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March 4, 2016

British Columbia Utilities Commission
Sixth Floor
900 Howe Street
Vancouver, B.C.
V6Z 2N3

Attention: Ms. Laurel Ross, Acting Commission Secretary and Director

Dear Ms. Ross:

Re: Project No. 3698852
FortisBC Energy Inc. (FEI or the Company)
Application for its Common Equity Component and Return on Equity (ROE) for 2016 (the Application)
FEI Witness Panel and Direct Testimony

On October 2, 2015, FEI filed the Application referenced above. In accordance with Exhibit A-6 setting out the Regulatory Timetable for the review of the Application the Oral Hearing is scheduled to commence on March 9, 2016.

FEI will present a Panel of one expert witness, Mr. James M. Coyne from Concentric Energy Advisors, Inc. Attached please find Mr. Coyne's Direct Testimony, his *curriculum vitae*, as well as his opening statement which he will read into the record of the proceeding.

Legal counsel for FEI anticipates making brief opening remarks on the first day of the hearing.

If further information is required, please contact the undersigned.

Sincerely,

FORTISBC ENERGY INC.

Original signed:

Diane Roy

Attachments

cc (email only): Registered Parties

FORTISBC ENERGY INC. (FEI OR THE COMPANY)
Application for Common Equity Component and Return on Equity (ROE) for 2016
(the Application)

Direct Testimony of Mr. James M. Coyne

Q1. *Please state your name.*

A. My name is James Coyne.

Q2. *Your evidence was filed as part of Exhibit B-1, Appendix B in this proceeding, is that correct?*

A. Yes.

Q3. *Does your Resume, which is attached to this Direct Testimony, accurately set out your experience and qualifications?*

A. Yes it does.

Q4. *Have you previously appeared before this Commission?*

A. Yes, I testified in the 2012 Generic Cost of Capital Phase 1 proceeding, My evidence was focussed on automatic adjustment mechanisms (AAM).

Q5. *Does that conclude your direct evidence?*

Q6. *Yes, it does.*



James M. Coyne Senior Vice President

Mr. Coyne provides financial, regulatory, strategic, and litigation support services to clients in the natural gas, power, and utilities industries. Drawing upon his industry and regulatory expertise, he regularly advises utilities, public agencies and investors on business strategies, investment evaluations, and matters pertaining to rate and regulatory policy. Prior to Concentric, Mr. Coyne worked in senior consulting positions focused on North American utilities industries, in corporate planning for an integrated energy company, and in regulatory and policy positions in Maine and Massachusetts. He has authored numerous articles on the energy industry and provided testimony and expert reports before the Federal Energy Regulatory Commission and numerous jurisdictions in the U.S. and Canada. Mr. Coyne holds a B.S. in Business from Georgetown University with honors and an M.S. in Resource Economics from the University of New Hampshire.

REPRESENTATIVE PROJECT EXPERIENCE

Expert Testimony Experience

- Green Mountain Power Company: Before the Vermont Public Service Board, provided expert testimony on the cost of capital for the Company's Vermont Electric Utility Business. (Docket No. 8191)
- Northern States Power Company: Before the Public Service Commission of Wisconsin, provided expert testimony on the cost of capital for the company's Wisconsin electric and natural gas utility operations. (Docket No. 4220-UR-119)
- Hydro Quebec: Before the Régie de l'énergie, filed expert testimony on the cost of capital and business risk for the Company's Québec electric transmission and distribution businesses, with John Trogonoski. (R-3842-2013)
- Enbridge: Before the Ontario Energy Board, filed expert testimony with Jim Simpson and Melissa Bartos in support of the Company's proposed 2nd Generation Incentive Regulation plan. Our work focused on development of a proposed plan consistent with the OEB's objectives for such plans, while recognizing the Company's operating environment and business objectives, and capitalizing on the experience with other IR programs. Concentric conducted a series of analyses, including industry benchmarking, and productivity analyses for the industry and Enbridge using both total factor productivity "TFP" analysis and partial factor productivity ("PFP") analysis. These analyses produced productivity measures ("X factors") for both Enbridge and the industry peer group that were utilized to test parameters for the proposed IR plan. Concentric also evaluated alternative measures of inflation ("I factors") for utility inputs. Lastly, we examined Enbridge's anticipated 2014 to 2016 costs, and evaluated the ability of a traditional I-X framework to accommodate the Company's cost profile. (EB-2012-0459)
- Gaz Métro: Before the Régie de l'énergie, filed expert testimony on the cost of capital, business risk, and capital structure for the Company's Québec gas distribution operations. (R-3809-2012)



- Startrans IO, LLC: Before the Federal Energy Regulatory Commission, filed expert testimony on the appropriate cost of equity for the Startrans transmission facilities in Nevada and California, and the economic and business environment for transmission investments. (FERC Dockets Nos. ER13-272-000, and EL13-26-000)
- Nova Scotia Power: Before the Nova Scotia Utility and Review Board, provided direct and rebuttal evidence on the business risk of Nova Scotia Power in relation to its North American peers for purposes of determining the appropriate cost of capital. (Docket No. 2013 GRA)
- FortisBC Utilities: Before the British Columbia Utilities Commission, provided direct evidence and a supporting study on formulaic approaches to the determination of the cost of capital. (BCUC 2012 Generic Cost of Capital Proceeding)
- Northern States Power Company: Before the South Dakota Public Utilities Commission provided expert testimony on the appropriate cost of capital for the company's South Dakota electric utility operations. (Docket No. EL12 -)
- Vermont Gas Systems, Inc: Before the Vermont Public Service Board, filed expert testimony on the appropriate cost of equity and capital structure. (Docket No. 7803A)
- Northern States Power Company: Before the South Dakota Public Utilities Commission, provided expert testimony on the appropriate cost of capital for the company's South Dakota electric utility operations. (Docket No. EL11-019)
- Public Service Commission of Wisconsin: Provided expert testimony on the cost of capital for the company's Wisconsin electric and natural gas utility operations. (Docket No. 4220-UR-117)
- Atlantic Path 15, LLC: Before the Federal Energy Regulatory Commission, filed expert testimony on the appropriate rate of return for the Path 15 transmission facilities in California, and the economic and business environment for transmission investments. (FERC Dockets Nos. ER11-2909 and EL11-29)
- Enbridge: Cost of capital witness for the company's 2013 rate filing, providing testimony on recommended ROE and capital structure for the company's Ontario gas distribution business, and a separate benchmarking analysis designed to illustrate the efficiency of the company's operations in relation to its' North American peers. (EB-2011-0354)
- Northern States Power Company: Before the Public Service Commission of Wisconsin, provided expert testimony on the cost of capital for the company's Wisconsin electric and natural gas utility operations. (Docket No. 4220-UR-117)
- FortisBC Energy, Inc: Provided a detailed study of alternative automatic adjustment mechanisms for setting the cost of equity, filed with the British Columbia Public Utilities Commission, December, 2010. (In response to BCUC Order No. G-158-09)
- Commonwealth of Massachusetts, Superior Court, Central Water District vs. Burncoat Pond Watershed District: Provided expert testimony on the appropriate method for computing interest in an eminent domain taking. (Civil Action No. WDCV2001-01051, May 2010)
- Retained by the Ontario Energy Board to evaluate the existing DSM regulatory framework and guidelines for gas distributors, and based on research on best practices in other jurisdictions, make recommendations and lead a stakeholder conference on proposed changes. (2009-2010)
- ATCO Utilities: Primary cost of capital witness on behalf of ATCO Utilities in the 2009 Alberta Generic Cost of Capital proceeding, for the establishment of the return on equity and capital structure for each of Alberta's gas and electric utilities. (AUC Proceeding ID. 85)



- Enbridge: Primary cost of capital witness before the Ontario Energy Board in its Consultative Process on the Board's policy for determination of the cost of capital. (EB-2009-0084)
- Provided written comments to the Ontario Energy Board on behalf of Enbridge Gas Distribution, and separately for Hydro One Networks and the Coalition of Large Distributors in response to the Board's invitation to interested stakeholders to provide comments to help the Board better understand whether current economic and financial market conditions have an impact on the reasonableness of the Cost of Capital parameter values calculated in accordance with the Board's established Cost of Capital methodology; and to help the Board determine if, when, and how to make any appropriate adjustments to those parameter values. (2009)
- Atlantic Path 15, LLC: Before the Federal Energy Regulatory Commission, provided expert testimony on the appropriate rate of return, capital structure, and rate incentives for the development and operation of the Path 15 transmission facilities in California. (FERC Docket ER08-374-000)
- Wisconsin Power and Light Company: Before the Public Service Commission of Wisconsin, on establishing ratemaking principles for the company's proposed wind and coal electric generation facility additions, providing expert testimony on the appropriate return on equity. (PSCW Docket Nos. 6680-CE-170 and 6680-CE-171, 2007)
- Aquarion Water Company: Before the Connecticut Department of Public Utility Control, providing expert testimony on establishing the appropriate return on equity for the Company's Connecticut operations. (DPUC Docket No. 07-05-19, 2007)
- Central Maine Power Company: Before the Maine Public Utilities Commission, provided expert testimony on the theoretical and analytical soundness of the Company's sales forecast for ratemaking purposes. (MPUC Docket No. 2007-215, 2007)
- Vermont Gas Systems, Inc.: Before the State of Vermont Public Board, on the company's petition for approval of an alternative regulation plan, provided expert testimony on models of incentive regulation and their relative benefits for VGS and its ratepayers. (VPSB Docket No. 7109, 2006)
- Texas New Mexico Power Company: Before the Public Utility Commission of Texas, on the approval of the company's stranded cost recovery associated with the auction of the company's generating assets. (PUC Docket No. 29206, 2004)
- TransCanada Corporation: Provided an independent expert valuation of a natural gas pipeline, filed with the American Arbitration Association. (AAA Case No. 50T 1810018804, 2004)
- Advised the Board of Directors of El Paso Corporation on settlement matters pertaining to western power and gas markets before FERC. (2003)
- Conectiv: Before the New Jersey Board of Public Utilities, on the approval of the proposed sale of Atlantic City Electric Company's fossil and nuclear generating assets. (NJBPU Docket No. EM00020106, 2000-2001)
- Bangor Hydro Electric Company: Before the Maine Public Utilities Commission, on the approval of the proposed sale of the company's hydroelectric and fossil generation assets. (MPUC Docket No. 98-820, 1998)
- Maine Office of Energy Resources: Before the Maine Public Utilities Commission on behalf of the Maine Office of Energy on the establishment of avoided costs rates for generators under PURPA. (1981-1982)



Regulatory Support Experience

- Retained by Gaz Métro to provide an independent assessment of the comprehensive incentive rate mechanism designed to improve the performance of Gaz Métro, and evaluate the proposed mechanism resulting from the Company's collaboration with a stakeholder working group. (R-3693-2009, 2011)
- For the Canadian Gas Association, facilitated workshops between Canadian regulators and utility executives on regulatory and utility responses to a low carbon world, and drafted follow-up white paper to facilitate further discussion on emerging industry issues. (2010-2013)
- Retained by Ontario's Coalition of Large Distributors (Enersource Hydro, Horizon Utilities, Hydro Ottawa, PowerStream, Toronto Hydro, and Veridian Connections) to examine the cost of capital for Ontario's electric utilities in relation to those in other provinces and in the U.S. (2008)
- Retained by the Ontario Energy Board to analyze ROE awards for the past two years in Ontario, and compare against other jurisdictions in Canada, the U.S., the U.K., and select other European jurisdictions. Differences in awarded ROEs were examined for underlying factors, including ROE methodology, company size, business risks, tax issues, subsidiary vs. parent, and sources of capital. The analysis also addressed the question of whether Canadian utilities compete for capital on the same basis as U.S. utilities. (2007)
- Retained by the Nantucket Planning and Economic Development Commission to educate government officials and island residents on the wind industry, and provide analysis leading to constructive input to the Army Corps of Engineers and the Minerals Management Service on the siting of proposed wind projects. (2004-2007)
- Interim manager of Government and Regulatory affairs for Boston Generating, LLC. Coordinate activities and interventions before FERC, NE-ISO, state regulatory agencies, and local communities hosting Boston Generating power plants. (2004)
- Facilitated the development of an Alternative Regulation Plan with the Department of Public Service and Vermont Gas Systems providing research and advice leading to a rate proposal for the Vermont Public Service Board. Conducted several workshops including the major stakeholders and regulatory agencies to develop solutions satisfying both public policy and utility objectives. (2004-2005)
- For an independent power company, perform market analysis and annual audits of its utility power contract. Services provided include verification of the contract price as a function of its index components, surveys of regional competitive energy suppliers, and analysis of regional spot prices for an independent benchmark. Meet with PUC staff to discuss and represent the company in its annual adjustment process, and report results to the company and its creditors. (2003-2004)

Areas of Expertise

- **Energy Regulation**
 - Rate policy
 - Cost of capital
 - Incentive regulation
 - Fuels and power markets
- **Management and Business Strategy**
 - Fuels and power market assessments
 - Investment feasibility
 - Corporate and business unit planning



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- Benchmarking and productivity analysis
 - **Financial and Economic Advisory**
 - Valuation analysis
 - Due diligence
 - Buy and sell-side advisory
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PUBLICATIONS AND RESEARCH

- “Autopilot Error: Why Similar U.S. and Canadian Risk Profiles Yield Varied Rate-making Results” (with John Trogonoski), Public Utilities Fortnightly, May 2010
 - “A Comparative Analysis of Return on Equity of Natural Gas Utilities” (with Dan Dane and Julie Lieberman), prepared for the Ontario Energy Board, June, 2007
 - “Do Utilities Mergers Deliver?” (with Prescott Hartshorne), Public Utilities Fortnightly, June 2006
 - “Winners and Losers: Utility Strategy and Shareholder Return” (with Prescott Hartshorne), Public Utilities Fortnightly, October 2004
 - “Winners and Losers in Restructuring: Assessing Electric and Gas Company Financial Performance” (with Prescott Hartshorne), white paper distributed to clients and press, August 2003
 - “The New Generation Business,” commissioned by the Electric Power Research Institute (EPRI) and distributed to EPRI members to contribute to a series on the changes in the Power Industry, December 2001
 - Potential for Natural Gas in the United States, Volume V, Regulatory and Policy Issues (co-author), National Petroleum Council, December 1992
 - “Natural Gas Outlook,” articles on U.S. natural gas markets, published quarterly in the Data Resources Energy Review and Natural Gas Review, 1984-1989
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SELECTED SPEAKING ENGAGEMENTS

- “M&A and Valuations,” Panelist at Infocast Utility Scale Solar Summit, September 2010
- “The Use of Expert Evidence,” The Canadian Association of Members of Public Utility Tribunals (CAMPUT) 2010 Energy Regulation Course, Queens University, Kingston, Ontario, June 2010
- “A Comparative Analysis of Return on Equity for Utilities in Canada and the U.S.,” The Canadian Association of Members of Public Utility Tribunals (CAMPUT) Annual Conference, Banff, Alberta, April 22, 2008
- “Nuclear Power on the Verge of a New Era,” moderator for a client event co-hosted by Sutherland Asbill & Brennan and Lexecon, Washington D.C., October 2005
- “The Investment Implications of the Repeal of PUCHA,” Skadden Arps Client Conference, New York, NY, October 2005
- “Anatomy of the Deal,” First Annual Energy Transactions Conference, Newport, RI, May 2005
- “The Outlook for Wind Power,” Skadden Arps Annual Energy and Project Finance Seminar, Naples, FL, March 2005
- “Direction of U.S. M&A Activity for Utilities,” Energy and Mineral Law Foundation Conference, Sanibel Island, FL, February 2002



- “Outlook for U.S. Merger & Acquisition Activity,” Utility Mergers & Acquisitions Conference, San Antonio, TX, October 2001
- “Investor Perspectives on Emerging Energy Companies,” Panel Moderator at Energy Venture Conference, Boston, MA, June 2001
- “Electric Generation Asset Transactions: A Practical Guide,” workshop conducted at the 1999 Thai Electricity and Gas Investment Briefing, Bangkok, Thailand, July 1999
- “New Strategic Options for the Power Sector,” Electric Utility Business Environment Conference, Denver, CO, May 1999
- “Electric and Gas Industries: Moving Forward Together,” New England Gas Association Annual Meeting, November 1998
- “Opportunities and Challenges in the Electric Marketplace,” Electric Power Research Institute, July 1998

PROFESSIONAL HISTORY

Concentric Energy Advisors, Inc. (2006 – Present)

Senior Vice President

Vice President

FTI Consulting (Lexecon) (2002 – 2006)

Senior Managing Director – Energy Practice

Arthur Andersen LLP (2000 – 2002)

Managing Director, Andersen Corporate Finance – Energy and Utilities

Navigant Consulting, Inc. (1996 – 2000)

Managing Director, Financial Services Practice

Senior Vice President, Strategy Practice

TotalFinaElf (1990 – 1996)

Manager, Corporate Planning and Development

Manager, Investor Relations

Manager of Strategic Planning and Vice President, Natural Gas Division

Arthur D. Little, Inc. (1989 – 1990)

Senior Consultant – International Energy Practice

DRI/McGraw-Hill (1984 – 1989)

Director, North American Natural Gas Consulting

Senior Economist, U.S. Electricity Service

Massachusetts Energy Facilities Siting Council (1982 – 1984)

Senior Economist – Gas and Electric Utilities

Maine Office of Energy Resources (1981 – 1982)

State Energy Economist



EDUCATION

M.S., Resource Economics, University of New Hampshire, with Honors, 1981
B.S., Business Administration and Economics, Georgetown University, Cum Laude, 1975

DESIGNATIONS AND AFFILIATIONS

NASD General Securities Representative and Managing Principal (Series 7, 63 and 24 Certifications),
2001
NARUC, Advanced Regulatory Studies Program, Michigan State University, 1984
American Petroleum Institute, CEO's Liaison to Management and Policy Committees, 1994-1996
National Petroleum Council, Regulatory and Policy Task Forces, 1992
President, International Association for Energy Economics, Dallas Chapter, 1995
Gas Research Institute, Economics Advisory Committee, 1990-1993
Georgetown University, Alumni Admissions Interviewer, 1988 – current



SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Alberta Utilities Commission				
ATCO Utilities Group	2008	ATCO Gas; ATCO Pipelines Ltd.; ATCO Electric Ltd.	Application No. 1578571 / Proceeding ID. 85	2009 Generic Cost of Capital Proceeding (Gas & Electric)
American Arbitration Association				
TransCanada Corporation	2004	TransCanada Corporation	AAA Case No. 50T 1810018804	Valuation of Natural Gas Pipeline
British Columbia Utilities Commission				
FortisBC	2012	FortisBC Utilities	G-20-12	Cost of Capital Adjustment Mechanisms
FortisBC	2015	FortisBC Utilities		Return on Equity (Gas)
Connecticut Department of Public Utility Control				
Aquarion Water Company of CT/ Macquarie Securities	2007	Aquarion Water Company of CT	DPUC Docket No. 07-05-19	Return on Equity (Water)
Federal Energy Regulatory Commission				
Atlantic Power Corporation	2007	Atlantic Path 15, LLC	ER08-374-000	Return on Equity (Electric)
Atlantic Power Corporation	2010	Atlantic Path 15, LLC	Docket No. ER11-2909-000	Return on Equity (Electric)
Atlantic Power Corporation	2011	Atlantic Path 15, LLC	Docket Nos. ER11-2909 and EL11-29	Rate of Return (Electric Transmission)
Startrans IO, LLC	2012	Startrans IO, LLC	ER-13-272-000	Cost of Capital (Electric Transmission)



SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Maine Public Utility Commission				
Bangor Hydro Electric Company	1998	Bangor Hydro Electric Company	MPUC Docket No. 98-820	Transaction-Related Financial Advisory Services, valuation
Central Maine Power Company	2007	Central Maine Power Company	MPUC Docket No. 2007-215	Sales Forecast
Massachusetts Superior Court				
Burncoat Pond Watershed District	2010	Central Water District v. Burncoat Pond Watershed District	WDCV 2001-0105	Valuation / Eminent Domain
New Jersey Board of Public Utilities				
Conectiv	2000-2001	Atlantic City Electric Company	NJBPU Docket No. EM00020106	Transaction-Related Financial Advisory Services
Nova Scotia Utility and Review Board				
Nova Scotia Power Inc.	2012	Nova Scotia Power Inc.	2013 GRA	Return on Equity/Business Risk (Electric)
Ontario Energy Board				
Enbridge Gas Distribution and Hydro One Networks and the Coalition of Large Distributors	2009	Enbridge Gas Distribution and Hydro One Networks and the Coalition of Large Distributors	EB-2009-0084	Ontario Energy Board's 2009 Consultative Process on Cost of Capital Review (Gas & Electric)
Enbridge Gas Distribution	2012	Enbridge Gas Distribution	EB-2011-0354	Industry Benchmarking Study and Cost of Capital (Gas Distribution)
Enbridge Gas Distribution	2014	Enbridge Gas Distribution	EB-2012-0459	Incentive Regulation Plan and Industry Productivity Study



SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Régie de l'énergie du Québec				
Gaz Métro	2012	Gaz Métro	R-3809-2012	Return on Equity/Business Risk/ Capital Structure (Gas Distribution)
Hydro-Québec Distribution and Hydro-Québec TransÉnergie	2013	Hydro-Québec Distribution and Hydro-Québec TransÉnergie	R-3842-2013	Return on Equity/Business Risk (Electric)
Hydro-Québec Distribution	2014	Hydro-Québec Distribution	R-3905-2014	Remuneration of Deferral Accounts
South Dakota Public Service Commission				
Northern States Power Company-MN	2012	Northern States Power Company-MN	EL 11-019	Return on Equity
Texas Public Utility Commission				
Texas New Mexico Power Company	2004	Texas New Mexico Power Company	PUC Docket No. 29206	Auction Process and Stranded Cost Recovery
Vermont Public Service Board				
Vermont Gas Systems, Inc.	2006	Vermont Gas Systems, Inc.	VPSB Docket No. 7109	Models of Incentive Regulation
Vermont Gas Systems, Inc.	2012	Vermont Gas Systems	Docket No. 7803A	Cost of Capital (Gas Distribution)
Green Mountain Power Corporation	2013	Green Mountain Power Corporation	Docket No. 8191	Return on Equity (Electric)
Wisconsin Public Service Commission				
Wisconsin Power and Light Company	2007	Wisconsin Power and Light Company	PSCW Docket No. 6680-CE-170	Return on Equity (Electric)
Wisconsin Power and Light Company	2007	Wisconsin Power and Light Company	PSCW Docket No. 6680-CE-171	Return on Equity (Electric)



SPONSOR	DATE	CASE/APPLICANT	DOCKET NO.	SUBJECT
Northern States Power Company	2011	Northern States Power Company	PSCW Docket No. 4220-UR-117	Return on Equity (Electric)
Northern States Power Company	2013	Northern States Power Company	PSCW Docket No. 4220-UR-119	Return on Equity (Gas & Electric)
Northern States Power Company	2015	Northern States Power Company	PSCW Docket No. 4220-UR-1212	Return on Equity (Gas & Electric)

Opening Statement: James M. Coyne, Concentric Energy Advisors, Inc.

Before: The British Columbia Utilities Commission

Date: March 9, 2016

Good morning Commissioners, my name is James M. Coyne. I am a Senior Vice President of Concentric Energy Advisors, Inc.

I have recommended a cost of equity of 9.5 percent on 40 percent common equity for FEI. I believe my recommendation appropriately compensates FEI for its business risk, is reasonable relative to the other Canadian utilities, and satisfies all three requirements of the fair return standard.

My ROE recommendation is supported by both the Multi-Stage DCF and CAPM analyses. I gave them equal weighting - the same weighting the Commission applied in its 2012 GCOC Decision. This weighting produces a range of 8.9 - 10.1%, and an average of 9.5%. Based on this analysis, I find 9.5% to be the lowest reasonable estimate of a fair return for FEI. My view is that the capital structure of 40% equity is reasonable both with respect to the proxy group companies and is appropriate with respect to FEI's Canadian peer gas utilities.

I have tested and corroborated my results using analysis and empirical data as well as comparisons to utilities in other jurisdictions to assess their reasonableness. These corroborating analyses showed that my results were reasonable, if not conservative.

I also performed a comprehensive risk analysis of FEI relative to U.S. gas distribution proxy companies, and relative to FEI's Canadian peer gas utilities. I found that FEI is generally higher risk than the U.S. gas proxy group, primarily due to the competitive and policy pressures natural gas faces in the Province. I also found, based on this analysis, that FEI is more risky than all but one of the other major natural gas distributors in Canada for essentially the same reasons. The only major Canadian gas distributor with greater risk than FEI is Gaz Metro. Accordingly, I consider that my combined ROE and equity return recommendation, being below that of Gaz Metro's but above the others in Canada, is reasonably positioned in the context of Canadian utilities and appropriate for FEI.

As I outlined in my rebuttal evidence, I essentially agree with Dr. Booth on a number of matters. Those include the current state of capital markets, the influence of financial policy on government bond yields, the reasonableness of a 50 bps financing and flexibility adder to our ROE results, and the need to modify the traditional CAPM assumptions to achieve a reasonable ROE recommendation. However, we disagree on several important issues in this proceeding. These disagreements help to explain why our ultimate conclusions differ.

First, as I indicated, my recommendation is based on several tests, giving equal weight to both CAPM and DCF results. This differs from Dr. Booth, who places predominant weight on the CAPM.

Second, I have provided two DCF analyses for each of my proxy groups. I have developed a constant growth analysis using analyst growth rates. I have also developed a multi-stage analysis that reduces the influence of analyst growth rates to the first five years of my analysis, and relies on GDP

growth thereafter. This multi-stage approach was relied upon by the Commission in its 2012 and is the approach adopted by the FERC.

Dr. Booth does generate DCF results for the Canadian market as a whole, for a broad group of S&P 500 US utilities, and 8 U.S. utilities, but none of these groups are rationalized for comparison to FEI's current business profile, and its unclear what if any weight he places on them. He also uses only "sustainable growth rates" in his analysis. Sustainable growth rates are premised on the assumption that companies will only grow through the use of internally generated funds (i.e. retained earnings). That assumption does not reflect the reality of the utility industry. Utilities are heavily reliant on raising both new debt and equity to fund future growth. To remove these potential sources for growth understates the utility's prospects for future earnings growth, explaining his unreasonably low 7.02% ROE from this method.

Third, though Dr. Booth and my risk free rates are relatively close after taking into account Dr. Booth's adjustments, we differ on our market risk premium estimates. I have provided a market risk premium based both on historical and forward looking estimates in the U.S. and Canada. In doing so, I have accounted for both the market's forward looking return expectations, and the inverse relationship between the market risk premium and the level of interest rates. Dr. Booth has provided a market risk premium based primarily on the long term historical average, even though he cites the survey work of Dr. Fernandez as corroboration. When interest rates are near historically low levels, the market risk premium should be higher than the long-term average. As a check, I conducted a regression analysis of Canadian bond and stock returns over the 1976-2014 period, accounting for several economic cycles. The results suggested my risk premium and CAPM results are conservative.

Fourth, I have used the standard Bloomberg and Value Line adjusted betas in my CAPM analysis. Dr. Booth has used his judgment to estimate a long term average beta for utility companies, and he questions the methodology - called the Blume adjustment - used to adjust the Bloomberg and Value Line betas. In my experience, the question of adjustment methodology for beta has only been an issue in proceedings where Dr. Booth is a witness. It is generally accepted in U.S. utility regulation when the CAPM is utilized that the reported betas utilizing the Blume adjustment methodology are reasonable, and have never been challenged or even a matter of controversy in a U.S. proceeding where I have been a witness. These betas are produced for use by investors and it is the investor required return we are seeking to determine in this proceeding.

These differences between our respective approaches have significant implications. Dr. Booth's approach results in a combined allowed ROE and common equity ratio below that of any major investor-owned natural gas or electric distribution utility in Canada.

In closing, I believe an increase in the allowed ROE and equity thickness currently approved by the BCUC is justified based on the quantitative analysis and detailed risk assessment I have provided in support of my recommendation. I further believe my recommendation appropriately compensates FEI for the risks it takes on relative to the other Canadian utilities, and satisfies all three requirements of the fair return standard.

Thank you.