Exhibit No.:

Issues: Return on Equity
Witness: Billie Sue LaConte

Sponsoring Party: Missouri Energy Group

Type of Exhibit: Direct Testimony

Case No.: ER-2011-0028

Date Testimony Prepared: February 8, 2011

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of Union Electric Company d/b/a)	
AmerenUE for Authority to File Tariffs Increasing)	Case No. ER-2011-0028
Rates for Electric Service Provided to Customers)	
In the Company's Missouri Service Area.)	

DIRECT TESTIMONY AND SCHEDULES

OF

BILLIE SUE LACONTE

ON BEHALF OF

MISSOURI ENERGY GROUP

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of Union Electric Company d/b/a) AmerenUE for Authority to File Tariffs Increasing) Case No. ER-2011-0028 Rates for Electric Service Provided to Customers)
In the Company's Missouri Service Area.)
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:
 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 Direct Testimony consisting of Pages 1 through 18, Appendix A and Schedules BSL-1 to BSL-6.
I have reviewed the attached Direct Testimony and hereby affirm that my testimony is true and correct to the best of my knowledge and belief.
Billie S. KaConte
Duly affirmed before me this 8 th day of February, 2011.
Notary Public
My commission expires on August 7, 2013. CAROL J. INSALACO My Commission Expires August 7, 2013 St. Louis County Commission #09486213

TABLE OF CONTENTS

MEG's Recommended Return on Equity	
MEG Discounted Cash Flow Method	3
DCF Model	3
Risk Premium Method	
Capital Asset Pricing Model	12
Risk Factors	

DIRECT TESTIMONY OF BILLIE SUE LACONTE CASE NO. ER-2011-0028

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 the Missouri Energy Group (MEG). Members of the
11		group served by Ameren Missouri are Barnes-Jewish Hospital, Buzzi Unicem USA, Inc.
12		and SSM HealthCare.

1 Q WHAT ARE THE MAIN POINTS OF YOUR TESTIMONY?

- 2 A They are:
- Based on current market conditions, the appropriate and fair rate of return on
- 4 equity (RoE) for Ameren Missouri (AMMO) is in the range of 9.7%-10.6%, with a
- 5 mid-point RoE of 10.2%.
- AMMO's estimated RoE is affected by other risk-reducing factors, such as the
- 7 Environmental Cost Recovery Mechanism (ECRM). If the Commission allows AMMO
- an ECRM, AMMO's RoE should be at the lower end of the range–9.7%-9.9%.

9 **MEG's Recommended Return on Equity**

10 Q WHAT RETURN ON EQUITY DID YOU CALCULATE FOR AMMO?

- 11 A Based on my analysis, I have determined a return on equity in the range of 9.7% to
- 12 10.6%. The components of this are shown in Table 1.

Table 1

Recommended Return on Equity

Method	<u>RoE</u>
DCF Method-Constant Growth (Analyst Growth) DCF Method-Constant Growth (GDP Growth)	10.5% 10.6
DCF Method-Two-stage Growth (Analyst Growth) DCF Method-Two-stage Growth (GDP Growth)	10.1 10.4
Risk Premium Method with current rate Risk Premium Method with forecast rate	10.0 9.7
CAPM	9.0
ECAPM	9.5%

1	Q	HOW DID YOU CALCULATE THE RECOMMENDED RETURN ON EQUITY?
2	Α	I used two Discounted Cash Flow (DCF) methods and the Risk Premium Method to
3		estimate AMMO's RoE. I also used the Capital Asset Pricing Method (CAPM) to check
4		the reasonableness of my DCF and Risk Premium analyses.
5	MEG	Discounted Cash Flow Method
6	Q	PLEASE DISCUSS YOUR DCF ANALYSES.
7	Α	The Discounted Cash Flow methods I used to estimate AMMO's RoE are:
8		The constant growth model using growth estimates from analysts and long-term
9		GDP growth estimates; and
10		The two-stage DCF model that uses analysts' growth estimates and long-term
11		GDP growth estimates.
12	DCF I	Model
13	Q	PLEASE DESCRIBE THE DCF MODEL.
14	Α	The DCF model is used by investors to determine the present value of a stock, based on
15		future cash flows (dividends), which are discounted by the stock's known return and its
16		forecast growth rate. The formula is:

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

- 1 P is the current stock price
- 2 D is the dividend yield
- 3 r is the rate of return
- 4 g is the growth rate
- 5 We can re-arrange the formula thus:

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

- 6 In other words, the expected return equals (1) the current dividend rate, plus (2) the
- 7 expected growth in dividends. The expected growth in dividends is also measured by
- 8 the expected growth in earnings.
- 9 Q HOW DID YOU DETERMINE THE VALUES FOR THE STOCK PRICE, GROWTH RATE
- 10 **DIVIDEND?**
- 11 A The stock prices are based on the average stock prices from November 1, 2010 to
- January 31, 2011, from Yahoo Finance. The growth rates are the forecast EPS growth
- rate for the next five years from Value Line Investment Analyzer (Value Line), Zacks and
- 14 Yahoo Finance. The dividends are the average of actual 2010 and forecast 2011, also
- 15 from Value Line.

1 Q WHAT COMPANIES DID YOU INCLUDE IN YOUR DCF ANALYSIS?

- 2 A I started with the integrated electric utilities that make up the S&P's Utility Index. This
- 3 index is a good representation of the electric utility industry.

Table 2

S & P Utility Index

Allegheny Energy

American Electric Power Co.

Ameren Corp.

CMS Energy

Consolidated Edison Inc.

DTE Energy Co.

Dominion Resources, Inc.

Duke Energy

Entergy Corp.

Exelon Corp.

FirstEnergy

Integrys Energy Group, Inc.

PPL Corp.

Pepco Holdings, Inc.

Pinnacle West Capital Corp.

Progress Energy

Southern Co.

TECO Energy, Inc.

Wisconsin Energy Corp.

Xcel Energy Inc.

- 4 I then excluded Duke Energy, Progress Energy, Allegheny Energy and FirstEnergy due to
- 5 recent merger activity.

1 Q DID YOU EXCLUDE ANY OTHER COMPANIES?

- 2 A Yes. Certain companies, including Ameren, Exelon Corporation and PPL Corporation,
- 3 have negative growth forecasts, so I removed them. Including these companies lowers
- 4 the estimated RoE to 10.1%.

5 Q WHAT IS YOUR ESTIMATED ROE USING THE SINGLE STAGE DCF WITH ANALYSTS'

GROWTH ESTIMATES?

7 A The resulting list of companies and their estimated RoEs are:

Table 3
Estimated RoE Single Stage DCF
with Analyst Growth Rates

<u>Utility</u>	Estimated <u>RoE</u>
American Electric Power	8.5%
CMS Energy	11.5
Consolidated Edison Inc.	8.7
DTE Energy Co.	10.5
Dominion Resources, Inc.	9.5
Entergy Corp.	6.6
Integrys Energy Group, Inc.	18.8
Pepco Holdings, Inc.	10.8
Pinnacle West Capital Corp.	11.9
Southern Co.	9.6
TECO Energy, Inc.	11.7
Wisconsin Energy Corp.	12.7
Xcel Energy Inc.	10.5
Group average	10.9
Group median	10.5%

1 Q IS IT REALISTIC FOR A UTILITY TO HAVE A NEGATIVE GROWTH FORECAST? 2 Α For the short-term, yes; for the long-term, no. This points out one of the problems inherent to the single stage DCF-whether the forecasts are realistic. For example, the 3 4 five-year growth forecasts for Integrys range from 7.9%-21%. The DCF model estimates 5 the RoE using expected long-term growth rates, whereas the analysts' forecast growth rates are for the next 3-5 years. These may be higher (or lower) than reasonably 6 expected over the long-term. 7 8 PLEASE DESCRIBE YOUR ROE ESTIMATE USING THE SINGLE STAGE DCF METHOD AND Q LONG-TERM GDP GROWTH. 9 10 Α This is similar to my first DCF analysis, except the long-term forecast growth in GDP is used for the growth component. 11 12 Q WHY IS THIS USED? Α The underlying assumption is that mature, established companies can grow at a rate 13 that is similar to or lower than the GDP growth rate. While some companies in the 14 15 economy will grow faster than GDP for a while, this cannot happen consistently over a long period. 16

1 Q HOW DID YOU DETERMINE THE LONG-TERM GDP GROWTH RATE?

- 2 A The long-term GDP growth rate is the historical GDP growth rate, 5.75%. This was
- 3 calculated in Ameren Missouri witness Robert B. Hevert's Workpaper GDP Growth, as
- 4 shown in the response to data request MIEC 5.1.

5 Q WHAT IS THE ROE USING THIS METHOD?

6 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 Electric Power Co.	10.7%
Ameren Corporation	11.1
CMS Energy	9.9
Consolidated Edison Inc.	10.6
DTE Energy	10.7
Dominion Resources, Inc.	10.2
Entergy Corporation	10.3
Exelon Corporation	10.9
Integrys Energy Group, Inc.	11.3
PPL Corporation	11.2
Pepco Holdings, Inc.	11.6
Pinnacle West Capital Corporation	10.9
Southern Company	10.6
TECO Energy, Inc.	10.5
Wisconsin Energy Corporation	8.9
Xcel Energy Inc.	10.1
Average	10.6
Median	10.6%

This method produces a more homogeneous group of results.

1 Q PLEASE DESCRIBE YOUR TWO-STAGE DCF ANALYSES.

2

3

4

5

6

7

8

10

11

12

13

14

15

16

Α

The *first* 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 -150) to calculate the growth in dividends. The *second* two-stage DCF method uses the forecast growth rates for dividends for the first stage and an average of the analysts' forecast five-year growth rates for earnings. Using these inputs, the model calculates the required internal rate of return to meet these dividend growth rates, or the return on equity.

9 Q WHY IS THE TWO-STAGE METHOD USED?

Analysts' growth forecasts for the first stage (next four 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 Integrys is 13.3% and for Wisconsin Energy, 9.6%. These are not sustainable compared to a historical GDP growth of 5.75%. 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.
- 3 Q WHAT IS YOUR ESTIMATED ROE USING THE TWO-STAGE DCF METHOD?
- 4 A The estimated RoE is 10.1% using the analysts' average growth forecasts and 10.4%
- 5 using long-term GDP growth.

Table 5

<u>Estimated RoE Using Two-Stage DCF Method</u>

<u>Utility</u>	Average of Analysts' Growth <u>Forecasts</u>	Long-term <u>GDP</u>
American Electric Power Co.	10.2%	10.4%
Ameren Corporation	10.2	10.4
CMS Energy	9.9	10.3
Consolidated Edison Inc.	9.8	10.0
DTE Energy	10.3	10.6
Dominion Resources, Inc.	10.1	10.5
Entergy Corporation	9.7	10.0
Exelon Corporation	10.0	10.1
Integrys Energy Group, Inc.	10.3	10.5
PPL Corporation	10.7	11.0
Pepco Holdings, Inc.	10.8	11.0
Pinnacle West Capital Corporation	10.3	10.5
Southern Company	10.1	10.4
TECO Energy, Inc.	10.0	10.3
Wisconsin Energy Corporation	9.1	9.5
Xcel Energy Inc.	9.6	9.9
Average	10.1	10.3
Median	10.1%	10.4%

1 Q HOW DID YOU ESTIMATE THE ANALYSTS' AVERAGE LONG-TERM GROWTH RATE? 2 Α This is the average 5-year growth rate for the companies in my proxy group, excluding those companies with negative growth forecasts. The average growth rate is 5.57%. 3 (See Schedule BSL-1, Line 20 for derivation.) 4 5 Risk Premium Method WHAT IS THE RISK PREMIUM METHOD? 6 Q 7 The risk premium method states that the expected return of a security equals the risk-Α free rate plus a risk premium. Simply put, investors require a premium over the risk-8 9 free rate if they are going to invest their money in a riskier security. WHAT RISK PREMIUM METHODS DID YOU USE? 10 Q 11 Α I used two risk premium methods, one based on current long-term debt yields plus the 12 utility equity risk premium and another using projected long-term debt yields plus the 13 utility equity risk premium. PLEASE DESCRIBE YOUR RISK PREMIUM ANALYSES. 14 Q The risk premium method uses (1) the average electric utility authorized RoEs for each 15 Α 16 year in the period 1992-2010 (11.12%), minus (2) the average long-term US treasury 30-17 year bond rates for the same year (5.62%) to determine the annual risk premium

1 (11.12% – 5.62% = 5.5%). This is added to the current and forecast yields on long-term
2 US 30-year treasury bonds (the risk-free rate) to estimate AMMO's return on equity.
3 For the risk-free rate, I used the current yield 30-year US Treasury bonds, or
4 4.45%, and the forecast yield on 30-year US Treasury bonds, or 4.2%. This rate is
5 considered to be risk-free because the return is guaranteed by the U.S. government.
6 Adding the average risk premium results in an estimated RoE of 10.0% and 9.7%,
7 respectively.

Table 6

Risk Premium Method to Estimate AMMO's RoE

	Using Current Bond <u>Yield</u>	Using Forecast Bond <u>Yield</u>
Bond yield Utility risk premium	4.45% 5.50	4.20% <u>5.50</u>
RoE	10.0%	9.7%

8 Capital Asset Pricing Model

- 9 **Q PLEASE DESCRIBE THE CAPM.**
- 10 A The CAPM is another risk premium method that is used to estimate the return on equity.
- 12 The formula for the CAPM is:
- 13 Expected RoE = Risk-free Rate + Beta * Market Risk Premium

The "equity risk premium" for a particular stock is the market risk premium times the stock's beta. The market risk premium is the difference between the return on the market *on average* (i.e., all stocks) and the risk-free rate. Thus, it is the risk premium that reflects the risk on an average stock. The beta is the price volatility of that stock relative to the market as a whole. Thus, the risk premium for a *specific* stock equals the *market average* risk premium times the beta. Since utility stock betas are lower than average, the risk premium for a utility stock is lower than the average market risk premium.

9 **Q** WHAT IS THE RISK-FREE RATE?

1

2

3

4

5

6

7

8

15

10 A The risk-free rate is the current yield on 30-year U.S. Treasury bonds, the same as used in the first Risk Premium method.

12 Q WHAT MARKET RISK PREMIUM (MRP) DID YOU USE IN YOUR ANALYSIS?

13 A I used 6.5%. This is the historical MRP, as shown in *Stocks, Bonds, Bills and Inflation*,
 14 2009 Yearbook.

Q WHAT IS BETA?

Beta (B) measures the volatility of a security as in comparison to the market as a whole.

A beta equal to 1.00 means that a stock's price fluctuates exactly the same as the

market as a whole. A beta higher than 1.00 implies the stock's price is more volatile

1 than the market; a beta less than 1.00 implies the security's price is less volatile than the 2 market. For example, the beta for the Las Vegas Sands, a casino company, is 2.90, 3 whereas the beta for Ameren is 0.80. **HOW DID YOU DETERMINE BETA?** 4 Q 5 Α To determine the beta, I reviewed the betas of the same group of companies that I used 6 in my DCF analysis. Based on this proxy group, the median beta is 0.70. 7 Q BASED ON YOUR ANALYSIS, WHAT IS THE RETURN ON EQUITY FOR AMMO USING THE 8 CAPM? 9 Α The return on equity for AMMO, using a risk-free rate of 4.45%, a beta of 0.7 and 10 market risk premium of 6.5%, is 9.0%: 4.45% + 0.7 * 6.5% = 9.0%. DID YOU ADJUST THE BETA? 11 Q 12 Α No. The betas I used are from Value Line, which have already been adjusted. WHY ARE THE BETAS ADJUSTED? 13 Q 14 Α Over the long term it has been shown that companies with betas that are less than one are under-estimated, that is, their risk is actually higher than the risk defined by the beta 15 and companies with betas greater than one are over-estimated, that is, their risk is 16

lower than the risk as shown by its beta. To account for this, betas are adjusted, using
 the following formula:

Adjusted beta = Beta * .75 + Market Beta*.25 or

=.75 Beta + .25 (the Market Beta is 1)

3

4

5

6

7

8

9

10

If a company has a beta below one, the adjustment will reflect its increased risk and if the company's beta is above one, the adjustment will reflect its lower risk.

To be fair, I "re-adjusted" the Value Line betas and used this re-adjusted beta to calculate the RoE using the CAPM method. (This is also known as the Empirical Capital Asset Pricing Model (ECAPM)). The adjusted beta is 0.78, which produces an estimated RoE of 9.5%.

Table 7
Estimated RoE Using CAPM and ECAPM

		Value Line Beta	
	<u>Utility</u>	<u>Unadj.</u>	<u>Adj.</u>
1	American Electric Power Co.	0.70	0.78
2	Ameren Corporation	0.80	0.85
3	CMS Energy	0.75	0.81
4	Consolidated Edison Inc.	0.65	0.74
5	DTE Energy	0.75	0.81
6	Dominion Resources, Inc.	0.70	0.78
7	Entergy Corporation	0.70	0.78
8	Exelon Corporation	0.85	0.89
9	Integrys Energy Group, Inc.	0.90	0.93
10	PPL Corporation	0.70	0.78
11	Pepco Holdings, Inc.	0.80	0.85
12	Pinnacle West Capital Corporation	0.70	0.78
13	Southern Company	0.55	0.66
14	TECO Energy, Inc.	0.85	0.89

15	Wisconsin Energy Corporation	0.65	0.74
16	Xcel Energy Inc.	0.65	0.74
17	Group Average	0.73	0.80
18	Group Median	0.70	0.78
19	Risk Free Rate	4.45%	4.45%
20	Market Risk Premium	6.50%	6.50%
21	Estimated RoE In. 19 + (In. 18 * In. 20)	9.0%	9.5%

1 Q WHAT IS THE ROE USING ONLY AMEREN'S BETA?

- 2 A The estimated RoE is 9.7%: 4.45% + 0.80 * 6.5% = 9.7%. Using Ameren's adjusted beta
- 3 (0.85), the estimated RoE is 10.0%: 4.45% + 0.85 * 6.5% = 10.0%.

4 Q DO YOU HAVE ANY OTHER COMMENTS ABOUT THE CAPM?

- 5 A The CAPM provides a good approximation of the return on equity based on long-term
- 6 historical market conditions and provides a check of reasonableness for the DCF and
- 7 Risk Premium analyses.

8 Risk Factors

9 Q ARE THERE OTHER FACTORS TO CONSIDER WHEN DETERMINING THE COMPANY'S

- 10 **ROE?**
- 11 A Yes, the Company's risk profile, including business risk and financial risk.

1 Q PLEASE COMMENT ON AMEREN MISSOURI'S BUSINESS RISK PROFILE. 2 Α Ameren Missouri's business risk profile, as determined by Standard and Poor's, is currently "excellent", as stated in Ameren Missouri's response to data request MIEC 3 05.6. The business risk of a vertically integrated utility has five basic characteristics, 4 5 including regulation, markets, operation, competitiveness and management (Company 6 response to data request MIEC 05.2 Attachment 21, Page 1). Standard and Poor's 7 states that "On Standard & Poor's business profile scale (where '1' is excellent and '10' 8 is vulnerable), vertically integrated utilities generally have satisfactory business profiles 9 of '5' or '6'." (Company response to data request MIEC 05.2 Attachment 21, Page 2). 10 Q WHAT FACTORS ARE PART OF THE REGULATION COMPONENT OF BUSINESS RISK? These factors include consistency, predictability, efficiency and timeliness of state public 11 Α service commissions and the reduction of regulatory lag. For example, AMMO's fuel 12 13 adjustment clause reduces its regulatory lag. IS THERE ANY OTHER FACTOR THAT MAY REDUCE AMMO'S RISK? 14 Q 15 Α Yes. The Company has requested an Environmental Cost Recovery Mechanism (ECRM). The ECRM will allow the Company to collect costs associated with required 16 environmental upgrades on its current plant in-between rate cases. 17

1 Q DOES THE ECRM REDUCE AMMO'S RISK?

Yes. It will remove the regulatory lag associated with these costs (currently estimated at \$110 million) (Direct Testimony of Warner L. Baxter, Page 6, Line 7) and increase the certainty that the company will collect these costs more quickly. Therefore, an ECRM will certainly maintain (if not improve) the Company's excellent business risk profile.

6 Q HOW SHOULD THE REDUCTION IN RISK BE RECOGNIZED?

7 A The increased certainty lowers the utility's risk and its RoE should be at the lower part of 8 my range, 9.7%-9.9%.

9 Q PLEASE SUMMARIZE YOUR TESTIMONY.

I have estimated the return on equity for AMMO within the range of 9.7-10.6%. 10 Α 11 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 the current risk 12 faced by the Company, such as business and financial risk. If the Commission allows 13 14 Ameren Missouri an ECRM, it seems appropriate that the allowed return on equity 15 should reflect this reduction in business risk for the Company. Therefore, a return on equity of 9.7%-9.9% is appropriate for AMMO at this time. If the ECRM is denied, 16 17 AMMO should receive a RoE of 10.2%.

Q DOES THIS CONCLUDE YOUR TESTIMONY?

19 A Yes.

18

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 submitted and delivered expert testimony 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 5 services to clients that include industrial utility users, municipalities, schools, hospitals, utilities 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 10 regulation and industry restructuring.