

1 **REFERENCE:**

2 **NFAT Review: A Review of Manitoba Hydro's Demand Side Management Plan, A Report Prepared by**
3 **Elenchus Research Associates Inc., January 2014.**

4 **The Scope Of Work (SOW) undertaken by Elenchus Research Associates Inc., as defined by the PUB.**

5
6 **PREAMBLE:**

7
8 **a) QUESTION:**

9 Please set out the purported expertise of all authors to the report.

10
11 **RESPONSE:**

12 Filed separately.

13
14 **b) QUESTION:**

15 Please provide the expertise that each author is purported to bring to the report.

16
17 **RESPONSE:**

18 See a).

19
20 **c) QUESTION:**

21 Please provide elements from each authors' *curriculum vitae* which demonstrate their purported
22 expertise.

23
24 **RESPONSE:**

25 See a) and b). Of particular interest are the following:

26
27 **Russ Houldin**

28
29 **Ontario Ministry of Energy**

November 1984 - March 1987

30 **Economist, Energy Economics and Forecasts Section**

- 31 • Analysis of economic costs, benefits and impacts of a variety of energy issues and the preparation
32 of energy price and demand forecasts
- 33 • Complete programming, data analysis and documentation for a new MEny residential energy
34 demand model in LOTUS
- 35 • Supervision and documentation of the transfer of all of MEny's energy demand models from an IBM
36 mainframe to an NCR (UNIX) minicomputer
- 37 • Supervision of the recalibration of MEny's commercial sector energy demand model
- 38 • A major study on the natural gas consumption of Toronto houses
- 39 • Supporting analysis for Ontario's new Energy Efficiency Act

40
41 **University of Toronto, Innis College**

August 1994 - Present

42 **Adjunct Professor (Part-Time)**

- 43
- 44 • Teaching fourth-year undergraduates courses on Environmental Thought and Public Policy and
45 Environment.

York University, Faculty of Environmental Studies
Adjunct Professor (Part-Time)

January 1993–June 1993

- Taught graduate students a course in the Economics of Pollution and Resource Depletion (1993) and undergraduates on Energy and Environment (2005)

Ministry of Treasury and Economics (Now Ministry of Finance) September 1990–September 1993
Assistant Manager, Economy and Environment, Sectoral and Regional Policy Branch

- Providing advice on the economic aspects of environmental policies and programs; liaison with government Ministries and agencies and external groups
- Research on economics and environment
- Ontario Energy Board
- October 2004 – December 31, 2013

Senior Advisor, Compliance/Regulatory Policy

- Providing advice and administrative support to Board members on electricity and natural gas issues.

The latter included the lead responsibility for Board staff's advice economic and sustainability aspects of the Ontario Power Authority's Integrated Power System Plan which was subject to review by the Board until suspended in September 2008.

John Todd

- In general rate application proceedings before Canadian energy regulation tribunals where Mr. Todd is identified as having provided advice to counsel, he would have reviewed and commented on the DSM reports whenever they were part of the application.
- Mr. Todd has served on DSM Consultatives and/or DSM Stakeholder Advisory Committees for Consumers Gas (now Enbridge Gas Distribution), Union Gas and West Kootenay Power (now FortisBC).

REFERENCE:

NFAT Review: A Review of Manitoba Hydro's Load Forecast, A Report Prepared by Elenchus Research Associates Inc., January 2014.

The Scope Of Work (SOW) undertaken by Elenchus Research Associates Inc., as defined by the PUB.

PREAMBLE:

a) QUESTION:

Please set out the purported expertise of all authors to the report.

RESPONSE:

Founded in 1980 by John Todd, President and CEO of Elenchus Research Associates, Elenchus is a leading Canadian consulting firm respected for its expertise and experience in economic regulation, focusing on the energy and the telecommunications sectors. Our clients include regulated companies, producers and generators, competitors, customers groups, regulators and government.

Our Economic Regulation group is recognized for its research, financial modeling, policy analysis, and assistance to utilities in preparing regulatory filings and navigating the regulatory approvals process. This also includes monitoring, reporting and development of regulatory strategy.

The curriculum vitae of John Todd, Stephen Motluk and Martin Benum are attached.

b) QUESTION:

Please provide the expertise that each author is purported to bring to the report.

RESPONSE:

John Todd has specialized in government regulation for over 35 years, addressing issues related to price regulation and deregulation, market restructuring to facilitate effective competition, and regulatory methodology. Sectors of primary interest in recent years have included electricity, natural gas and the telecommunications industry. John has assisted counsel in over 200 regulatory proceedings and provided expert evidence in over 100 hearings. His clients include regulated companies, producers and generators, competitors, customers groups, regulators and government.

Stephen Motluk was a Senior Consultant at Elenchus from 2004 to 2013. He has testified or submitted expert evidence in several jurisdictions across Canada. Engagements have included: performance based regulation; productivity, efficiency, and utility incentives; distribution system load forecasts; price modelling and simulation of generation options; distribution system reliability performance; review of assessment methods used in facilities approvals; among other regulatory economics projects. Before joining Elenchus, he was regulatory research staff with the Ontario Energy Board and Senior Portfolio Analyst with EPCOR Merchant and Capital. He has an undergraduate degree in economics and graduate degrees in economics and business.

Martin Benum has been a Senior Consultant at Elenchus since 2010. He has over 25 years' experience in the electricity sectors in Ontario. Martin provides strategic regulatory advice on energy regulation and designs MS Excel based tools for clients i.e. (OEB application models). He has held senior positions with

Enersource Corporation and the Ontario Energy Board. He holds a degree in Business Management and is a designated CMA.

c) QUESTION:

Please provide elements from each authors' *curriculum vitae* which demonstrate their purported expertise.

RESPONSE:

John Todd

- In most general rate application proceedings before Canadian energy regulation tribunals where Mr. Todd is identified as having provided advice to counsel (roughly 60 proceedings), he would have reviewed and commented on the load forecasts and the load forecasting methodology, as appropriate.
- Mr. Todd has collaborated with Stephen Motluk for the load forecasts prepared by Elenchus for Ontario electricity distributors.

Stephen Motluk

- Expert advice and evidence in support of electricity distributor load forecasts and weather normalization for rate setting applications in Ontario

Martin Benum

- Preparation of client load forecasts using Normalized Average Use per Customer ("NAC") and Multivariate Regression models

PRESIDENT

John Todd has specialized in government regulation for over 35 years, addressing issues related to price regulation and deregulation, market restructuring to facilitate effective competition, and regulatory methodology. Sectors of primary interest in recent years have included electricity, natural gas and the telecommunications industry. John has assisted counsel in over 200 regulatory proceedings and provided expert evidence in over 100 hearings. His clients include regulated companies, producers and generators, competitors, customers groups, regulators and government.

PROFESSIONAL OVERVIEW

Founder of Elenchus Research Associates Inc. (ERAI) 2003

- ERAI was spun off from ECS (see below) as an independent consulting firm in 2003. There are presently twenty-five ERAI Consultants and Associates. Web address: www.elenchus.ca

Founded the Canadian Energy Regulation Information Service (CERISE) 2002

- CERISE is a web-based service providing a decision database, regulatory monitoring and analysis of current issues on a subscription basis. Staff are Rachel Chua and rotating co-op students. Web address: www.cerise.info

Founded Econalysis Consulting Services, Inc., (ECS) 1980

- ECS was divested as a separate company in 2003.
- There are presently four ECS consultants: Bill Harper, Mark Garner, Shelley Grice and James Wightman. Web address: www.econalysis.ca

Education

1975	Masters in Business Administration in Economics and Management Science, University of Toronto
1972	Bachelors of Science in Electrical Engineering, University of Toronto

PRIOR EMPLOYMENT

Ontario Economic Council, Research Officer (Government Regulation)	1978 - 1980
Research Assistant	1973 - 1978
Univ. of Toronto, Faculty of Management Studies	
Bell Canada	1972 - 1973
Western Area Engineering	

REGULATORY/LEGAL PROCEEDINGS

Provided expert evidence and/or assistance to the applicant or another participant for:

Before the Ontario Energy Board

2013	<ul style="list-style-type: none">• Enbridge Gas Distribution (EB-2012-0459) (Evidence: Cost Allocation Methodology, with Michael Roger)• IESO Fees Case (Evidence: Review of IESO Fees Billing Determinant)
2012	<ul style="list-style-type: none">• Hydro One Transmission 2013-2014 Revenue Requirement (EB-2012-0031) (Evidence: Ontario Cost Allocation and Export Tariff Service, with Michael Roger)
2011	<ul style="list-style-type: none">• Cost Allocation evidence for several Ontario electricity distributors (2012 Cost of Service)
2010	<ul style="list-style-type: none">• Natural Resource Gas Rate Case (Evidence: Proposed Incentive Regulation Mechanism)• Cost Allocation evidence for several Ontario electricity distributors (2011 Cost of Service)
2009	<ul style="list-style-type: none">• Hydro One Distribution Rate Case (Evidence: Principles for Density Based Rates)• Cost Allocation evidence for several Ontario electricity distributors (2010 Cost of Service)
2008	<ul style="list-style-type: none">• Provided technical and strategic assistance to eight second tranche electricity distribution companies in preparing their rebasing applications for rates for 2009. (Evidence: Cost allocation model updates (for two LDCs))
2007	<ul style="list-style-type: none">• Third generation Incentive Regulation (Evidence: Inclusion of a capital expenditure factor)• Provided technical and strategic assistance to six first tranche electricity distribution companies in preparing their rebasing applications for rates for 2008.
2006	<ul style="list-style-type: none">• Cost Allocation Review (EB-2005-0252)• Transmission Revenue Requirement Adjustment Mechanism (EB-2005-0501)• Second Generation Incentive Regulation Mechanism (EB-2006-0088-0089) (Evidence: Capital Investment Factor)
2005	<ul style="list-style-type: none">• Sub-metering Review (EB-2005-0317) (Evidence: Comments on Staff Discussion Paper on Sub-metering)

- Union Gas Rate Hearing
(Evidence: Evaluation of Avoided Cost Methodology)
- 2004
 - Enbridge Gas Distribution 2005 Rates (RP-2003-0203)
(Evidence: Determining the Fair Rate of Return for a 15-Month Period)
(Evidence: Stand-alone System Supply Costs)
- 2003
 - Generic Proceeding on Electricity Distributor Boundary Changes (RP-2003-0044)
(Evidence: The Benefits of Competition in the Electrical Distribution Sector)
 - Union Gas Limited, 2004 Rates (RP-2003-0063)
(Evidence: Monthly Demand Charge for Brighton Beach Power Station (with Paula Zarnett))
- 2002
 - Union Gas Limited, 2003 Rates (RP-2002-0130/EB-2002-0363)
(Evidence: Review of Union's Delivery Commitment Credit (with Joyce Poon))
- 2001
 - Union Gas, Further Unbundling of Rates (RP-2000-0078)
(Evidence: Regulatory Framework and Cost Responsibility)
 - Hydro One Networks, Cost Allocation and Rate Design for RP-2000-0023
(Evidence: Cost Allocation Model (with Bruce Bacon))
- 1999
 - Propose Electric Distribution Rate Handbook
(Evidence: Comments on Staff Proposals)
 - Standard Supply Service Code, (RP-1999-0040)
(Evidence: Comments and Alternate Proposal)
 - Enbridge, Year 2000 Rate Application (RP 1999-0001)
 - Enbridge, Performance Based Regulation Application (EBRO 497-01)
 - Enbridge, Ancillary Service Separation & Rental Wind Down (EBO 179-14/15)
- 1998
 - Consumers Gas, 1999 Test Year Rates Application (EBRO 497)
 - Union Gas, Separation of Ancillary Services (EBO 177-17)
- 1997
 - Town of Aurora, Franchise Renewal (EBA 795)
 - Union Gas, Customer Information System (EBO 177-15)
 - Legislative Change (EBO 202)
 - System Expansion Generic Hearing (EBO 188)
 - Consumers Gas, 1998 Test Year Rates Application (EBRO 495)
- 1997
 - Ten Year Market Review Working Group
 - Union Gas/Centra Gas Amalgamation Application
- 1996
 - Union Gas/Centra Gas, 1997 Rates Application (EBRO 493/494)
 - Consumers Gas, 1997 Test Year Rates Application (EBRO 492)
 - Ontario Hydro, Review of 1997 Rates (HR-24)
- 1995
 - Ontario Hydro, Review of 1996 Rates (HR-23)
 - Consumers Gas, 1996 Test Year Rates Application (EBRO 490)
 - Union Gas, 1996 Test Year Rates Application (EBRO 486)
 - Union Gas/Centra Gas, Shared Services Hearing (EBRO 486/489)
- 1994
 - Centra Gas, 1995 Test Year Rates Application (EBRO 489)
 - Ontario Hydro International Hearing (EBRLG - 36)
 - Ontario Hydro Corporate Restructuring and 1995 Rates (HR-22)
 - Consumers' Gas, 1995 Test Year Rate Case (EBRO 487)
- 1993
 - Joint Hearing on Direct Purchase Issues (EBRO 474-B/476/483/484/485)
(Evidence: Return-to-System Policies for Ontario LDCs)

- 1993
 - Centra Gas, 1994 Test Year Rates Application (EBRO 483/484)
 - Consumers' Gas, 1994 Test Year Rate Case (EBRO 485)
 - Union Gas, 1994 Test Year Rate Case (EBRO 476-03)
(Evidence: Equity Effects of Union's Depreciation Study)
- 1992
 - Consumers' Gas, 1993 Test Year Rate Case (EBRO 479)
 - Union Gas, 1993 Test Year Interim Rate Increase (EBRO 476)
- 1991
 - Consumers' Gas, 1992 Test Year Rate Case (EBRO 473)
(Evidence: Direct Purchase Issues)
 - Union Gas, Application for Rates and Cost of Gas (EBRO 462)
 - Centra Gas, 1992 Test Year Rates Application (EBRO 474)
(Evidence: Direct Purchase Issues)

Before the Public Utilities Board of Manitoba

- 2013
 - Need for and Alternatives to Manitoba Hydro's Preferred Development Plan
(Evidence: Review of Manitoba Hydro's Load Forecast)
(Evidence: Review of Demand Side Management and Energy Efficiency issues)
- 2005
 - Manitoba Public Insurance, 2006 General Rates Application
(Evidence: Rate Stabilization Reserve and Related Issues)
- 2003
 - Centra Gas Manitoba, 2003/04 General Rate Application,
(Evidence: Comments on the Future Regulatory Methodology)
- 2002
 - Manitoba Hydro, Rate Status Update
(Evidence: Manitoba Hydro's Financial Requirements and Proposed Curtailable Rate Program, with William Harper)
 - Manitoba Hydro, Integration Proceeding
(Evidence: Assessment of Manitoba Hydro/Centra Manitoba Integration, with William Harper)
- 2001
 - Manitoba Public Insurance, 2002 General Rate Application
(Evidence: Rate Stabilization Issues)
 - Centra Gas Manitoba, Primary Gas Rates
(Evidence: Centra Gas Manitoba's Rate Setting Methodology)
- 2000
 - Centra Gas Manitoba, Rate Management
 - Manitoba Public Insurance, 2001 General Rate Application
(Evidence: MPI's Rate Stabilization Reserve Surplus)
 - Manitoba Hydro, Surplus Energy Program
- 1999
 - Centra Gas Manitoba, Western T-Service and Agency Billing and Collection Service
(Evidence: Assessment of the Proposals of the Company)
 - Manitoba Public Insurance, 2000 General Rate Application
(Evidence: Rate Stabilization Reserve Risk Analysis)
- 1999
 - Manitoba Hydro Purchase of Centra Manitoba
(Evidence: Implications for Rates and the Regulatory Regime)
- 1998
 - Centra Gas Manitoba, Rates Flowing from Board Order 79/98
 - Manitoba Public Insurance, 1999 General Rate Application
(Evidence: Rate Stabilization Reserve, Allocation of Costs and IT Expenditures)

- Centra Gas Manitoba, Feasibility Cost Assumptions Application
(Evidence: Comments on Centra's Proposed Changes to the Feasibility Test)
- Centra Gas Manitoba, 1998 Test Year General Rate Application
(Evidence: Comments on Centra's Proposed Customer Information System)
- 1997 • Centra Gas Manitoba, Ste. Agathe Franchise Application
- Manitoba Hydro, Review of ISE/DFH/SESS Programs
- Manitoba Public Insurance, 1998 General Rate Application
- Centra Gas Manitoba, Continuation of Shared Services Application
- 1996 • Centra Gas Manitoba, 1997 General Rate Application
- Centra Gas Manitoba, Cost of Service and Rate Design Review
- Generic Hearing on the Role of the LDC in Manitoba
(Evidence: The Future Role of Centra Manitoba in the Supply of Natural Gas)
- Manitoba Hydro, General Rate Application, 1996 and 1997
- 1995 • Centra Gas Manitoba, Price Management and Direct Purchase Issues
- Application of the Gladstone, Austin Natural Gas Co-op Ltd.
- Manitoba Hydro, Review of Prospective Cost of Service Study (GRA)
(Evidence: Comments on the Prospective COSS Methodology)
- 1995 • Manitoba Hydro, Dual Fuel Heating and Industrial Surplus Energy Rates
- Centra Gas Manitoba, Rural Expansion/Brandon Facilities Upgrade Hearings
- Centra Gas Manitoba, 1995 General Rate Application
(Evidence: Review of Centra's Weather Normalization Methodology)
- 1994 • Centra Gas Manitoba, Rural Expansion Hearing
(Evidence: Rural Mains Expansion Feasibility Test)
- Centra Gas Manitoba, Future Test Year Application
(Evidence: Comparison of the Future and Historic Test Year methods of RB-ROR regulation)
- Manitoba Hydro, General Rate Application, 1994 and 1995
- 1993 • Centra Gas Manitoba, Inc. 1994 General Rate Application
- Manitoba Telephone System, Interconnect Hearing
- Manitoba Telephone System, 1993 General Rate Application
- 1992 • Manitoba Telephone System, 1992 General Rate Application
(Evidence: The appropriate debt ratio for a crown corporation)
- Manitoba Hydro, General Rate Application, 1992
- Centra Gas Manitoba, Inc. General Rate Application
- 1991 • Manitoba Telephone System, General Rate Application, 1991
- Centra Gas Manitoba, Inc. Application for Interim Refundable Rate Increase
- 1990 • Manitoba Hydro, Major Capital Projects
(Evidence: Hydro's 1000MW Ontario Sale and system planning risks)
- ICG Utilities (Manitoba) Ltd., Generic Hearing on Rate Setting
(Evidence: Implications of using a future versus historic test year)

Before the British Columbia Utilities Commission

- 2006 • British Columbia Transmission Corporation, 2006 Transmission Revenue Requirement
- 2005 • Insurance Corporation of British Columbia, Financial Allocation Workshop

- FortisBC, General Rates Application
(Evidence: Review of FortisBC Performance under PBR, 1996 to 2004) w. S. Motluk
- 2004 • Insurance Corporation of British Columbia, Financial Allocation Methodology
(Evidence: Review of ICBC's Financial Allocation Methodology, with ICBC)
- 2002 • Pacific Northern Gas West and Northeast, General Rate Application
- 2001 • Utilicorp Networks Canada (formerly West Kootenay Power), Annual Review, 2001
- 2000 • Pacific Northern Gas, 2000-01 General Rate Application (negotiated)
- West Kootenay Power, Annual Review, 2000
- 1999 • Centra Gas BC, 2000-02 Rates Application (negotiated)
- BC Gas, Market Unbundling Group (Report to the BCUC)
- West Kootenay Power, 2000-02 Rate Application (negotiated)
- Pacific Northern Gas, 1999-00 General Rate Application (negotiated)
- Annual Reviews of WKP and BC Gas
- West Kootenay Power, Transmission Access Application
- 1998 • BC Gas, Southern Crossing Pipeline Application (Revised)
- Pacific Northern Gas, 1998-99 Revenue Requirement/Rate Design
(Evidence on PNG's Cost of Service Methodology)
- 1997 • BC Gas, Southern Crossing Pipeline Application
(Evidence on the impact of ratepayer risks related to the SCP due to developments in the competitive environment in the natural gas sector)
- Annual Reviews of WKP and BC Gas.
- West Kootenay Power, Cost of Service and Rate Design (negotiated settlement)
- 1997 • Pacific Northern Gas Shared Services
- Retail Access and Unbundling Tariff Hearing (suspended)
(Evidence on the impact of market restructuring on costs and rates)
- 1996 • BC Gas - 1996 Rate Design (negotiated settlement)
(Evidence: Alternative Methods for Allocating Distribution Mains Costs to Customer Classes)
- BC Gas - 1996-1997, Revenue Requirement & IRP (negotiated settlement)
- West Kootenay Power - Brilliant Generating Station Transactions
- West Kootenay Power - General Rate Application/IRP (negotiated settlement)
- 1995 • Generic System Expansion Hearing
- BC Gas - General Rate Application (negotiated settlement)
- 1994 • BC Hydro, 1994 Rate Increase Application
- West Kootenay Power, 1994/95 Rates and Integrated Resource Plan
(Evidence: Review of WKP's Integrated Resource Plan)
- 1993 • BC Hydro, 1993 Rate Increase Application
- BC Gas, Rate Design Hearing
(Evidence: Analysis of BC Gas' cost studies and their use in setting rates)
- BC Gas - General Rate Application (settled and withdrawn prior to hearing)
- Generic Hearing into the New Provincial Domestic Natural Gas Supply Policy

Before the Régie de l'énergie

- 2001
 - Hydro Québec, Transmission Rates (R-3401-98)
(Evidence: HQT's Transmission Tariff Rate Design Methodology, with B. Bacon)
 - Inclusion of Operating Costs in the Gasoline Price Floor Set By the Régie
(Evidence: Review of Principles) (Régie File R-3457-2000)
- 2000
 - SCGM Unbundling of Tariffs (R-3443-2000)
(Evidence: SCGM's Unbundling Tariff Proposal, with R. Higgin)
 - Gazifère, Rates (R-3446-2000)
(Evidence: Cash Working Capital and Other Issues, with G. Morrison)
- 1999
 - Operating Costs Borne by Gasoline or Diesel Fuel Retailers (R-3399-98)
(Evidence: Methodology for Determining Operating Costs)
 - Small Hydro Within Hydro Quebec's Resource Plan (R-3410-98)
(Evidence: Determining the Purchase Price for Small Hydro)
- 1999
 - Gazifère, Year 2000 Rate Case
(Evidence: Assessment of Cost Allocation and Revenue Sharing Proposals)
- 1998
 - Hydro Québec, Rate-Setting Methodology Under s. 167 of the Régie de l'énergie Act.
(Evidence: Recommendations on Regulatory Framework)
 - Hydro Québec, The Role of Wind Power in the Quebec Energy Portfolio
(Evidence: Issues Related to Establishing a Set-Aside)

Before the Alberta Energy and Utilities Board

- 2001
 - Generic, Gas Rate Unbundling (2001-093)
(Evidence: Canadian Experience and Approaches)
 - Generic, Gas Cost Recovery Rate Methodology (2001-040)

Before the Newfoundland & Labrador Board of Commissioners of Public Utilities

- 2013
 - Newfoundland Hydro General Rate Application
 - Newfoundland Power, General Rate Application (2013-2014)
- 2009
 - Newfoundland Power, 2010 General Rate Application
(Evidence: Assessment of five hearing issues)
- 2007
 - Newfoundland Power, 2008 General Rate Application
(Evidence: Regulatory instruments and other issues)
- 2006
 - Newfoundland Power, 2007 Amortization and Cost Deferrals Application
- 2005
 - Newfoundland Power, 2006 Accounting Policy Application
(Evidence: Assessment of Newfoundland Power's Proposals)

Before the New Brunswick Energy and Utilities Board

- 2013
 - New Brunswick Power, PLGS Deferral Account (Matter No. 171)
(Evidence: Options for the Recovery of the Point Lepreau Nuclear Generating Station Deferral Account Balance)
- 2010
 - New Brunswick Power Distribution Corp, 2010 Rate Review

- 2009
 - EGNB, Development Period hearing
 - New Brunswick Power Distribution Corp, 2009 Rate Review
- 2008
 - New Brunswick Power Distribution Corporation, PDVSA Deferral Account
- 2007
 - New Brunswick Power Distribution Corporation, PDVSA Deferral Account (Evidence: Treatment of the Petroleos De Venezuela, S.A. (PDVSA) Settlement in Setting Rates)

Before the Nova Scotia Utility and Review Board

- 2013
 - NSPI Capital Expenditures for the South Canoe Wind Project (CI# 42127) (Evidence: Treatment of costs associated with competitive wind power project)
 - Town of Antigonish Electric Utility Large User Rate (Evidence: Cost Allocation)
- 2011
 - Nova Scotia Power, 2011 Annual Capital Expenditure Plan
 - Nova Scotia Power, Load Retention Tariff (Evidence: Load Retention Tariff Methodology)
 - Heritage Gas, 2012 General Tariff Application
 - Efficiency Nova Scotia, Compliance Filing (Cost Allocation Methodology Report)
- 2008
 - Town of Antigonish Electric Utility rate process (Evidence: Comments on the Town of Antigonish Electric Utility Revised Cost of Service Study)

Before the National Energy Board

- 1999
 - BC Gas, Southern Crossing Project

Before the Canadian Radio television and Telecommunications Commission

- 2010
 - Obligation to Serve and Other Matters (NC 2010-43) (Evidence: Analysis of Issues Related to Local Service Subsidy)
- 2006
 - Review of Price Cap Framework (PN 06-5)
- 2001
 - Implementation of Price Cap Regulation for Québec-Téléphone & Télébec (PN 01-36) (Evidence: Designing a Consistent Price Cap Regime)
 - Price Cap Review (PN 01-37) (Evidence: The Second Generation Price Cap Regime)
 - Recovery of 2000 and 2001 Income Tax Expense (PN 00-108) (Evidence: Appropriate Recovery of MTS Income Tax Expense)
- 2000
 - Scope of Price Cap Review (PN 00-99)
 - Sunset Rule for Near-Essential Facilities (PN 00-96)
 - Access to Municipal Property in the City of Vancouver (PN 99-25)
 - Review of Contribution Collection Mechanism (PN 99-6) (Evidence: Review of Contribution Collection Mechanism)
 - Review of Direct Connection Charges

- 1999
 - Review of Frozen Contribution Rate Policy (PN 99-5)
(Evidence: Comments on the Frozen Contribution Rates Policy)
 - High Cost of Serving Areas (PN 97-42)
- 1998
 - Local Number Portability Start-up Costs (PN 98-10)
 - Competition in the Provision of International Telecommunications Services (PN 97-34)
- 1997
 - Implementation of Price Caps (PN 97-11)
 - Review of Joint Marketing Restrictions (PN 97-14/97-21)
 - Forbearance from Regulation of Toll Services Provided by Dominant Carriers (96-26)
 - -Regulation of Telecom Services Offered by Broadcast Carriers (PN 96-36)
- 1996
 - Scope of Contribution (PN 96-19)
 - Bell Canada, Business Rate Restructuring (PN 96-13)
 - Price Cap Regulation and Related Issues (PN 96-8)
(Evidence: Evidence addressing the design of the price cap system)
- 1996
 - Local Interconnection and Network Component Unbundling (PN 95-36)
(Evidence: Mechanisms for Collecting Contribution)
 - AGT, General Rate Application
 - Local Services Pricing Options (PN 95-49/95-56)
(Evidence: Mechanisms for Pursuing the Goal of Universally Available Basic Telephone Service in Low-Penetration Exchanges)
- 1995
 - Review of Phase II (PN 95-19)
 - Regulatory Framework for Ontario Independent Telephone Cos. (PN 95-15)
 - Split Rate Base Hearing (PN 94-52, 94-56 and 94-58)
(Evidence: Applicability of the Decision 94-19 Regulatory Framework to MTS)
- 1995
 - Review of the Regulatory Framework of Teleglobe Canada Inc. (PN 95-11)
 - Review of the Quality of Service Indicators (PN 94-50)
 - Bell SYGMA Hearing (PN 94-53)
- 1994
 - Regulatory Framework
(Evidence: A Proposed Regulatory/Structural Alternative)
 - Maritime Tel, General Rate Increase
 - Island Tel, General Rate Increase
 - BC Tel, General Rate Increase
 - AGT, General Rate Increase
 - Northwestel, General Rate Increase (paper hearing)
 - Bell Canada, General Rate Increase
 - Teleglobe, Annual Construction Program Review (paper hearing)
 - New Brunswick Tel, Annual Construction Program Review (paper hearing)
- 1992
 - Bell Canada - 1992 Annual Construction Program Review
 - AGT - 1992 Annual Construction Program Review
- 1991
 - Bell Canada - 1991 Construction Program Review
- 1990
 - Maritime Telegraph & Telephone, Review of Revenue Requirement 1990-91
(Evidence on the impact of modernization)
 - Island Telephone Company, Review of Revenue Requirement 1990-91
(Evidence on the impact of modernization)

- Review of Cable Television Regulations
(Evidence on alternative forms of regulation)

Before the Ontario Telephone Services Commission

- 1992 • Review of Rate-of-Return Regulation for Public Utility Telephone Companies.
(Evidence: The need for OTSC regulation of municipal public utility telcos)

Before the Ontario Securities Commission

- 1985 • Securities Industry Review
(Evidence: Industry structure and the form of regulation)
- 1983 • Role of Financial Institutions in the Securities Industry
(Evidence: Discount Brokerage and the Role of Financial Institutions)
- 1982 • Institutional Ownership of, and Diversification by, Securities Dealers
(Evidence: The impact of foreign and institutional entry)
- 1981 • The Unfixing of Brokerage Commission Rates
(Evidence: The impact of price competition on the securities industry)

Before the Ontario Municipal Board

- 1995 • Appeal of Boundary Expansion by Lincoln Hydro Electric Commission
(Affidavit prepared on the tests for boundary expansions)
- 1992 • Evidence dealing with the *Rental Housing Protection Act, 1989*

Before the Supreme Court of Ontario

- 1990 • Challenge of the Residential Rent Regulation Act (1986) under the *Canadian Charter of Rights and Freedoms*
(Evidence: The impact of rent regulation on Ontario's rental housing market)

Before the Saskatchewan Court of Queen's Bench

- 1993 • Evidence regarding market dynamics and competition policy.

Non-Hearing Processes (Task Forces, Lawsuits and Arbitrations)

- 2012 • Review of SaskPower's Cost Allocation Methodology (with Michael Roger)
- 2011 • Developing a regulatory training course for Ontario electricity distributors
- 2010 • Expert Advisor to the Ontario Energy Board for the Cost Allocation Review
- 2009 • Expert Advisor to New Brunswick Department of Energy on regulatory

- matters related to the proposed purchase of NB Power assets by Hydro Quebec
- 2008 • Expert Advisor to Ontario Energy Board for the Rate Design Review
- 2007 • Workshop on Electricity Market Design for the Electricity Regulatory Authority of Vietnam
- 2006 • Workshop on Regulatory Methodology for the Government of Vietnam (electricity regulator, Ministry of Energy and state-owned enterprises) with Marie Rounding
- 2004 • Vitamin Price Fixing
- Allocation of debt related to separation of electric utilities
- 2001 • BC Gas, Second Generation Performance Based Regulation Negotiation
- Telecommunications Industry, Price Cap Review Negotiation
- 1999 • PBR Task Force (Electricity), Ontario Energy Board
- Market Unbundling Group (BC Gas), British Columbia Utilities Commission
 - Western Supply Transportation Service (Centra Gas Manitoba), Manitoba PUB
- 1998 • Market Design Task Force, Ontario Energy Board
- 1997 • Ten Year Market Review, Ontario Energy Board

Commercial Arbitrations

Current: Two arbitrations in Alberta

- 2013 • Analysis of options for pricing of live chickens under Regulation 402
- 2006 • Disputed Power Purchase Agreement (PPA)
- 2004 • Evidence on the interpretation of a Gas Purchase Agreement (GPA)

Facilitation Activities

- 2010 • Strategic Planning Process for the Boards of Directors of an Ontario electricity distributor
- 2008 • Strategic Planning Processes for the Boards of Directors of electricity distributors
- 2007 • Stakeholder facilitation for Ontario Power Generation in relation to its Regulated Payment Amounts
- 2004 • Ontario Energy Board, Review of Further Efficiencies in the Electricity Distribution Sector (RP-2004-0020) (with IBM Consulting)
- Visioning Session: Structural Review of an association of Ontario electric LDCs
 - Business Plan Visioning Session with the Board of Directors of an Ontario electric LDC
- 2000 • Ontario Energy Board, Distribution Access Rule Task Force

Other Regulatory Issues Researched for Clients

- Analysis of strategic options for an Ontario electricity distributor
- Review of productivity enhancements for an Ontario electricity distributor
- Review of Conditions of Service for several Ontario electricity distributors
- Review of Economic Evaluation models and methodologies for several Ontario electricity distributors
- “Benchmarking for Regulatory Purposes” (with First Quartile Consulting) for the Canadian Association of members of Regulatory Tribunals (CAMPUT)
- “Review of Potential Regulatory Cost Measures” (a Report for the OEB)
- “Survey of Regulatory Cost Measures” (a Report for the Ontario Energy Board)
- OEA Working Dialogue on OEB Regulating Efficiency and Effectiveness (2007)
- Regulatory Cost Measures for the Ontario Energy Industry (2007)
- “Designing an Appropriate Lost Revenue Adjustment Mechanism (LRAM) for Electricity CDM Programs In Ontario”
- Small Hydro PPA Terms and Conditions
- Ontario Electricity Supply Mix
- Mitigation of Regulatory Risk for Utilities
- Regulatory Benchmarking
- Cross-jurisdictional Survey of Regulatory Efficiency
- Renegotiation of Municipal Franchise Agreement

Regulated Industries:

Papers and Research Projects

- *Report on the Effects of Separating Hydro One’s Transmission and Distribution Functions.*
- *Report on Hydro One Privatization Options.*
- *The Impact of Complete Deregulation on Market Efficiency of the Gas and Electric Industry in Alberta Post-2005 Assuming Current Market Dominance.*
- *Analysis of a Possible Equity Infusion for Ontario Hydro: Potential Implications for Financing Costs.*
- *Volatility in the Ontario Electricity Market, by ECS with Snelson International Energy.*
- *An Assessment of Price Volatility in the Ontario Electricity Market.*
- *Analysis of MTS Privatization Plan.*
- *Comments on the Issues Identified in the December 1995 Working Paper of the Advisory Committee on Competition in Ontario’s Electricity System, A submission on behalf of The Power Workers’ Union.*
- *Telecommunications Municipal/Franchise Tax Design Options (with Dr. E. Slack).*
- *The Implications of Phase III Costing for the Rates and Toll Settlements of Independent Telephone Companies (with Andrew Roman).*

- Submission to the Department of Communications (Canada) (August 1990): *Towards Competition in Telecommunication and Cable TV Services: A Single Switched Broadband Distribution Facility* (Comments of the Public Interest Advocacy Centre, with Robert E. Horwood and Gaylord Watkins).
- Submission to the Department of Communications (Canada) (May 1990): *Fibre Optic Networks: Facilitating Competition in Telecommunication and Television Services for the Benefit of All Users* (Comments of the Public Interest Advocacy Centre, with Robert E. Horwood and Gaylord Watkins).
- Submission to the CRTC concerning cable television regulation on behalf of the Public Interest Advocacy Centre (with Carmen Baggaley).
- Analysis of financing alternatives for Toronto Hydro's 13.8 kV conversion program for the City of Toronto Parks and Recreation Department.
- Analysis of the MacEachen White Paper on "Inflation and the Taxation of Personal Investment Income" for the Ontario Economic Council.
- Submission to the Parliamentary Committee commenting on the April 1985 Finance Green Paper, "The Regulation of Financial Institutions: Proposals for Discussion" prepared on behalf of the Public Interest Research Centre.

Financial Markets:

Papers and Research Projects

- Analysis of the potential consumer benefits from insurance retailing by financial institutions in Canada for the Public Interest Research Centre.
- Development of a financial model for projecting the financial implications of alternative corporate structures.
- Developed model for projecting cash flows for a major land development project.
- Analysis of the impact on the capital markets of changes to the investment rules for public sector pension funds for the Task Force on the Investment of Public Sector Pension Funds (with Prof. John Bossons).
- Review of the OSC proposals and alternatives for relaxing ownership restrictions in the securities industry prepared for the Ontario Securities Commission for submission to the Premier's Office (with Prof. Tom Courchene).
- Analysis of the Impact of Opening the Ontario Securities Market on the Economy of Toronto for a major Canadian securities dealer.
- Response to the December 1984 "Interim Report of the Ontario Task Force on Financial Institutions" for Consumer and Corporate Affairs (Canada).
- Report on functional integration in the Canadian financial services sector for the Australian Merchant Bankers' Association.
- Analysis of the Canadian and American Experience with Partially Negotiable Brokerage Commission Rates for the Australian Merchant Bankers Assoc.

- Served as a North American contact for the Office of Fair Trading (United Kingdom) providing information on developments in the debate over unfixing of brokerage fees, entry of banks into securities dealing and related matters.
- Development of a computerized package for analyzing the effects of alternative tax systems on business investment. Prepared for the Ontario Government reference to the Ontario Economic Council to study a separate personal income tax for Ontario.
- "An Analysis of the Use of Component Internal Rates of Return for Fund Performance Measurement" for Canadian National Investments.
- Analysis of Canadian Stock Market Data (development of a computer package for evaluating investment portfolio efficiency).
- Redesign and periodic updating of the financial, analysis methodology for Alfred Bunting and Co.
- Developed an APL computer package for teaching Business Finance concepts.

Housing:

Papers and Research Projects

- Potential Impact of Rent De-Control on Selected Markets in Ontario
- Review of the Ontario Auditors analysis of the cost of social housing.
- *Future Social Housing Delivery Opportunities in Metro Toronto.*
- Development of a model for projecting core need households to 2011.
- Analysis of the City of Toronto's approach to the valuation of certain properties developed under the *Rental Housing Protection Act, 1989.*
- *Security of Tenure Issues Pertaining to Co-operative Housing.*
- *Rent Regulation in Ontario*, a report prepared as expert Evidence for a Charter of Rights challenge of Ontario's system of rent regulation (with W.T. Stanbury).
- Feasibility study of enhancements to long term housing forecasting models (demographic factors) with David Foot.
- Feasibility study of enhancements to long term housing forecasting models (economic factors).
- Review of the housing situation in the Greater (Toronto) Metropolitan Region in 1988 and the next decade for the Ontario Ministry of Housing.
- Treatment of the Assisted Rental Program under rent regulation for the Ontario Ministry of Housing.
- Alternatives for implementing of the chronically depressed rent provision of the Residential Rent Regulation Act, 1986.
- Projected rental housing requirements to 1996, by unit rent level for Ontario Ministry of Housing.
- Analysis of the effects of the Canadian Home Ownership Stimulation Program on housing starts for Canada Mortgage and Housing Corporation.
- Energy Efficiency of New Housing (with Peat, Marwick and Partners and Scanada Consultants Limited) for Canada Mortgage and Housing Corporation.
- A Model of Supply and Demand in the Market for Housing for the Ontario Ministry of Housing.

- Several publications and presentations shown in the Academic Profile (see below).

Other Areas:

Papers and Research Projects

- Economic analysis of the market impact of the merger of two Canadian trucking companies in the context of the Competition Act.
- Assisted a Joint Task Force of the Ontario Ministries of Social Services and Health to develop a cost project model of alternative long term health care delivery systems.
- Study of Tax Incentives for Film and Television (joint project with Dr. E. Slack) for the Canadian Film and Television Association.
- Economic Analysis of Tax Incentives for the Film Industry (joint project with Dr. E. Slack) for the Department of Communications.
- Economic Impact of Cultural Institutions for Ontario Association of Art Galleries with the Ontario Federation of Symphony Orchestras and the Toronto Theatre Alliance.
- Economic Impact of Art Galleries' Expenditures on their Local Communities for the Ontario Association of Art Galleries.
- Developed a case study of the potash pro-rationing scheme invoked by the Saskatchewan government for the Faculty of Management Studies, Univ. of Toronto.
- Analysis of Regional Municipality of Niagara financial information for the Niagara Region Review Commission.
- Analysis of Ottawa/Carleton regional government's financial information, and comparison with other regional governments, using the MARS database (with Dr. E. Slack).
- A Dynamic Simulation Model of the North York Secondary School System for Planning for Declining Enrolment for the Ontario Institute for Studies in Education, Department of Educational Planning (with Dr. S. Padro).
- Development of an extension to the Limits to Growth World III Model incorporating commodity prices, technology, disaggregated regions and energy resources into the model.
- Development of a computer program for solving the Dynamic Transportation Problem (with Professors Sethi and Bookbinder at the Faculty of Management Studies, University of Toronto).

PRESENTATIONS

- MEARIE Training Program, Regulatory Specialist Certificate Course, (2011 – 2014)
- “Innovations in Rate Design”, CAMPUT Training Session, Annually 2010-2013
- “Cost of Service Filing Requirements” (2010) 2nd Annual Applications Training for Electricity Distributors, Society of Ontario Adjudicators and Regulators in cooperation with the Ontario Energy Board

- “Green Energy Act” (2010) 2nd Annual Applications Training for Electricity Distributors, Society of Ontario Adjudicators and Regulators in cooperation with Ontario Energy Board
- “Rate Design”, CAMPUT Training Session, Annually 2009- 2013
- “How To Build Transmission and Distribution to Enable FiT: The Role of Distributors”, EUCI Conference on Feed in Tariffs, Toronto, Sept. 2009
- “Distributor Mergers and Acquisitions: Potential Savings”, 2007 Electricity Distributors Ass
- “Beyond Borders” Regulating the Transition to Competition in Energy Markets (with Fred Hassan), EnerCom Conference March 2006.
- “Low-Income Energy Plan for Peterborough City & County”, 2006 LIEN-AHAC Conference
- “The “Deregulated Retail Energy Sector in Ontario”, Toronto Association of Business Economists, Oct. 2003.
- “Other Approaches to Rate Regulation”, CAMPUT Annual Meeting, Sept. 2003.
- “Price Projection: Will the Rate Freeze be Revenue Neutral?” at Canadian Institute Conf., The Impact of Ontario’s New Electricity Market on Large Power Consumers Jan. 2003.
- “Managing Energy Price Risk: Impact of Market & Regulatory Developments on Price Risk Management”, Canadian institute Conference, Toronto, October 21, 2002.
- “Location Based Marginal Pricing: Will it Happen?” Ontario Energy Contracts, Insight Conference, Toronto, October 1, 2002.
- “The Evolution of the North American Energy Market” Canadian Gas Association Executive Conference, Vancouver, June 2002.
- “Alternate Dispute Resolution: Can Everyone Win?” Canadian Gas Association Breakfast, Whistler, British Columbia, May 7, 2002.
- “Incentive Regulation and Commodity Competition Impacts on Quality of Service & Rates”, CAMPUT Regulatory Educational Conference, Whistler, BC, May 7, 2002.
- “Energy Deregulation Developments and Impacts on the HVACR Industry”, HRAI’s 33rd Annual Meeting, August 23-25, 2001 Huntsville, Ontario.
- “Natural Gas Delivery Regulation in Canada”, HRAC Conference on Natural Gas in Nova Scotia, Halifax, Nova Scotia, August 25, 1999.
- “Licensing as a Regulatory Approach” Thirteenth Annual CAMPUT Regulatory Educational Conference, Saint John, New Brunswick, May 4, 1999.
- “The Impact of Restructuring Electricity Markets on Customers”, West Kootenay Power 1998 Annual Conference, The Dawn of Customer Choice, Kelowna, B.C., Dec. 2, 1998.
- “Gaining Access to the Retail Customer”, *Electricity Competition in Ontario, New Rule, New Opportunities, New Players* (Canadian Institute Conference), Toronto, Oct. 1998.
- “The Future: Mega-BTU Inc.?” (Plenary session) Twelfth Annual CAMPUT Regulatory Educational Conference, Banff, Alberta, April 27, 1998.
- “Protecting Low Income Consumers’ Access: Lessons Learned From Other Countries,” Twelfth Annual Energy Affordability Conference, National Consumers Law Center, Washington, D.C, February 26-27, 1998.
- “Competition: What happens downstream of the meter?” (Plenary) Eleventh Annual CAMPUT Regulatory Educ. Conference, Whistler, B.C., May 6, 1997.

- "Brokers, Marketers and the Public Interest" Eleventh Annual CAMPUT Regulatory Educational Conference, Whistler, B.C., May 6, 1997.
- "Separation of Gas Supply, Merchant Functions & Other Alternatives," Tenth Annual CAMPUT Regulatory Educ. Conf., Niagara-on-the Lake, May 1, 1996.
- "The Impact of Deregulation on the Public Interest," Tenth Annual CAMPUT Regulatory Educational Conference, Niagara-on-the Lake, April 30, 1996.
- "Marketing to Low and Moderate Income Consumers in the New Competitive Market: Lessons Learned From Other Industries," Tenth Annual Energy Affordability Conference, National Consumers Law Center, Washington, D.C, February 22, 1996.
- "Where Should We be Going?" OEB Ten Year Market Review Workshop, Jan. 31, 1996.
- "Restructuring the Electrical Power Industry in Ontario" for the Board of Directors of Ontario Hydro on behalf of the Power Workers' Union, August, 1995.
- "A New Vision for Ontario's Electric Demand/Supply Future" panel presentation, Opening Plenary Session of the Canadian Independent Power Conference, Toronto, Dec. 1993.
- "Trends in Rental Housing Affordability by Income Level in Ontario" presented at the 1992 meetings of the Canadian Economics Assoc., Charlottetown, PEI.
- "An Evaluation of Rent Regulation as an Instrument for Meeting the Housing Needs of Renters in Ontario," presented to the Ontario Standing Committee on General Government, August, 1991.
- with S.W. Hamilton (Sept 1990) "Housing and the Regulatory Environment", a paper presented at the Housing Young Families Affordability Symposium, (Vancouver: Canadian Housing and Renewal Association/Canada Mortgage and Housing Corp.)
- "New Telecommunications Technologies: Who Pays? Who Benefits?" presented at the 1990 (June) meetings of the Canadian Economics Assoc., Victoria, B.C.
- with W.T. Stanbury, (1989) "Rent Controls as a Prisoner of War Game", Canadian Real Estate Research Bureau, Faculty of Commerce and Business Administration, University of British Columbia, #89-ULE-019.
- "The Implications of Rent Regulation for Housing Market Models" presented at 1989 (June) meetings of the Canadian Economics Association, Quebec City.
- "Price Caps - An Alternative to Rate of Return Regulation?" at the Canadian Association of Members of Public Utility Tribunals/Centre for the Study of Regulated Industries, Annual Regulatory Studies Training Programme, McGill University, May 14-18, 1989.
- "Living with Rent Regulation in Ontario" at the 35th North American meetings of the Regional Sciences Association, Toronto, November 1988.
- "A Survey of the Research of the Thom Commission," at *Rent Control: The International Experience*, John Deutsch Institute Roundtable, Queen's University, September, 1987.
- Invited address on "Forecasting the Regulatory Environment of Financial Institutions" sponsored by the University of Michigan - Flint as the 1985 paper for their annual *Lectures on the American Economy and the Business Community* series.
- "Collapsing Barriers Between Banking and Other Financial Institutions" at the 1984 Canadian MBA Conference, McMaster University.

- The economic impact of cultural activities for conferences of National Museums of Canada, Canadian Conference on Heritage Resources, Canadian Museums Association, Ontario Association of Art Galleries, and Ontario Federation of Symphony Orchestras.

PUBLICATIONS

Refereed Books and Monographs:

- with W.T. Stanbury (February 1990) *Rent Regulation: The Ontario Experience*, (Vancouver: The Canadian Real Estate Research Bureau).
- with W.T. Stanbury (January 1990) *The Housing Crisis: The Effects of Local Government Regulation*, (Vancouver: The Laurier Institute).
- with T. Courchene and L. Schwartz (October 1986) *Ontario's Proposals for the Canadian Securities Industry*, Observation No. 29, (Toronto: C.D. Howe Inst.).
- (1983) *Price Competition in the Canadian Securities Industry: A Test Case of Deregulation*, (Toronto: Ontario Economic Council).
- with G.F. Mathewson (1982) *Information Entry and Regulation in Markets for Life Insurance - Part II Overview and Policy Implications*, (Toronto: Ontario Economic Council).

Refereed Articles:

- with W.T. Stanbury (1990) "Landlords as Economic Prisoners of War", *Canadian Public Policy*, XVI no.4.
- with G.D. Quirin and S.P. Sethi (1977) "Market Feedbacks and the Limits to Growth", *INFOR*, Vol. 15, No. 1.

Other Publications:

- (1992) *Technology, Competition and Cross-subsidization in the Canadian Telecommunications Industry*, (Ottawa: Public Interest Advocacy Centre).
- (April 1990) *Paying for What You Need: Technological Advances and Competition in Telecommunications*, (Ottawa: Public Interest Advocacy Centre).
- with Andrew Roman and Robert Horwood, (1989) *Insurance Retailing by Financial Institutions in Canada*, (Ottawa: Public Interest Research Centre).
- with Douglas G. Hartle (1983) "The TAX-2 Model and Results" in *A Separate Personal Income Tax for Ontario: An Economic Analysis*, Special Research Report, (Toronto: Ontario Economic Council).
- (1982) "Commentary" in *Inflation and the Taxation of Personal Investment Income: An Analysis and Evaluation of the Canadian 1982 Reform Proposals* (edit. D.W. Conklin), Special Research Report (Toronto: Ontario Economic Council).

TEACHING

1989	Economics of Housing, Scarborough College, University of Toronto
1979 – 1985	Engineering Economy, Faculty of Engineering, University of Toronto
1982 – 1985	Computerized Business Systems (B.A. Program), and Management Information Systems (M.B.A.), Canadian School of Management
1979	Introductory Economics at St. George Campus, University of Toronto
1977 – 1979	Economic Principles at Erindale College, University of Toronto
1980 – 1985	Scuba diving instruction for Basic Diver, Sport Diver, Assistant Instructor and Instructor courses (National Association of Underwater Instructors).

RESEARCH MANAGEMENT

1983 – 1987	<ul style="list-style-type: none">• Research Director: Commission of Inquiry Into Residential Tenancies.• Directing a staff of four in house researchers on various background studies on Ontario's housing market and the literature related to rent regulation. Managed thirty external projects on topics related to the housing market and rent regulation.
1978 – 1980	<ul style="list-style-type: none">• Research Officer: Ontario Economic Council.• Research was conducted in the areas of regulation of the securities industry, mineral resource taxation policy, and Federal Provincial energy policy.• Other duties included managing ten external research contracts on topics in regulation and directing the work of research assistants.

OTHER ACTIVITIES

- Organizing Committee for the Concert for Inclusion in support of ParaSport Ontario
- Chairman of the Board of Directors of the Ontario Energy Marketers Association (formerly the Direct Purchase Industry Committee) and Executive Director of the Association.
- Invited participant in the Ontario Energy Board's External Advisory Committee.
- Panelist for "Administrative Tribunals and ADR", Osgoode Hall Law School, Professional Development Program, Continuing Legal Education, April 1997.
- Participation on behalf of OCAP in consultative processes related to direct purchase and integrated resource planning in the Ontario natural gas industry.
- Former Member of the Board of Directors of East Toronto Community Legal Services.
- Former Chairman of the Board of Directors of the Festival of Canadian Theatre.
- Articles in the editorial section of the Financial Times of Canada on policies for reforming Ontario's system of rent regulation (June 1990) and federal proposals regarding bank directorships (February 1991).
- Numerous appearances on CBC radio and television commenting on energy industry issues, competition, regulation and mergers in the Canadian economy.

- Refereed articles and research studies for *Canadian Public Policy*, *Queen's Quarterly* and Consumer and Corporate Affairs, Canada.
- Several organizations have been assisted in developing their research agendas, writing submissions to government on economic issue, or in other advisory capacities. Clients include the Public Interest Research Centre (topics include airline deregulation, Via Rail, telephone solicitation, Bell Canada's rate structure, frequent flyer programs, price cap regulation, and home equity conversion), Ontario Association of Art Galleries (arts funding and economic impact), Public Affairs Management, Inc., City of Toronto, Parks and Recreation Department, and Goldfarb Consultants.

CLIENTS

Private Sector Companies

Alfred Bunting & Co.	Auto Haulaway Inc.
BC Gas Utilities Limited	BC Rail
Buttcon Ltd.	Canavest House Ltd.
Canadian National Investments	Entergrus (Chatham-Kent Energy)
Comdisco Canada Inc.	Coral Energy
Devon Canada	Direct Energy
EnCana	ENERconnect
Enbridge Gas Distribution	EnCana Corporation
Enron Trade and Capital Canada	Financial Times of Canada
Fine Line Communications Ltd.	FortisBC
Fuji Electric (Tokyo)	Goldfarb Consultants
Great West Life Assurance Co.	Highmark Properties
Hydro One Networks Inc.	Hydro Québec
Insurance Corp. of British Columbia	McLeod Young Weir
New Brunswick Power (Disco)	Ontario Hydro Services
Ontario Power Generation	Shulman Communications Inc.
Sithe Canada	Star Produce
Terasen Gas	The Morassutti Group
Union Gas Limited	Wirebury Connections Inc.
Over 30 Ontario electricity distributors	

Industry and Other Associations

Association for Furthering Ontario's Rental Development
 Australian Merchant Bankers' Association
 Canadian Association of Members of Public Utilities Tribunals (CAMPUT)
 Canadian Business Telecommunications Alliance
 Canadian Film and Television Association
 Canadian Independent Telephone Association
 Canadian Museums Association
 Cornerstone Hydro Electric Concepts
 Electricity Distributors Association

Manitoba Keewatinowi Okimakanak
Ontario Association of Art Galleries
Ontario Energy Association
Ontario Federation of Symphony Orchestras
Power Workers' Union (CUPE 1000)
Toronto Theatre Alliance

Consumers' Associations

Alberta Council on Aging
Alert on Welfare
British Columbia Old Age Pensioners' Association
Canadian Pensioners Concerned
(Nova Scotia Division)
Consumers Association Of Canada
(National)
(Manitoba Branch)
(Alberta Branch)
(Northwest Territories Branch)
Consumers Fight Back Association
Council of Senior Citizens' Organizations
Co-operative Housing Association of Ontario
Federated Anti-Poverty Groups of British Columbia
Action réseau consommateurs (formerly La Fédération
Nationale des Associations de Consommateurs du Québec)
Manitoba Society for Seniors
The National Anti-Poverty Organization
Nova Scotia League for Equal Opportunities
Ontario Coalition Against Poverty
Option Consommateurs
PEI Council for the Disabled
PEI Senior Citizens Federation
People on Welfare for Equal Rights
Public Interest Research Centre
Rural Dignity of Canada
Rural Dignity, PEI Chapter
Senior Citizen' Association
Social Action Commission

Counsel for Consumers' Associations

British Columbia Public Interest Advocacy Centre
Legal Aid Manitoba, Public Interest Law Centre

Newfoundland Consumer Advocate
Public Interest Advocacy Centre (Ottawa)

Government

Federal

Canada Mortgage and Housing Corporation
Canadian Conference on Heritage Resources
Consumer and Corporate Affairs (Canada)
Department of Communications (Canada)
Director of Investigation and Research, Combines Investigation Act
St. Lawrence Seaway Authority

Provincial

Alberta Department of Energy
Commission of Inquiry into Residential Tenancies
New Brunswick, Department of Energy
Niagara Region Review Commission
Ontario Economic Council
Ontario Energy Board
Ontario Institute for Studies in Education, Department of Educational Planning
Ontario Ministry of Community and Social Services
Ontario Ministry of Health
Ontario Ministry of Housing (Corporate Policy and Planning; Rent Review Policy, Housing Field Operations)
Ontario Securities Commission
Ontario Task Force on the Investment of Public Sector Pension Funds
Ottawa/Carleton Region Review Commission
University of Toronto

Other

City of Calgary Electrical System
City of Peterborough
City of Toronto, (Telecom; Housing; Parks and Recreation)
Halifax Regional Municipality
Manitoba NDP Caucus
Office of Fair Trading (United Kingdom)
St. Francis Xavier University
Toronto Harbour Commissioners
Four municipally operated public utility telephone system

SENIOR CONSULTANT

- Regulatory, LDC and Retail electricity exposure
 - Over twenty five years of progressive experience in the Ontario electrical industry
 - Five years regulatory experience with the Ontario Energy Board
 - Strong knowledge and understanding of the energy industry
 - Knowledge of the various Ontario Legislature Acts and Bills affecting the energy industry
 - Strong working knowledge and application experience with OEB handbook rules, regulations, Compliance orders and guidelines
 - Hands on electricity rate development and application experience
 - Hands on OEB electronic report filing
 - OEB hearings evidence preparation, interrogatory response, evidence review and interrogatory Submissions
 - Proficiency in data collection for analytical processing, analysis, interpretation and reporting
 - Proficient in MS Office and multiple PC software applications
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PROFESSIONAL OVERVIEW

Elenchus

2010 - Present

Senior Consultant

Responsible for:

- Provide regulatory advice on issues and their implementation
- Participate in regular client meetings and teleconferences dealing with emerging regulatory issues
- Participate in all aspects of the preparation and defense of Electricity Distribution Rate rebasing applications
- Work with a wide range of utility team members including staff, management, executive and Board of Directors
- Preparation of client load forecasts using Normalized Average Use per Customer ("NAC") and Multivariate Regression models

Responsibilities included:

- Participation on multi-disciplinary teams to ensure the effective and efficient processing of applications
- Coordinated certain aspects of application processing administration including the issuance of notices and procedural orders and timelines for proceedings
- Analysis of information including economic, technical and other information submitted in support of applications and other regulatory proceedings
- Preparation of requests for additional information from applicants and interveners, and to develop submissions on behalf of Board staff
- Coordinated the preparation and filing of submissions on behalf of Board staff
- Participated in negotiations and settlements of issues with applicants and other stakeholders
- Identified and consolidated issues negotiated by applicants and stakeholders and presents results for consideration
- Prepared materials to assist in cross examination of witnesses
- Prepared briefings on financial, regulatory and technical matters pertaining to applications and other regulatory proceedings
- Gathered and analyzed information from both internal and external sources to support issues resolution
- Acted as a point of contact with industry participants, including the general public
- Worked individually and on teams to develop and implement tools and processes for the efficient and effective processing of applications, including monitoring and reporting on those processes
- Designed and developed spreadsheets and other tools for the reporting, retention, and analysis of information filed by regulated industry participants
- Maintained current and accurate records of application status and processing for assigned applications
- Worked with other OEB departments and responded to inquiries from and provided advice to industry and stakeholder representatives
- Responded to inquiries from internal and external clients
- Coordinated input from various areas and subject matter experts to develop responses to inquiries
- Monitored developments and trends in the energy sector and analyzed implications for Board policy and energy sector participants

- Participated in and/or monitored industry conferences, meetings, working groups and stakeholder consultations
- Established and maintained business relationships with representatives of regulated entities, government, customer and other stakeholder groups and industry associations
- Briefed senior management, Board Members and other staff regarding existing and new developments, emerging issues and trends
- Maintained industry contacts to be knowledgeable of trends and issues
- Established and maintained relationships with the regulated industry, industry groups, customer groups and government branches

Enersource Corporation, Rates and Regulatory

2003 - 2005

Responsibilities included:

- Preparation and submission of regular electronic report filings to the Ontario Energy Board
- Detailed monthly analysis and reporting on LDC Energy Revenue and OEB approved variance accounts
- Preparation and submission of rate applications to OEB
- Preparation and submission of OEB rate hearing evidence including legal counsel interaction
- Continuous multimedia surveillance, analysis and reporting on OEB and other energy sector related information
- Discussions and response to OEB staff queries
- Collection, comparison and reporting on other LDC rates
- Customer and LDC load data collection and analysis
- Attendance at OEB and other energy sector information sessions
- Corporate compliance reviews
- Participation in LDC and interested party groups advocacy discussions and submissions

First Source Energy Corp

2001 - 2003

Manager, Risk Management and Settlement

Overall responsibilities encompass all financial aspects of the business.

- Instrumental in establishing the company's risk and credit policies.
- Established both supply and market Value-at-Risk reporting, which led to our overall corporate hedging practices.
- Dealt in the negotiations with suppliers; Canadian and US, utilizing the ISDA contract for enabling agreements and financial swaps
- Negotiated margin calls with the suppliers

- Familiar with the Ontario Retail Settlement Code, dealings with the Ontario Energy Board, the Canadian Customs and Revenue Agency and the Ontario Ministry of Finance
- Designed and built financial settlement reporting structure to deal with over 60 LDC's (Local Distribution Companies) on financial settlements
- Responsible for the company financial reporting, prudential management, cash control, dealings with both internal and external auditors, business planning and forecasting and other management and statutory reporting

Note: First Source Energy Corp. was a joint venture retail electricity company. Enersource Corp. was majority shareholder. While First Source was highly successful, numerous external factors lead the shareholders to dissolve the business. My employment contract provided reversion rights to return to Enersource Corp.

ENERSOURCE CORPORATION	1986 - 2001
Rates and Regulatory	1999 - 2001
Manager Reporting and Analysis	1993 - 1999
Accounting Supervisor	1986 - 1993

My scope of experience and responsibilities has been:

- Preparation of rates and regulatory submissions and other reporting requirements to the Ontario Energy Board
- Revenue and cost reporting, cost and variance analysis, project analysis
- Coordination, preparation and presentation of annual corporate budgets, periodic financial and management reporting
- Computer systems implementations
- Taxation reporting and annual audit preparation
- Banking relationships
- Management of various accounting departments (i.e. Payroll, Accounts Payable)
- Participation in cross company multi-departmental committees
- Participation on industry related committees

Burlington Hydro	1985 - 1986
Accounting Supervisor	

My scope of experience and responsibilities were:

- Supervision of payroll and accounts payable
- Monthly financial reporting
- Inventory systems implementations
- Banking relationships

Creeds	1983 - 1985
Assistant Controller	
Peat Marwick Mitchell (KPMG)	1981 - 1983
External Auditor	
Cil Paints INC.	1978 - 1980
Accountant in Training	

ACADEMIC ACHIEVEMENTS

1986	Certified Management Accountant (CMA)
1982	Bachelor of Business Management (BBM)

SENIOR CONSULTANT

Stephen Motluk began his consulting career over 20 years ago as an economist and forecaster with a major Canadian applied economic think-tank in Ottawa. Over the past two decades, he has contributed to the analysis of many critical issues in areas as diverse as energy, education, health and welfare. He has held positions in government and the private sector and has been involved in complex negotiations involving provincial funding programs. For more than a decade, his analysis has been focused on the energy sector. He has had experience with the regulator in Ontario where, among other things, he worked on implementation of performance-based regulation (PBR) for electric utilities. Subsequently, he worked with an electricity market participant developing their Ontario business. As a Senior Consultant at Elenchus, Stephen has provided expert advice, evidence and testimony on incentive regulation and performance based regulation plans for electric and gas utilities in Ontario, BC, Alberta and NS. He has advised consumer groups, stakeholders and utilities. In addition, he has prepared expert evidence on electricity LDC load forecasting for many LDCs in Ontario. He has also had experience on the Board of Directors of an Ontario electricity LDC.

PROFESSIONAL OVERVIEW

Elenchus
Senior Consultant

2004 - Present

Responsible for:

- Expert advice and evidence in support of electricity distributor load forecasts and weather normalization for rate setting applications in Ontario;
- Expert advice, evidence and testimony on performance-based (incentive) regulation for electricity and natural-gas distribution systems;
- Evaluation of utility performance under incentive rates and evaluation of proposed alternative regulation plans;
- Empirical analysis of electricity distributor costs, investment and service reliability and surveys of international practices relating to the treatment of reliability under incentive rates and willingness-to-pay for enhanced service quality;

- Economic evaluation of electricity generation options in Ontario and cost modelling and price simulation of the Ontario interconnected electricity system using simulation models;
- Research, evaluation and analysis of regulatory regimes for electricity markets in various jurisdictions in North America, Europe, and other OECD areas;
- Analysis of, and advice on, various utility cost indices;
- Development of avoided cost estimates for natural gas and electricity distribution systems;
- Review of alternative assessment methods used in selected transmission line facility approvals;
- Expert advice and analysis on energy cost and energy-supply costs in long-term energy supply contracts and contract litigation;
- Analysis of power purchase agreements options and the effect of transmission costs and renewable energy credits/emission reduction benefits;
- Survey of approved ROE and capital structure for integrated electric utilities in Canada;
- Analysis and advice relating to large multi-unit residential building energy consumption and cost savings from energy efficiency retrofitting;
- Evaluation of potential new business opportunities for LDC energy services company;
- Analysis of regulatory costs and regulatory overhead in energy regulation.

EPCOR, Merchant & Capital L.P
Senior Portfolio Analyst

2002 - 2004

Ontario Energy Board
Strategic Services Group, Regulatory Affairs

1999 - 2002

ACADEMIC ACHIEVEMENTS

MA (and PhD studies), Dept. of Economics, Dalhousie University (Halifax, NS)

MBA (Mgmt. Sci.), Graduate School of Management, Clarkson University (Potsdam, NY, USA)

BA, Dept. of Economics, University of Waterloo (Ontario)