBITDA</u>	Debt/ <u>Capital</u>
11.3% RoE	25%	3.12	49.4%
9.0% RoE	23%	3.51	49.4%
S&P Range	20%-30%	3-4	45%-50%

- 1 The ratios using a 9.0% RoE are within the same range as the ratios using an 11.3% RoE.
- 2 The lower RoE should not warrant a change to its bond rating. In fact, the ratios for
- 3 MAWC suggest it has lower financial risk than that of its parent company (significant
- 4 versus aggressive, based on S&P's ratings method). The details of Table 6 are included
- 5 in Schedule BSL-5.

6 Q SHOULD MAWC'S ROE BE ADJUSTED TO REFLECT ITS RISK PROFILE?

- 7 A No. As explained above, MAWC's risk profile as related to the comparable group of
- 8 companies is similar and does not require any adjustment to my recommended RoE.

9 Q PLEASE SUMMARIZE YOUR TESTIMONY.

- 10 A I have estimated a return on equity for MAWC of 9.0%. Determining the appropriate
- return on equity for a utility is not an exact science; one must take into consideration

several factors when doing so, including various estimates of growth, market risk and current risk faced by the company, such as business and financial risk. My recommended RoE will allow MAWC to earn a rate of return that will not adversely affect its credit rating and is fair and equitable to its customers.

DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

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Α

Yes.

Experience of Billie S. LaConte

Ms. LaConte joined Drazen Consulting Group, Inc. in May 1995. Her work has focused on cost allocation, rate design, sales and price forecasts, power cost forecasting, electric restructuring issues, cost of capital issues and contract interpretation.

Ms. LaConte has advised clients on economic and strategic issues concerning the natural gas pipeline, oil pipeline, electric, waste water and water industries. She has prepared cost allocation and rate design studies to provide timely support to clients engaged in settlement negotiations in electric and gas utility proceedings. Ms. LaConte has prepared cost of service studies for wastewater utilities. She has provided power cost forecasting studies to assist clients in project planning, negotiating contracts with electric utilities for standby services and interruptible rates. She has prepared studies on electric and gas utilities' performance-based rates (PBR) and benchmarking programs to evaluate their success and to provide recommendations on methods to be used. Ms. LaConte has worked on contract interpretation to resolve contract disputes for several clients.

Ms. LaConte has provided economic and strategic analysis and contract interpretation for clients located in several jurisdictions, including Georgia, Maine, Iowa, Virginia, Alberta, Québec and Nova Scotia. She has provided financial and cost of service analysis for natural gas pipelines certificate approval from the Federal Energy and Regulatory Commission (FERC) and the Canadian National Energy Board (NEB). Ms. LaConte has testified before the Missouri Public Service Commission on cost allocation, rate design, cost of capital and other matters. She testified before the Alberta Energy and Utilities Board on power cost forecasting issues, electric restructuring issues, sales and price forecasts and cost allocation issues. She has similarly testified before the Iowa Utilities Board, the St. Louis Metropolitan Sewer District Commission, the Nova Scotia Utility and Review Board and the Arkansas Public Service Commission.

Ms. LaConte has a B.A. in mathematics from Boston University, in Boston, 1 2 Massachusetts. She has a M.B.A. in finance from the John M. Olin School of Business, 3 Washington University, St. Louis, Missouri. 4 Drazen Consulting Group offers economic, strategic planning and regulatory consulting services to clients that include industrial utility users, municipalities, schools, hospitals, utilities 5 6 and government agencies. The founding firm (Michael Drazen and Associates) was established 7 in 1937. 8 The firm's work covers all aspects of utility regulation (and deregulation), including 9 revenue requirements, cost of capital, cost analysis, pricing, valuation, performance-based

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regulation and industry restructuring.