**EXHIBIT NO. \_\_\_(RAM-2)
DOCKET NO. UE-121697/UG-121705
DOCKET NO. UE-130137/UG-130138
WITNESS:  DR. ROGER A. MORIN**

**BEFORE THE**

**WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION**

|  |  |
| --- | --- |
| WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, Complainant,v.PUGET SOUND ENERGY, INC.,  Respondent. | DOCKET NOS. UE-121697and UG-121705 (*consolidated*) |
| WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION, Complainant,v.PUGET SOUND ENERGY, INC.,  Respondent. | DOCKET NOS. UE-130137and UG-130138 (*consolidated*) |

**FIRST EXHIBIT (PROFESSIONAL QUALIFICATIONS) TO THE**

**PREFILED DIRECT TESTIMONY OF**

**DR. ROGER A. MORIN
ON BEHALF OF PUGET SOUND ENERGY, INC.**

**NOVEMBER 5, 2014**

**PUGET SOUND ENERGY, INC.**

****FIRST EXHIBIT (PROFESSIONAL QUALIFICATIONS) TO THE
PREFILED DIRECT TESTIMONY OF DR. ROGER A. MORIN****

Q. Please state your name, business address, and occupation.

A. My name is Dr. Roger A. Morin. My business address is Georgia State University, Robinson College of Business, University Plaza, Atlanta, Georgia 30303.

Q. By whom are you employed and in what capacity?

A. I am Professor of Finance at the College of Business, Georgia State University and Professor of Finance for Regulated Industry at the Center for the Study of Regulated Industry at Georgia State University. I am also a principal in Utility Research International, an enterprise engaged in regulatory finance and economics consulting to business and government.

Q. Please summarize your academic and business career.

A. I currently teach at Georgia State University. I have taught at the Wharton School of Finance, University of Pennsylvania; Amos Tuck School of Business at Dartmouth College; Drexel University; University of Montreal; and McGill University.

I was a faculty member of Advanced Management Research International. I am currently a faculty member of The Management Exchange Inc. and Exnet, where I continue to conduct frequent national executive-level education seminars throughout the United States and Canada. In the last twenty years, I have conducted numerous national seminars on “Utility Finance,” “Utility Cost of Capital,” “Alternative Regulatory Frameworks,” and on “Utility Capital Allocation,” which I have developed on behalf of The Management Exchange Inc., in conjunction with Public Utilities Reports, Inc.

I have authored or co-authored several books, monographs, and articles in academic scientific journals on the subject of finance. They have appeared in a variety of journals, including The Journal of Finance, The Journal of Business Administration, International Management Review, and Public Utility Fortnightly. I published a widely-used treatise on regulatory finance, Utilities’ Cost of Capital (Public Utilities Reports, Inc., Arlington, Va. 1984). My more recent book on regulatory matters, Regulatory Finance (Public Utilities Reports, Inc., Arlington, Va. 1994), is a voluminous treatise on the application of finance to regulated utilities. A revised and expanded edition of Regulatory Finance was published in 2006.

I have engaged in extensive consulting activities on behalf of numerous corporations, legal firms, and regulatory bodies in matters of financial management and corporate litigation. Attachment A to this Exhibit No. \_\_\_(RAM-2) describes my professional credentials in more detail.

Q. Have you previously testified on cost of capital before utility regulatory commissions?

A. Yes, I have been a cost of capital witness before more than forty (40) regulatory bodies in North America, including the Washington Utilities and Transportation Commission (“WUTC”, or “Commission”), the Federal Energy Regulatory Commission, and the Federal Communications Commission. I have also testified before the following state, provincial, and other local regulatory commissions:

|  |  |  |  |
| --- | --- | --- | --- |
| Alabama | Florida | Missouri | Ontario |
| Alaska | Georgia | Montana | Oregon |
| Alberta | Hawaii | Nevada | Pennsylvania |
| Arizona | Illinois | New Brunswick | Quebec |
| Arkansas | Indiana | New Hampshire | South Carolina |
| British Columbia | Iowa | New Jersey | South Dakota |
| California | Kentucky | New Mexico | Tennessee |
| City of New Orleans, Louisiana | Louisiana | New York | Texas |
| Colorado | Maine | Newfoundland | Utah |
| CRTC | Manitoba | North Carolina | Vermont |
| Delaware | Maryland | North Dakota | Virginia |
| District of Columbia | Michigan | Nova Scotia | Washington |
| FCC | Minnesota | Ohio | West Virginia |
| FERC | Mississippi | Oklahoma |  |

The details of my participation in regulatory proceedings are provided in more detail in Attachment A to this Exhibit No. \_\_\_(RAM-2).

**Attachment A to Exhibit No. \_\_\_(RAM-2)**

# RESUME OF ROGER A. MORIN

(summer 2009)

**NAME**: Roger A. Morin

**ADDRESS**: 9 King Ave.
Jekyll Island, GA 31527, USA

87 Paddys Head Rd
Peggy’s Cove Hway
Nova Scotia, Canada B3A 3N6

**TELEPHONE**: (912) 635-3233 business office
(912) 635-3233 business fax
(404) 229-2857 cellular
(902) 823-0000 summer office

**E-MAIL ADDRESS**: profmorin@mac.com

**DATE OF BIRTH**: 3/5/1945

**PRESENT EMPLOYER**: Georgia State University
Robinson College of Business
Atlanta, GA 30303

**RANK**: Emeritus Professor of Finance

**HONORS**: Professor of Finance for Regulated Industry

 Director Center for the Study of Regulated Industry,

 Robinson College of Business, Georgia State University.

**EDUCATIONAL HISTORY**

Bachelor of Electrical Engineering, McGill University, Montreal, Canada, 1967.

Master of Business Administration, McGill University, Montreal, Canada, 1969.

PhD in Finance & Econometrics, Wharton School of Finance, University of Pennsylvania, 1976.

**EMPLOYMENT HISTORY**

Lecturer, Wharton School of Finance, Univ. of Pennsylvania, 1972-3

Assistant Professor, University of Montreal School of Business, 1973-1976.

Associate Professor, University of Montreal School of Business, 1976-1979.

Professor of Finance, Georgia State University, 1979-2008

Professor of Finance for Regulated Industry and Director, Center for the Study of Regulated Industry, Robinson College of Business, Georgia State University, 1985-2008

Visiting Professor of Finance, Amos Tuck School of Business, Dartmouth College, Hanover, N.H., 1986

Emeritus Professor of Finance, Georgia State University, 2007-9

**OTHER BUSINESS ASSOCIATIONS**

Communications Engineer, Bell Canada, 1962-1967.

Member of the Board of Directors, Financial Research Institute of Canada, 1974-1980.

Co-founder and Director Canadian Finance Research Foundation, 1977.

Vice-President of Research, Garmaise-Thomson & Associates, Investment Management Consultants, 1980-1981.

Executive Visions Inc., Board of Directors, Member

Board of External Advisors, College of Business, Georgia State University, Member 1987-1991

**PROFESSIONAL CLIENTS**

AGL Resources

AT & T Communications

Alagasco - Energen

Alaska Anchorage Municipal Light & Power

Alberta Power Ltd.

Allete

Ameren

American Water Works Company

Ameritech

Arkansas Western Gas

Baltimore Gas & Electric – Constellation Energy

Bangor Hydro-Electric

B.C. Telephone

B C GAS

Bell Canada

Bellcore

Bell South Corp.

Bruncor (New Brunswick Telephone)

Burlington-Northern

C & S Bank

Cajun Electric

Canadian Radio-Television & Telecomm. Commission

Canadian Utilities

Canadian Western Natural Gas

Cascade Natural Gas

Centel

Centra Gas

Central Illinois Light & Power Co

Central Telephone

Central & South West Corp.

Chattanoogee Gas Company

Cincinnatti Gas & Electric

Cinergy Corp.

Citizens Utilities

City Gas of Florida

CN-CP Telecommunications

Commonwealth Telephone Co.

Columbia Gas System

Consolidated Natural Gas

Constellation Energy

Delmarva Power & Light Co

Deerpath Group

Detroit Edison Company

DTE Energy

Edison International

Edmonton Power Company

Elizabethtown Gas Co.

Emera

Energen

Engraph Corporation

Entergy Corp.

Entergy Arkansas Inc.

Entergy Gulf States, Inc.

Entergy Louisiana, Inc.

Entergy Mississippi Power

Entergy New Orleans, Inc.

First Energy

Florida Water Association

Fortis

Garmaise-Thomson & Assoc., Investment Consultants

Gaz Metropolitain

General Public Utilities

Georgia Broadcasting Corp.

Georgia Power Company

GTE California - Verizon

GTE Northwest Inc. - Verizon

GTE Service Corp. - Verizon

GTE Southwest Incorporated - Verizon

Gulf Power Company

Havasu Water Inc.

Hawaiian Electric Company

Hawaiian Elec & Light Co

Heater Utilities – Aqua - America

Hope Gas Inc.

Hydro-Quebec

ICG Utilities

Illinois Commerce Commission

Island Telephone

Jersey Central Power & Light

Kansas Power & Light

KeySpan Energy

Manitoba Hydro

Maritime Telephone

Maui Electric Co.

Metropolitan Edison Co.

Minister of Natural Resources Province of Quebec

Minnesota Power & Light

Mississippi Power Company

Missouri Gas Energy

Mountain Bell

National Grid

Nevada Power Company

New Brunswick Power

Newfoundland Power Inc. - Fortis Inc.

New Market Hydro

New Tel Enterprises Ltd.

New York Telephone Co.

Niagara Mohawk Power Corp

Norfolk-Southern

Northeast Utilities

Northern Telephone Ltd.

Northwestern Bell

Northwestern Utilities Ltd.

Nova Scotia Power

Nova Scotia Utility and Review Board

NUI Corp.

NYNEX

Oklahoma G & E

Ontario Telephone Service Commission

Orange & Rockland

PNM Resources

Pacific Northwest Bell

People’s Gas System Inc.

People’s Natural Gas

Pennsylvania Electric Co.

Pepco Holdings

Potomac Electric Power Co.

Price Waterhouse

PSI Energy

Public Service Electric & Gas

Public Service of New Hampshire

Public Service of New Mexico

Puget Sound Energy, Inc.

Quebec Telephone

Regie de l’Energie du Quebec

Rochester Telephone

San Diego Gas & Electric

SaskPower

Sierra Pacific Power Company

Sierra Pacific Resources

Southern Bell

Southern States Utilities

Southern Union Gas

South Central Bell

Sun City Water Company

TECO Energy

The Southern Company

Touche Ross and Company

TransEnergie

Trans-Quebec & Maritimes Pipeline

TXU Corp

US WEST Communications

Union Heat Light & Power

Utah Power & Light

Vermont Gas Systems Inc.

**MANAGEMENT DEVELOPMENT AND PROFESSIONAL EXECUTIVE EDUCATION**

Canadian Institute of Marketing, Corporate Finance, 1971-73

Hydro-Quebec, “Capital Budgeting Under Uncertainty,” 1974-75

Institute of Certified Public Accountants, Mergers & Acquisitions, 1975-78

Investment Dealers Association of Canada, 1977-78

Financial Research Foundation, bi-annual seminar, 1975-79

Advanced Management Research (AMR), faculty member, 1977-80

Financial Analysts Federation, Educational chapter: “Financial Futures Contracts” seminar

Exnet Inc. a.k.a. The Management Exchange Inc., faculty member 1981-2008.National Seminars:

*Risk and Return on Capital Projects*

*Cost of Capital for Regulated Utilities*

*Capital Allocation for Utilities*

*Alternative Regulatory Frameworks*

*Utility Directors’ Workshop*

*Shareholder Value Creation for Utilities*

*Fundamentals of Utility Finance in a Restructured Environment*

*Contemporary Issues in Utility Finance*

SNL Center for Financial Education. faculty member 2008-2009.

National Seminars:

*Essentials of Utility Finance*

Georgia State University College of Business, Management Development Program, faculty member, 1981-1994.

**EXPERT TESTIMONY & UTILITY CONSULTING AREAS OF EXPERTISE**

Corporate Finance

Rate of Return

Capital Structure

Generic Cost of Capital

Costing Methodology

Depreciation

Flow-Through vs Normalization

Revenue Requirements Methodology

Utility Capital Expenditures Analysis

Risk Analysis

Capital Allocation

Divisional Cost of Capital, Unbundling

Incentive Regulation & Alternative Regulatory Plans

Shareholder Value Creation

Value-Based Management

**REGULATORY BODIES**

Alabama Public Service Commission

Alaska Public Utility Commission

Alberta Public Service Board

Arizona Corporation Commission

Arkansas Public Service Commission

British Columbia Board of Public Utilities

California Public Service Commission

Canadian Radio-Television & Telecommunications Comm.

Colorado Public Utilities Board

Delaware Public Utility Commission

District of Columbia Public Service Commission

Federal Communications Commission

Federal Energy Regulatory Commission

Florida Public Service Commission

Georgia Public Service Commission

Georgia Senate Committee on Regulated Industries

Hawaii Public Service Commission

Illinois Commerce Commission

Indiana Utility Regulatory Commission

Iowa Board of Public Utilities

Louisiana Public Service Commission

Maine Public Service Commission

Manitoba Board of Public Utilities

Michigan Public Service Commission

Minnesota Public Utilities Commission

Mississippi Public Service Commission

Missouri Public Service Commission

Montana Public Service Commission

National Energy Board of Canada

Nevada Public Service Commission

New Brunswick Board of Public Commissioners

New Hampshire Public Utility Commission

New Jersey Board of Public Utilities

New Mexico Public Regulatory Commission

New Orleans City Council

New York Public Service Commission

Newfoundland Board of Commissioners of Public Utilities

North Carolina Utilities Commission

Ohio Public Utilities Commission

Oklahoma State Board of Equalization

Ontario Telephone Service Commission

Ontario Energy Board

Pennsylvania Public Service Commission

Quebec Natural Gas Board

Quebec Regie de l’Energie

Quebec Telephone Service Commission

South Carolina Public Service Commission

Tennessee Regulatory Authority

Texas Public Utility Commission

Utah Public Service Commission

Virginia Public Service Commission

Washington Utilities & Transportation Commission

West Virginia Public Service Commission

**SERVICE AS EXPERT WITNESS**

Southern Bell, So. Carolina PSC, Docket #81-201C

Southern Bell, So. Carolina PSC, Docket #82-294C

Southern Bell, North Carolina PSC, Docket #P-55-816

Metropolitan Edison, Pennsylvania PUC, Docket #R-822249

Pennsylvania Electric, Pennsylvania PUC, Docket #R-822250

Georgia Power, Georgia PSC, Docket # 3270-U, 1981

Georgia Power, Georgia PSC, Docket # 3397-U, 1983

Georgia Power, Georgia PSC, Docket # 3673-U, 1987

Georgia Power, F.E.R.C., Docket # ER 80-326, 80-327

Georgia Power, F.E.R.C., Docket # ER 81-730, 80-731

Georgia Power, F.E.R.C., Docket # ER 85-730, 85-731

Bell Canada, CRTC 1987

Northern Telephone, Ontario PSC

GTE-Quebec Telephone, Quebec PSC, Docket 84-052B

Newtel., Nfld. Brd of Public Commission PU 11-87

CN-CP Telecommunications, CRTC

Quebec Northern Telephone, Quebec PSC

Edmonton Power Company, Alberta Public Service Board

Kansas Power & Light, F.E.R.C., Docket # ER 83-418

NYNEX, FCC generic cost of capital Docket #84-800

Bell South, FCC generic cost of capital Docket #84-800

American Water Works - Tennessee, Docket #7226

Burlington-Northern - Oklahoma State Board of Taxes

Georgia Power, Georgia PSC, Docket # 3549-U

GTE Service Corp., FCC Docket #84-200

Mississippi Power Co., Miss. PSC, Docket U-4761

Citizens Utilities, Ariz. Corp. Comm., D # U2334-86020

Quebec Telephone, Quebec PSC, 1986, 1987, 1992

Newfoundland L & P, Nfld. Brd. Publ Comm. 1987, 1991

Northwestern Bell, Minnesota PSC, #P-421/CI-86-354

GTE Service Corp., FCC Docket #87-463

Anchorage Municipal Power & Light, Alaska PUC, 1988

New Brunswick Telephone, N.B. PUC, 1988

Trans-Quebec Maritime, Nat’l Energy Brd. of Cda, ‘88-92

Gulf Power Co., Florida PSC, Docket #88-1167-EI

Mountain States Bell, Montana PSC, #88-1.2

Mountain States Bell, Arizona CC, #E-1051-88-146

Georgia Power, Georgia PSC, Docket # 3840-U, l989

Rochester Telephone, New York PSC, Docket # 89-C-022

Noverco - Gaz Metro, Quebec Natural Gas PSC, #R-3164-89

GTE Northwest, Washington UTC, #U-89-3031

Orange & Rockland, New York PSC, Case 89-E-175

Central Illinois Light Company, ICC, Case 90-0127

Peoples Natural Gas, Pennsylvania PSC, Case

Gulf Power, Florida PSC, Case # 891345-EI

ICG Utilities, Manitoba BPU, Case 1989

New Tel Enterprises, CRTC, Docket #90-15

Peoples Gas Systems, Florida PSC

Jersey Central Pwr & Light, N.J. PUB, Case ER 89110912J

Alabama Gas Co., Alabama PSC, Case 890001

Trans-Quebec Maritime Pipeline, Cdn. Nat’l Energy Board

Mountain Bell, Utah PSC,

Mountain Bell, Colorado PUB

South Central Bell, Louisiana PS

Hope Gas, West Virginia PSC

Vermont Gas Systems, Vermont PSC

Alberta Power Ltd., Alberta PUB

Ohio Utilities Company, Ohio PSC

Georgia Power Company, Georgia PSC

Sun City Water Company

Havasu Water Inc.

Centra Gas (Manitoba) Co.

Central Telephone Co. Nevada

AGT Ltd., CRTC 1992

BC GAS, BCPUB 1992

California Water Association, California PUC 1992

Maritime Telephone 1993

BCE Enterprises, Bell Canada, 1993

Citizens Utilities Arizona gas division 1993

PSI Resources 1993-5

CILCORP gas division 1994

GTE Northwest Oregon 1993

Stentor Group 1994-5

Bell Canada 1994-1995

PSI Energy 1993, 1994, 1995, 1999

Cincinnati Gas & Electric 1994, 1996, 1999, 2004

Southern States Utilities, 1995

CILCO 1995, 1999, 2001

Commonwealth Telephone 1996

Edison International 1996, 1998

Citizens Utilities 1997

Stentor Companies 1997

Hydro-Quebec 1998

Entergy Gulf States Louisiana 1998, 1999, 2001, 2002, 2003

Detroit Edison, 1999, 2003

Entergy Gulf States, Texas, 2000, 2004

Hydro Quebec TransEnergie, 2001, 2004

Sierra Pacific Company, 2000, 2001, 2002, 207

Nevada Power Company, 2001

Mid American Energy, 2001, 2002

Entergy Louisiana Inc. 2001, 2002, 2004

Mississippi Power Company, 2001, 2002, 2007

Oklahoma Gas & Electric Company, 2002 -2003

Public Service Electric & Gas, 2001, 2002

NUI Corp (Elizabethtown Gas Company), 2002

Jersey Central Power & Light, 2002

San Diego Gas & Electric, 2002

New Brunswick Power, 2002

Entergy New Orleans, 2002

Hydro-Quebec Distribution 2002

PSI Energy 2003

Fortis – Newfoundland Power & Light 2002

Emera – Nova Scotia Power 2004

Hydro-Quebec TransEnergie 2004

Hawaiian Electric 2004

Missouri Gas Energy 2004

AGL Resources 2004

Arkansas Western Gas 2004

Public Service of New Hampshire 2005

Hawaiian Electric Company 2005

Delmarva Power & Light Company 2005

Union Heat Power & Light 2005

Puget Sound Energy, Inc. 2006, 2007

Cascade Natural Gas 2006

Entergy Arkansas 2006-7

Bangor Hydro 2006-7

Delmarva 2006-7

Potomac Electric Power Co. 2006, 2007

Detroit Edison Co. 2007, 2008

Nevada Power Co. 2007

Hawaiian Electric Co. 2006-7

Hawaii Elec & Light Co. 2007

Maui Electric Co. 2007

Ameren Union Electric 2008

Consolidated Edison of New York 2007-2008

Orange & Rockland 2007

Niagara Mohawk Power Corp 2008

Allete (Minnesota Power) 2007-2008

Sierra Pacific Power 2007-2008

**PROFESSIONAL AND LEARNED SOCIETIES**

Engineering Institute of Canada, 1967-1972

Canada Council Award, recipient 1971 and 1972

Canadian Association Administrative Sciences, 1973-80

American Association of Decision Sciences, 1974-1978

American Finance Association, 1975-2002

Financial Management Association, 1978-2002

**ACTIVITIES IN PROFESSIONAL ASSOCIATIONS AND MEETINGS**

Chairman of meeting on “New Developments in Utility Cost of Capital”, Southern Finance Association, Atlanta, Nov. 1982

Chairman of meeting on “Public Utility Rate of Return”, Southeastern Public Utility Conference, Atlanta, Oct. 1982

Chairman of meeting on “Current Issues in Regulatory Finance”, Financial Management Association, Atlanta, Oct. 1983

Chairman of meeting on “Utility Cost of Capital”, Financial Management Association, Toronto, Canada, Oct. 1984.

Committee on New Product Development, FMA, 1985

Discussant, “Tobin’s Q Ratio”, paper presented at Financial Management Association, New York, N.Y., Oct. 1986

Guest speaker, “Utility Capital Structure: New Developments”, National Society of Rate of Return Analysts 18th Financial Forum, Wash., D.C. Oct. 1986

Opening address, “Capital Expenditures Analysis: Methodology vs Mythology,” Bellcore Economic Analysis Conference, Naples Fla., 1988.

Guest speaker, “Mythodology in Regulatory Finance”, Society of Utility Rate of Return Analysts (SURFA), Annual Conference, Wash., D.C. February 2007.

**PAPERS PRESENTED:**

“An Empirical Study of Multi-Period Asset Pricing,” annual meeting of Financial Management Assoc., Las Vegas Nevada, 1987.

“Utility Capital Expenditures Analysis: Net Present Value vs Revenue Requirements”, annual meeting of Financial Management Assoc., Denver, Colorado, October 1985.

“Intervention Analysis and the Dynamics of Market Efficiency”, annual meeting of Financial Management Assoc., San Francisco, Oct. 1982

“Intertemporal Market-Line Theory: An Empirical Study,” annual meeting of Eastern Finance Assoc., Newport, R.I. 1981

“Option Writing for Financial Institutions: A Cost-Benefit Analysis”, 1979 annual meeting Financial Research Foundation

“Free-lunch on the Toronto Stock Exchange”, annual meeting of Financial Research Foundation of Canada, l978.

“Simulation System Computer Software SIMFIN”, HP International Business Computer Users Group, London, 1975.

“Inflation Accounting: Implications for Financial Analysis.” Institute of Certified Public Accountants Symposium, 1979.

**OFFICES IN PROFESSIONAL ASSOCIATIONS**

- President, International Hewlett-Packard Business Computers Users Group, 1977

- Chairman Program Committee, International HP Business Computers Users Group, London, England, 1975

- Program Coordinator, Canadian Assoc. of Administrative Sciences, 1976

- Member, New Product Development Committee, Financial

 Management Association, 1985-1986

- Reviewer: Journal of Financial Research

Financial Management

Financial Review

Journal of Finance

**PUBLICATIONS**

“Risk Aversion Revisited”, Journal of Finance, Sept. 1983

“Hedging Regulatory Lag with Financial Futures,” Journal of Finance, May 1983. (with G. Gay, R. Kolb)

“The Effect of CWIP on Cost of Capital,” Public Utilities Fortnightly, July 1986.

“The Effect of CWIP on Revenue Requirements” Public Utilities Fortnightly, August 1986.

“Intervention Analysis and the Dynamics of Market Effi­ciency,” Time-Series Applications, New York: North Holland, 1983. (with K. El-Sheshai)

“Market-Line Theory and the Canadian Equity Market,” Journal of Business Administration, Jan. l982, M. Brennan, editor

“Efficiency of Canadian Equity Markets,” International Management Review, Feb. 1978.

“Intertemporal Market-Line Theory: An Empirical Test,” Financial Review, Proceedings of the Eastern Finance As­sociation, 1981.

**BOOKS**

Utilities’ Cost of Capital, Public Utilities Reports Inc., Arlington, Va., 1984.

Regulatory Finance, Public Utilities Reports Inc., Arlington, Va., 2004

Driving Shareholder Value, McGraw-Hill, January 2001.

The New Regulatory Finance, Public Utilities Reports Inc., Arlington, Va., 2006.

**MONOGRAPHS**

Determining Cost of Capital for Regulated Industries, Public Utilities Reports, Inc., and The Management Exchange Inc., 1982 - 1993. (with V.L. Andrews)

Alternative Regulatory Frameworks, Public Utilities Reports, Inc., and The Management Exchange Inc., 1993. (with V.L. Andrews)

Risk and Return in Capital Projects, The Management Exchange Inc., 1980. (with B. Deschamps)

Utility Capital Expenditure Analysis, The Management Exchange Inc., 1983.

Regulation of Cable Television: An Econometric Planning Model, Quebec Department of Communications, 1978.

“An Economic & Financial Profile of the Canadian Cablevision Industry,” Canadian Radio-Television & Telecommunication Commission (CRTC), 1978.

Computer Users’ Manual: Finance and Investment Programs, University of Montreal Press, 1974, revised 1978.

Fiber Optics Communications: Economic Characteristics, Quebec Department of Communications, 1978.

“Canadian Equity Market Inefficiencies”, Capital Market Re­search Memorandum, Garmaise & Thomson Investment Consult­ants, 1979.

**MISCELLANEOUS CONSULTING REPORTS**

“Operational Risk Analysis: California Water Utilities,” Calif. Water Association, 1993.

“Cost of Capital Methodologies for Independent Telephone Systems”, Ontario Telephone Service Commission, March 1989.

“The Effect of CWIP on Cost of Capital and Revenue Requirements”, Georgia Power Company, 1985.

“Costing Methodology and the Effect of Alternate Depreciation and Costing Methods on Revenue Requirements and Utility Finances”, Gaz Metropolitan Inc., 1985.

“Simulated Capital Structure of CN-CP Telecommunications: A Critique”, CRTC, 1977.

“Telecommunications Cost Inquiry: Critique,” CRTC,1977.

“Social Rate of Discount in the Public Sector”, CRTC Policy Statement, 1974.

“Technical Problems in Capital Projects Analysis”, CRTC Policy Statement, 1974.

**RESEARCH GRANTS**

“Econometric Planning Model of the Cablevision Industry”, International Institute of Quantitative Economics, CRTC.

“Application of the Averch-Johnson Model to Telecommunications Utilities”, Canadian Radio-Television Commission. (CRTC)

“Economics of the Fiber Optics Industry”, Quebec Dept. of Communications.

“Intervention Analysis and the Dynamics of Market Efficiency”, Georgia State Univ. College of Business, 1981.

“Firm Size and Beta Stability”, Georgia State University Col­lege of Business, 1982.

“Risk Aversion and the Demand for Risky Assets”, Georgia State University College of Business, 1981.

Chase Econometrics, Interactive Data Corp., Research Grant, $50,000 per annum, 1986-1989.