Exhibit No.: Issues: Return on Equity Witness: Billie Sue LaConte Sponsoring Party: BJC Healthcare Type of Exhibit: Rebuttal Testimony Case No.: WR-2011-0337 Date Testimony Prepared: January 19, 2012

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)	

REBUTTAL 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

STATE OF MISSOURI)) COUNTY OF ST. LOUIS)

Billie S. LaConte, being of lawful age and duly affirmed, states the following:

- 1. My name is Billie S. LaConte. I am a consultant in the field of public utility economics and regulation and a member of Drazen Consulting Group, Inc.
- 2. Attached hereto and made a part hereof for all purposes is my Rebuttal Testimony consisting of Pages 1 through 20 and Rebuttal Schedule BSL-1.
- 3. I have reviewed the attached Rebuttal Testimony and hereby affirm that my testimony is true and correct to the best of my knowledge and belief.

Gellie Station

Billie S. LaConte

Duly affirmed before me this 19th day of January, 2012.

Contribution Contribution Contribution Contribution St. Louis County Constitution (21)(24)(06)

Sheryl M. F.enelon

Notary Public

My commission expires on July 6, 2015.

TABLE OF CONTENTS

Evaluation of Company's Analyses	2
Discounted Cash Flow Method	
Risk Premium Method	5
CAPM and ECAPM Analyses	9
Comparable Risk Analysis	13
Additional Adjustments	15
Business and Financial Risk Adjustments	15
Summary	19

REBUTTAL TESTIMONY OF BILLIE SUE LACONTE

CASE NO. WR-2011-0337

1 Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

2 A Billie Sue LaConte, 8000 Maryland Avenue, Suite 1210, St. Louis, Missouri.

3 Q ARE YOU THE SAME BILLIE SUE LACONTE THAT FILED DIRECT TESTIMONY IN THIS

- 4 **PROCEEDING**?
- 5 A Yes, I am.

6 Q WHAT TOPICS ARE COVERED IN THIS EVIDENCE?

- 7 A This testimony will discuss the rate of return on equity (RoE) recommended by Missouri
- 8 American Water Company's (MAWC's) expert witness, Ms. Pauline M. Ahern.

9 Q WHAT ARE THE MAIN POINTS OF THIS TESTIMONY?

- 10 A The main point of this testimony is the return on equity recommended by Ms. Ahern is
- 11 too high. I shall discuss why some of the assumptions used by Ms. Ahern are improper
- 12 and why the adjustments for flotation costs should be excluded. I shall address Ms.
- 13 Ahern's financial and business risk adjustments.

1 Evaluation of Company's Analyses

- 2 Q WHAT IS THE RETURN ON EQUITY THAT MAWC IS REQUESTING?
- 3 A MAWC is requesting a RoE of 11.3%.

4 Q WHAT IS THE BASIS FOR THIS LEVEL OF RETURN?

- 5 A Ms. Ahern used several methods to estimate MAWC's return on equity: (1) the
- 6 Discounted Cash Flow (DCF) method; (2) a risk premium method; (3) Capital Asset
- 7 Pricing Model (CAPM); (4) an Empirical Capital Asset Pricing Model (ECAPM); and (5) a
- 8 "comparable risk" method. She then made adjustments to reflect financial and business
- 9 risk and added an adjustment for flotation cost to determine her recommended return
- 10 on equity.

Table 1

MAWC Recommended RoE

Method	<u>RoE</u>	<u>Adjustments</u>	<u>%</u>	Recommended <u>Return on Equity</u>
DCF Method	9.54%	Financial Risk	-0.07%	
Risk Premium Method	10.40%	Flotation Cost	0.12%	
CAPM/ECAPM	10.33%	Business Risk	<u>0.40%</u>	
Comparable Risk Method	<u>13.26%</u>			
Average*	10.85%	Total Adjustments	0.45%	11.30%

*Actual average is 10.88%; Schedule PMA-1, Page. 2 of 2, shows 10.85%.

1 Discounted Cash Flow Method

2	Q	PLEASE DESCRIBE MS. AHERN'S DCF ANALYSES.
3	А	Ms. Ahern used a single stage DCF method. The DCF method is used by investors to
4		determine the present value of a stock, based on future cash flows (dividends), which
5		are discounted by the stock's known return and its forecast growth rate. The DCF was
6		applied to a proxy group of nine water utilities. The utilities included in her proxy group
7		are:

Table 2

Proxy Group

American States Water Co. American Water Works Co., Inc. Aqua America, Inc. Artesian Resources Corp. California Water Service Group Connecticut Water Service, Inc. Middlesex Water Company SJW Corporation York Water Company

8 Q WHAT IS THE ROE MS. AHERN CALCULATED USING THE SINGLE STAGE DCF?

9 A She estimated the RoE as 9.54%.

10 Q DO YOU HAVE ANY COMMENTS ABOUT MS. AHERN'S DCF ANALYSIS?

- 11 A Yes. A single stage DCF may overstate or understate a company's RoE over the long-
- 12 term, because the growth rates are based on analysts' forecasts for the next 3-5 years.

For example, the average growth rate for SJW Corporation is 12.33%. This is much
 higher than the long-term GDP forecast of 5.2%. If SJW Corporation were to grow at
 that rate every year, it would eventually exceed GDP. Analysts' growth rates should be
 viewed in conjunction with other growth estimates to achieve a reasonable forecast of
 expected earnings.

6

Q

WHAT DO YOU RECOMMEND?

7 A Ms. Ahern should use the two-stage DCF method in addition to the single-stage DCF.

8 The two-stage model recognizes short-term growth (whether it be lower or higher than

9 the long-term), but also accounts for a more realistic, long-term growth rate. The

10 combination of these two methods provides a more balanced RoE estimate.

11 Q WHY IS THE TWO-STAGE METHOD USED?

12	Α	Analysts' g	growth forecas	sts for the first	stage (next five	e years) ma	y not be sustainable for
----	---	-------------	----------------	-------------------	------------------	-------------	--------------------------

13 the long-term. The two-stage model uses a short-term growth rate along with a long-

14 term growth rate to estimate the RoE. The underlying assumption is that mature,

- 15 established companies can grow at a rate that is similar to or lower than the GDP
- 16 growth rate. While some companies in the economy will grow faster than GDP for a
- 17 while, this cannot happen consistently over a long period.

18 Q DID YOU ESTIMATE MAWC'S ROE USING MS. AHERN'S DATA AND THE TWO-STAGE 19 DCF METHOD?

- 1 A Yes. Using Ms. Ahern's single-stage DCF data, along with a forecast long-term GDP
- 2 growth rate of 5.2% produces a RoE of 8.3%.

Estimate of MAWC's ROE using 2-Stage DCF Analysis

<u>Utility</u>	Estimated <u>ROE</u>
American States Water	8.1%
American Water	8.4%
Aqua America	8.1%
Artesian Resources Corporation *	9.1%
California Water	8.3%
Connecticut Water Services *	8.4%
Middlesex Water	8.8%
SJW Corporation	8.1%
York Water Company *	7.9%
Average	8.4%
Median	8.3%

Based on stock price and dividend information from Schedule PMA-8, Pages 1-10. See Rebuttal Schedule BSL-1.

3 Q HOW DID YOU ESTIMATE THE FORECAST GDP GROWTH RATE?

- 4 A In my direct testimony, I used a forecast growth rate of 5.2%, based on the
- 5 Congressional Budget Office's report *The Budget and Economic Outlook: Fiscal Years*
- 6 *2011-2021*, Page 29, Table 2-1.

7 Risk Premium Method

- 8 Q PLEASE DESCRIBE MS. AHERN'S RISK PREMIUM METHOD.
- 9 A The risk premium method used by Ms. Ahern uses the formula:

 $R_b + \beta * ERP = RoE$ 1 2 Where R_b is the prospective yield on an A-rated utility bond, β is the price volatility of a 3 stock relative to the market as a whole and the equity risk premium (ERP) is the 4 difference between total market return from 1924-2010 and the average yield on 5 corporate bonds. 6 Q DO YOU HAVE ANY COMMENTS ABOUT MS. AHERN'S ESTIMATE OF THE PROSPECTIVE 7 **BOND YIELD?** 8 Yes. Ms. Ahern uses a series of adjustments to estimate the prospective bond yield. А 9 These adjustments include the difference in historical yields for Aaa-rated corporate bonds (current yield of 5.43%) and A-rated public utility bonds, plus another adjustment 10 11 to reflect the difference in the bond yield for the proxy group and an A-rated public 12 utility bond. The first adjustment is 0.40%, which is the difference in prospective Aaa corporate bond yields and prospective A-rated public utility bonds (Schedule PMA-10, 13 Page 4). The second adjustment is based on the assumption that the average rating for 14 15 the proxy group is A3 (Schedule PMA-10, p.2). This is based on two of the nine companies' Moody's ratings information (seven of the nine companies in the proxy 16 17 group do not have Moody's ratings information). The companies with Moody's ratings are rated A2 and Baa1 or an average of A3. An average based on two companies is not 18 an accurate representation of the group. Schedule PMA-10 Page 4 shows that all of the 19 20 companies have Standard and Poor's bond ratings. The average is A+, which is

equivalent to a Moody's rating of A1. Therefore, no additional adjustment is needed
 and the correct yield is 5.83%.

3	Q	PLEASE COMMENT ON MS. AHERN'S ESTIMATE OF THE EQUITY RISK PREMIUM.
4	A	Ms. Ahern's equity risk premium of 4.43% is overstated. It is based on an average of
5		historical and forecast data. She uses two formulas to estimate the ERP and uses the
6		average of the two formulas for her ERP. However, her first method gives too much
7		weight to the forecast data. Ms. Ahern uses the historical ERP of 6.1%, for 1994-2010
8		and averages that with a 5-year forecast ERP of 7.69%, which produces an average ERP
9		of 6.75%. This gives disproportionate weight to the 5-year average. As an example,
10		assume a water customer has 10 months of actual usage and 5 months of forecast
11		usage:

Example of Average Calculation

	Monthly
	Usage
<u>Month</u>	<u>Gallons</u>
1	1,175
2	1,100
3	900
4	875
5	1,180
6	1,150
7	1,425
8	1,200
9	1,000
10	950
11	1,225
12	1,250
13	1,325
14	1,500
15	1,600
Overall average	1,190
1-10 avg. (actual):	1,096
11-15 avg. (forecast):	1,380
Average of 2 avgs:	1,238
Difference (gallons):	47.4
Difference (%):	4.0%

1	Using Ms. Ahern's method, the average is 1,238 gallons per month, or 4% higher than
2	the overall average of 1,190 gallons per month. For estimating the ERP, equal weight
3	should be given to the forecast data. Table 5 shows the correct calculation of the ERP.

Average Market Risk Premium

Avg. ERP 1924-2010:	5.8%
	<u>X 87 years</u>
	504.6
Avg. forecasted ERP:	7.69%
	<u>X 5 years</u>
	38.45
Total ERP:	543.5
Average ERP 1924-2015:	5.9%
Beta	0.7
Beta adj. ERP	4.13%

- 1 As shown above, the average, non-weighted equity risk premium is 4.13%. The second
- 2 method Ms. Ahern uses to estimate the ERP is based on the difference in historical
- 3 holding period returns for the S&P 500 for 1926-2010 and the mean yield on Moody's A-
- 4 rated public utility bond yields for the same period. This results in an ERP of 4.12%,
- 5 which is similar to the non-weighted ERP of 4.13%.

6 Q WHAT IS THE RETURN ON EQUITY USING THE CORRECT BOND YIELD AND ERP?

- 7 A The RoE is:
- 8 5.83% bond yield + 4.13% ERP = 9.96% RoE

9 CAPM and ECAPM Analyses

- 10 Q WHAT IS THE ROE FOR MAWC BASED ON MS. AHERN'S ESTIMATED CAPM ANALYSIS?
- 11 A Ms. Ahern estimated RoE using the CAPM is 10.04%.

1	Q	HOW DID MS. AHERN CALCULATE THE ROE USING THE CAPM?
2	А	She calculated a risk-free rate of 4.78%, a beta of 0.7 and a MRP of 7.52%. The result,
3		therefore, was:
4		10.04% = 4.78% + .7 x 7.52%
5	Q	HOW DID MS. AHERN CALCULATE THE MARKET RISK PREMIUM?
6		Ms. Ahern's market risk premium for her CAPM analysis is based on a combination of
7		the historical market risk premium (MRP) over the income component of long-term
8		treasury bonds for the period 1926 to 2010 and a forecast market risk premium for the
9		next 3-5 years, which produces an average MRP of 7.52%.
10	Q	WHAT IS MS. AHERN'S ESTIMATED BETA?
11	А	Her estimated beta is 0.7. The beta is the average beta of the nine water utilities in her
12		proxy group.
13	Q	DO YOU HAVE ANY COMMENTS ABOUT MS. AHERN'S CAPM ANALYSIS?
14	А	Yes, her calculation of the MRP is overstated. Similar to her risk premium method, Ms.
15		Ahern gives too much weight to her forecast MRP. A more accurate MRP would give
16		equal weight to the forecast data.

Average Market Risk Premium

	Avg. MRP 1924-2010	6.7%			
		<u>X 87 years</u>			
		582.9			
	Avg. forecasted MRP	8.34%			
		<u>X 5 years</u>			
		41.7			
	Total MRP	624.6			
	Average MRP 1924-2015	6.79%			
	Using an MRP of 6.79% produces a RoE of 9.5%				
	9.5% = 4.78% + 0.7	x 6.79%			
_					
Q	PLEASE COMMENT ON MS. AHERN'S EMPIRICAL CAPITAL ASSET PRICING MODEL				
	(ECAPIVI) ANALYSIS.				
Δ	Ms Abern's estimated RoF using the FCAPM m	ethod is 10 61% Th	ne FCAPM is a variant		
~	wis. Allerin's estimated for using the LCAPIVI method is 10.01%. The ECAPIVI is a Vallant				
	of the CAPM method. It is based on the theory that the beta values usually calculated				
	from stock price variations-called the "unadjusted" betas-do not accurately reflect the				
	. , , ,				
	riskiness of a stock. That is, if the unadjusted beta is less than 1, the CAPM				
	underestimates the return. If the unadjusted beta is greater than 1, then the CAPM				
	overestimates the return. The ECAPM formula	"adjusts" the beta	to more closely reflect		
	the stock's risk				
	Q A	Avg. MRP 1924-2010 Avg. forecasted MRP Total MRP Average MRP 1924-2015 Using an MRP of 6.79% produces a RoE of 9.5% 9.5% = 4.78% + 0.7 x Q PLEASE COMMENT ON MS. AHERN'S EMPIRICA (ECAPM) ANALYSIS. A Ms. Ahern's estimated RoE using the ECAPM m of the CAPM method. It is based on the theory from stock price variations-called the "unadjusted b underestimates the return. If the unadjusted b underestimates the return. The ECAPM formula	Avg. MRP 1924-2010 6.7% X 87 years 582.9 Avg. forecasted MRP 8.34% X 5 years 41.7 Total MRP 624.6 Average MRP 1924-2015 6.79% Using an MRP of 6.79% produces a RoE of 9.5%. 9.5% = 4.78% + 0.7 x 6.79% Q PLEASE COMMENT ON MS. AHERN'S EMPIRICAL CAPITAL ASSET P (ECAPM) ANALYSIS. A A Ms. Ahern's estimated RoE using the ECAPM method is 10.61%. The of the CAPM method. It is based on the theory that the beta value from stock price variations-called the "unadjusted" betas-do not a riskiness of a stock. That is, if the unadjusted beta is less than 1, the underestimates the return. If the unadjusted beta is greater than 1 overestimates the return. The ECAPM formula "adjusts" the beta tage		

12 Q HOW DOES THE ECAPM ADJUST THE BETA?

13 A The adjusted beta is defined as:

1		Adjusted beta = .25 + .75B
2		In other words, the adjusted beta is a weighted average of the actual beta (weighted
3		75%) and the market average beta of 1.00 (weighted 25%). The beta Ms. Ahern used for
4		her CAPM analysis is 0.7, so the adjusted beta is:
5		.25 + .75 x .70 = .775
6		The ECAPM formula is:
7		Expected RoE = Risk-free Rate + <i>Adjusted beta</i> x Market Risk Premium
8		The equivalent ECAPM formula used by Ms. Ahern is:
9		RoE = R _f + .25 (MRP) + .75 * B * MRP
10		The ECAPM gives less weight to the equity risk premium and more weight to the total
11		market risk premium, which increases the RoE.
12	Q	WHAT IS MS. AHERN'S ESTIMATED ROE USING THE ECAPM METHOD?
13	А	She calculated a risk-free rate of 4.78%, an adjusted beta of 0.775 and a MRP of 7.52%.
14		The result, therefore, was:
15		10.61% = 4.78% + .775 x 7.52%
16	Q	DO YOU AGREE WITH MS. AHERN'S ECAPM ANALYSIS?
17	А	No. The betas she uses, which come from Value Line, have been adjusted by analysts;
18		no further adjustment is necessary. Most regulated water utilities have a beta that is
19		less than one, so ECAPM will always result in higher RoEs. Furthermore, as described
20		above, the MRP is overstated.

1 Comparable Risk Analysis

2	Q	PLEASE COMMENT ON MS. AHERN'S COMPARABLE RISK ANALYSIS.
3	А	Ms. Ahern's comparable risk analysis estimates MAWC's RoE based on the estimated
4		return on equity for a group of companies that are non-price regulated but deemed to
5		have comparable risk to the proxy group of regulated water utilities.
6	Q	HOW DID MS. AHERN DETERMINE WHICH COMPANIES TO INCLUDE IN HER
7		COMPARABLE GROUP?
8	А	Ms. Ahern used 41 non-regulated, domestic, non-utility companies based on a statistical

9 analysis of stock market prices. The analysis determined which companies have similar

10 market, financial and business risk as the proxy group.

11 Q HOW DID MS. AHERN ESTIMATE THE ROE FOR THE COMPARABLE GROUP?

- 12 A She estimated the expected rate on book equity, net worth or partner's capital for each
- 13 company. The estimated RoE using this method was 15%. She also applied the DCF
- 14 method (12.48% RoE), the risk premium method (11.39%) and CAPM/ECAPM (10.66%)
- 15 to the comparable group, which produced an average RoE of 11.51%. She averaged the
- 16 15% RoE and the 11.51% RoE which produces a comparable risk RoE of 13.26%.

17 Q IS IT APPROPRIATE TO USE THE COMPARABLE RISK METHOD TO ESTIMATE MAWC'S

18 **RETURN ON EQUITY?**

A No. Ms. Ahern's comparable risk method relies partially on the accounting return on
 book value of common equity, net worth or partner's capital, which may be more or less
 than the rate of return required by investors.

4 Q ARE THE ROE ESTIMATES USING THE DCF, RPM, CAPM AND ECAPM METHODS USING

5 THE COMPARABLE RISK COMPANIES RELIABLE?

- A No. It is not appropriate to compare regulated companies with those that face marketbased competition with respect to allowed return. Furthermore, these methods used
- 8 by Ms. Ahern have the same errors as stated previously.

9 Q SHOULD THE COMPANY USE THE COMPARABLE RISK METHOD TO ESTIMATE ITS

10 **RETURN ON EQUITY?**

A No. For the reasons stated above, the comparable risk method should be excluded from
the Company's estimated RoE. Indeed, the comparable *earnings method* (estimating
the RoE based on the book value of common equity, net worth or partners' capital,
which Ms. Ahern uses in her comparable risk method) is not an accepted method and

- 15 has been disallowed by other commissions, including the Illinois Commerce Commission
- 16 (*Re Consumers Illinois Water Company Docket No. 03-0403*) and the Connecticut
- 17 Department of Public Utility Control (*Re Aquarion Water Company of Connecticut*
- 18 *Docket No. 04-02-14*). Including the comparable risk method inflates Ms. Ahern's
- 19 overall RoE recommendation. Without the comparable risk method, her recommended
- 20 RoE would be 10.54%, as compared to 11.45%.

1 Additional Adjustments

2	Q	PLEASE COMMENT ON THE ADJUSTMENT FOR FLOTATION COSTS.
3	А	Flotation costs include two components. The first is the actual cost paid by the
4		company to the underwriter for issuing the stock. The second is indirect and represents
5		the claimed decrease in the price of the stock resulting from the issuance of new shares.
6		Ms. Ahern estimated the flotation cost for MAWC by "modifying her DCF calculation to
7		provide a dividend yield that would reimburse investors for issuance costs" (Direct
8		Testimony of Pauline Ahern, p. 67, lines 5-6). This increased her estimated RoE by 12
9		basis points.
10	Q	SHOULD THE FLOTATION COST ADJUSTMENT BE INCLUDED WHEN ESTIMATING
11		MAWC'S RETURN ON EQUITY?

12 A No. In the past, the Commission has allowed utilities to expense flotation costs and

- 13 collect them over a period of time. If American Water Works, Inc. (AWW), MAWC's
- 14 parent company, was planning to issue stock during the test year period that would be
- 15 used to increase MAWC's common equity ratio, then the flotation cost should be
- 16 reflected as an expense and no flotation cost adjustment to the RoE would be needed.

17 Business and Financial Risk Adjustments

18 Q PLEASE COMMENT ON MS. AHERN'S BUSINESS RISK ADJUSTMENT.

19 A Ms. Ahern added 40 basis points (0.40%) to her recommended RoE to reflect MAWC's

20 increased business risk due to its smaller size in relation to the proxy group. Ms. Ahern

- 1 compared MAWC's capitalization to the average capitalization of the proxy group to
- 2 determine the size of the business risk adjustment.
- 3

Q DO YOU AGREE WITH THIS ADJUSTMENT?

- 4 A No, I do not. Ms. Ahern is comparing an estimated market capitalization of \$776 million
- 5 for MAWC to the average market capitalization of the proxy group. However, the
- 6 average market capitalization is overstated. MAWC's parent company, American Water
- 7 Works, Inc., has a \$5.3 billion market capitalization, which has the effect of significantly
- 8 increasing the average.

<u>Line</u>	<u>Company</u>	Description	Market to <u>Book Ratio</u> (1)	Market Cap. <u>\$ millions</u> (2)
1	American States Water Co.		170.6%	\$644.26
2	American Water Works Co., Inc.		127.1%	<i>5,251.63</i>
3	Aqua America, Inc.		268.5%	3,152.49
4	Artesian Resources Corp.		157.8%	150.14
5	California Water Service Group		181.0%	788.32
6	Connecticut Water Service, Inc.		191.9%	218.74
7	Middlesex Water Company		168.5%	292.02
8	SJW Corporation		169.3%	431.88
9	York Water Company		244.6%	\$223.25
10	Average		186.6%	\$1,239.19
11	Average excluding AWW		194.0%	\$737.64
12	Median		170.6%	\$431.88
13	Median excluding AWW		175.8%	\$361.95
14	MAWC total common equity as of	12/31/10		\$415.72
	MAWC estimated market capitalization			
15	Using median	l.14, c.2 * l.12, c.2		\$709.21
16	Using average excluding AWW	l. 14, c.2 * l.11, c.2		\$806.59

Та	ble	e 7
	~	- -

Calculation of MAWC's Business Risk as Compared to Proxy Group

1	Table 7 shows the market capitalization for each company in the proxy group, using data
2	from Schedule PMA-17, Page 2. The median market capitalization is a better reflection
3	of the proxy group's capitalization, because it mitigates the effects of any outliers.
4	Using the median market capitalization shows that MAWC has less business risk than
5	the proxy group (median capitalization is \$432 million compared to MAWC's estimated
6	\$709 million). Therefore, using the tables from Schedule PMA-17, Page 1, MAWC's RoE
7	should be adjusted <i>downward</i> by 53 basis points or 0.53%.

Business Risk Adjustment Calculation

<u>Description</u>	<u>MAWC</u>	Proxy <u>Group</u>
Market capitalization per MAWC	\$775.7	\$1,239.2
Size premium	2.27%	1.85%
Spread from size premium	0.42%	
Market cap. using median data	\$709.2	\$431.9
Size premium	2.27%	2.80%
Spread from size premium	-0.53%	

8 Q PLEASE COMMENT ON MS. AHERN'S FINANCIAL RISK ADJUSTMENT.

9 A Ms. Ahern's financial risk adjustment is -0.07%. The adjustment Ms. Ahern used is

10 based on a comparison of MAWC's common equity ratio (50.64%) as of December 31,

11 2011 to the proxy group's average common equity ratio (49.03%) as of December 31,

12 2010. Because MAWC has a higher common equity ratio and a lower debt ratio than

13 the proxy group, it has slightly lower business risk. Ms. Ahern estimates the adjustment

1	using the Hamada equation, which uses the CAPM to estimate the proxy group's RoE
2	using a beta that has been altered to reflect MAWC's financial risk. The difference in
3	this new RoE and the original proxy group RoE using the CAPM is the financial risk
4	adjustment.

5 Q DO YOU AGREE WITH HER FINANCIAL RISK ADJUSTMENT?

6	А	The calculation of the re-levered beta is incorrect. Ms. Ahern states that she compared
7		MAWC's December 31, 2011 common equity ratio to the proxy group's average
8		December 31, 2010 common equity ratio to estimate the financial adjustment.
9		However, it appears that she used MAWC's December 31, 2010 common equity ratio of
10		50.39%, which is slightly lower than its December 31, 2011 common equity ratio of
11		50.64%. Using the 2011 figure lowers the financial adjustment to -0.14%, using Ms.
12		Ahern's CAPM assumptions and to -0.15%, using the corrected CAPM assumptions, as
13		described above.

MAWC		Proxy Group	
Debt	49.36%	Debt	50.97%
Equity	50.64%	Equity	49.03%
Beta	0.7		
Unlevered beta	42%		
			Financial
Re-levered beta	68%		<u>Adjustment</u>
MAWC Version			
RoE using CAPM where,	9.40%	9.53%	-0.14%
Beta	0.68	0.7	
MRP	<i>6.79%</i>	6.79%	
Risk free rate	4.78%	4.78%	
BJC Corrected Version			
RoE using CAPM where,	9.89%	10.04%	-0.15%
Beta	0.68	0.7	
MRP	7.52%	7.52%	
Risk free rate	4.78%	4.78%	

1 Summary

2 Q WHAT IS MAWC'S ROE USING YOUR CHANGES TO MS. AHERN'S CALCULATIONS?

3 A MAWC's estimated RoE, using Ms. Ahern's data groups adjusted as described above,

4 would be:

<u>Method</u>	<u>Ms. Ahern</u>	<u>Changes</u>
Single-stage DCF (no chg)	9.54%	9.54%
Two-stage DCF	N/A	8.30%
RPM	10.40%	9.96%
CAPM/ECAPM	10.33%	9.53%
Comparable Risk	<u>13.26%</u>	<u>N/A</u>
Average	10.85%	9.33%
Financial risk adjustment	-0.07%	-0.15%
Business risk adjustment	0.40%	-0.53%
Flotation cost adjustment	.12%	<u>N/A</u>
Overall average	11.3%	8.65%

Ms. Ahern's RoE Calculations with BJH's Adjustments

1 Q PLEASE SUMMARIZE YOUR COMMENTS REGARDING MS. AHERN'S ANALYSIS.

2 A Ms. Ahern's estimated RoE for MAWC is 11.3%. Her estimate is based on several

3 analyses and adjustments for flotation costs and business and financial risks. The

4 estimated RoE is too high due to her reliance on the single-stage DCF model, errors in

5 her RPM, CAPM and ECAPM analyses, her inclusion of a comparable risk method, her

6 errors in the calculation of the financial and business risk adjustments and her inclusion

7 of a flotation adjustment. My corrections to her analysis show that MAWC's requested

8 RoE is excessive and should not be allowed.

9 Q DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

10 A Yes.