

ECONALYSIS CONSULTING SERVICES

William O. Harper

Mr. Harper has over 25 years experience in the design of rates and the regulation of electricity utilities. While employed by Ontario Hydro, he has testified as an expert witness on rates before the Ontario Energy Board from 1988 to 1995, and before the Ontario Environmental Assessment Board. He was responsible for the regulatory policy framework for Ontario municipal electric utilities and for the regulatory review of utility submissions from 1989 to 1995. Mr. Harper also coordinated the participation of Ontario Hydro (and its successor company Ontario Hydro Services Company) in major public reviews involving Committees of the Ontario Legislature, the Ontario Energy Board and the Macdonald Committee. He has served as a speaker on rate and regulatory issues for seminars sponsored by the APPA, MEA, EPRI, CEA, AMPCO and the Society of Management Accountants of Ontario. Since joining ECS, Mr. Harper has provided consulting support for client interventions on energy and telecommunications issues before the Ontario Energy Board, Manitoba Public Utilities Board, Québec's Régie de l'énergie, British Columbia Utilities Commission, Saskatchewan Rate Review Panel and CRTC. He has also appeared before the Manitoba's Public Utilities Board, the Manitoba Clean Environment Commission, the Ontario Energy Board and Quebec's Régie de l'énergie. Bill is currently a member of the Ontario Independent Electricity System Operator's Technical Panel.

EXPERIENCE

Econalysis Consulting Services- Senior Consultant 2000 to present

- Responsible for supporting client interventions in regulatory proceedings, including issues analyses & strategic direction, preparation of interrogatories, participation in settlement conferences, preparation of evidence and appearance as expert witness (where indicated by an asterix). Some of the more significant proceedings included:
 - Electricity (Ontario)
 - IMO 2000 Fees (OEB)
 - Hydro One Remote Communities Rate Application 2002-2004
 - OEB - Transmission System Code Review (2003)
 - OEB - Distribution Service Area Amendments (2003)
 - OEB - Regulated Asset Recovery (2004)
 - OEB - 2006 Electricity Rate Handbook Proceeding*
 - OEB - 2006 Rate Applications by Various Electricity Distributors
 - OEB - 2006 Guidelines for Regulation of Prescribed Generation Assets
 - OEB -2007 Rate Applications by Various Electricity Distributors
 - OEB- 2007 Cost of Capital and 2nd Generation Incentive Regulation Proceeding

- OEB - Hydro One Networks 2007/2008 Transmission Rate Application
- OEB – 2008 Rate Applications by Various Electricity Distributors
- OEB - Hydro One Networks 2009/2010 Transmission Rate Application
- OEB – 2009 Rate Applications by Various Electricity Distributors

- Electricity (British Columbia)
 - BC Hydro IPP By-Pass Rates
 - BC Hydro Heritage Contract Proposals
 - BC Hydro's 2004/05; 2005/06; 2007/09 and 2008/10 Revenue Requirement Applications
 - BC Hydro's CFT for Vancouver Island Generation – 2004
 - BC Hydro's 2005 Resource Expenditure and Acquisition Plan
 - BC Hydro's 2006 Residential Time of Use Rate Experiment Application
 - BC Hydro's 2006 Integrated Electricity Plan
 - BC Hydro's 2007 Rate Design Application
 - BC Hydro's 2008 Residential Inclining Block Rate Application
 - BC Transmission Corporation – Open Access Transmission Tariff Application - 2004
 - BCTC's 2005/06; 2006/07 and 2008/10 Revenue Requirement Applications
 - BCTC's – 2005 Vancouver Island Transmission Reinforcement Project
 - BCTC's – 2007 Interior-Lower Mainland Transmission Application
 - Fortis BC's 2005 Revenue Requirement and System Development Application
 - Fortis BC's 2006; 2007, 2008 and 2009 Revenue Requirement Applications
 - Fortis BC's 2007/08 and 2009/10 Capital Plan and System Development Plans
 - FortisBC's 2007 Rate Design Application

- Electricity (Quebec)
 - Hydro Québec-Distribution's 2002-2011 Supply Plan*
 - Hydro Quebec-Distribution's 2002-2003 Cost of Service and Cost Allocation Methodology*
 - Hydro Québec - Distribution's 2004-2005 Tariff Application*
 - Hydro Québec - Distribution's 2005/2006 Tariff Application*
 - Hydro Québec - Distribution's 2005-2014 Supply Plan*
 - Hydro Québec - Distribution's 2006/2007 Tariff Application*
 - Hydro Québec - Transmission's 2005 Tariff Application*
 - Hydro Québec - Distribution's 2006 Interruptible Tariff Application
 - Hydro Québec - Distribution's 2006 Cost Allocation Work Group
 - Hydro-Québec - Transmission's 2007 Tariff Application
 - Hydro-Québec - Distribution's 2007/08 Tariff Application*
 - Hydro-Québec - Transmission's 2008 Tariff Application
 - Hydro-Québec - Distribution's 2008/09 Tariff Application*
 - Hydro Québec - Distribution's 2008-2017 Supply Plan
 - Hydro-Québec - Transmission's 2009 Tariff Application
 - Hydro-Québec - Distribution's 2009/10 Tariff Application*

- Electricity (Manitoba)
 - Manitoba Hydro's Status Update Re: Acquisition of Centra Gas Manitoba Inc.*
 - Manitoba Hydro's Diesel 2003/04 Rate Application
 - Manitoba Hydro's 2004/05 and 2005/06 Rate Application*
 - Manitoba Hydro/NCN NFAAT Submission re: Wuskwatim*
 - Manitoba Hydro's 2005 Cost of Service Methodology Submission*
 - Manitoba Hydro's 2007 Rate Adjustment Application
 - Manitoba Hydro's 2008 General Rate Application*
 - Manitoba Hydro's 2008 Energy Intensive Industry Rate Application
 - Manitoba Hydro's 2009 Rate Adjustment Application

- Electricity (Saskatchewan)
 - Saskatchewan Power's 2008 Cost Allocation Methodology Review

- Natural Gas Distribution
 - Enbridge Consumers Gas 2001 Rates
 - BC Centra Gas Rate Design and Proposed 2003-2005 Revenue Requirement
 - Rate of Return on Common Equity (BCUC)
 - Terasen Gas (Vancouver Island) LNG Storage Project (2004)

- Telecommunications Sector
 - Access to In-Building Wire (CRTC)
 - Extended Area Service (CRTC)
 - Regulatory Framework for Small Telecoms (CRTC)

- Other
 - Acted as Case Manager in the preparation of Hydro One Networks' 2001-2003 Distribution Rate Applications
 - Supported the implementation of OPG's Transition Rate Option program prior to Open Access in Ontario
 - Prepared Client Studies on various issues associated with electricity supply/distribution in remote communities
 - Member of the OEB's 2004 Regulated Price Plan Working Group
 - Member of the OEB's 2005/06 Cost Allocation Technical Advisory Team
 - Member of the OEB's 2008 3rd Generation Incentive Regulation Working Group
 - Member of the IESO Technical Panel (April 2004 to Present)

Hydro One Networks

Manager - Regulatory Integration, Regulatory and Stakeholder Affairs (April 1999 to June 2000)

- Supervised professional and administrative staff with responsibility for:
 - providing regulatory research and advice in support of regulatory applications and business initiatives;
 - monitoring and intervening in other regulatory proceedings;
 - ensuring regulatory requirements and strategies are integrated into business planning and other Corporate processes;
 - providing case management services in support of specific regulatory applications.
- Acting Manager, Distribution Regulation since September 1999 with responsibility for:
 - coordinating the preparation of applications for OEB approval of changes to existing rate orders; sales of assets and the acquisition of other distribution utilities;
 - providing input to the Ontario Energy Board's emerging proposals with respect to the licences, codes and rate setting practices setting the regulatory framework for Ontario's electricity distribution utilities;
 - acting as liaison with Board staff on regulatory issues and provide regulatory input on business decisions affecting Hydro One Networks' distribution business.
- Supported the preparation and review before the OEB of Hydro One Networks' Application for 1999-2000 transmission and distribution rates.

Ontario Hydro

Team Leader, Public Hearings, Executive Services (Apr. 1995 to Apr. 1999)

- Supervised professional and admin staff responsible for managing Ontario Hydro's participation in specific public hearings and review processes.
- Directly involved in the coordination of Ontario Hydro's rate submissions to the Ontario Energy Board in 1995 and 1996, as well as Ontario Hydro's input to the Macdonald Committee on Electric Industry Restructuring and the Corporation's appearance before Committees of the Ontario Legislature dealing with Industry Restructuring and Nuclear Performance.

Manager – Rates, Energy Services and Environment (June 1993 to Apr. 95)

Manager – Rate Structures Department, Programs and Support Division (February 1989 to June 1993)

- Supervised a professional staff with responsibility for:
 - Developing Corporate rate setting policies;
 - Designing rates structures for application by retail customers of Ontario Hydro and the municipal utilities;
 - Developing rates for distributors and for the sale of power to Hydro's direct industrial customers and supporting their review before the Ontario Energy Board;

- Maintaining a policy framework for the execution of Hydro's regulation of municipal electric utilities;
- Reviewing and recommending for approval, as appropriate, municipal electric utility submissions regarding rates and other financial matters;
- Collecting and reporting on the annual financial and operating results of municipal electric utilities.
- Responsible for the development and implementation of Surplus Power, Real Time Pricing, and Back Up Power pricing options for large industrial customers.
- Appeared as an expert witness on rates before the Ontario Energy Board and other regulatory tribunals.
- Participated in a tariff study for the Ghana Power Sector, which involved the development of long run marginal cost-based tariffs, together with an implementation plan.

Section Head – Rate Structures, Rates Department

November 1987 to February 1989

- With a professional staff of eight responsibilities included:
 - Developing rate setting policies and designing rate structures for application to retail customers of municipal electric utilities and Ontario Hydro;
 - Designing rates for municipal utilities and direct industrial customers and supporting their review before the Ontario Energy Board.
- Participated in the implementation of time of use rates, including the development of retail rate setting guidelines for utilities; training sessions for Hydro staff and customers presentations.
- Testified before the OEB on rate-related matters.

Superintendent – Rate Economics, Rates and Strategic Conservation Department

February 1986 to November 1987

- Supervised a Section of professional staff with responsibility for:
 - Developing rate concepts for application to Ontario Hydro's customers, including incentive and time of use rates;
 - Maintaining the Branch's Net Revenue analysis capability then used for screening marketing initiatives;
 - Providing support and guidance in the application of Hydro's existing rate structures and supporting Hydro's annual rate hearing.

Power Costing/Senior Power Costing Analyst, Financial Policy Department

April 1980 to February 1986

- Duties included:
 - Conducting studies on various cost allocation issues and preparing recommendations on revisions to cost of power policies and procedures;
 - Providing advice and guidance to Ontario Hydro personnel and external groups on the interpretation and application of cost of power policies;
 - Preparing reports for senior management and presentation to the Ontario Energy Board.

- Participated in the development of a new costing and pricing system for Ontario Hydro. Main area of work included policies for the time differentiation of rates.

Ontario Ministry of Energy

Economist, Strategic Planning and Analysis Group

April 1975 to April 1980

- Participated in the development of energy demand forecasting models for the province of Ontario, particularly industrial energy demand and Ontario Hydro's demand for primary fuels.
- Assisted in the preparation of Ministry publications and presentations on Ontario's energy supply/demand outlook.
- Acted as an economic and financial advisor in support of Ministry programs, particularly those concerning Ontario Hydro.

EDUCATION

Master of Applied Science – Management Science

- University of Waterloo, 1975
- Major in Applied Economics with a minor in Operations Research
- Ontario Graduate Scholarship, 1974

Honours Bachelor of Science

- University of Toronto, 1973
- Major in Mathematics and Economics
- Alumni Scholarship in Economics, 1972