## EB-2010-0002 Hydro One 2011/12 Transmission Revenue Requirement

## **AMPCO Witness Panel**

**Curriculum Vitae of** 

Adam White, Dr. Anindya Sen, Darren MacDonald & Paolo Dottori

## **Adam White**

#### **AITIA Analytics Inc.**

President and CEO (November 2006 to present)

Energy intelligence, analysis and strategic communications

- Analysis and strategic communications for a multi-national chief executive in a complex policy and regulatory environment
- Market intelligence, marketing and regulatory strategies for a start-up alternative energy technology corporation
- Policy simulation and regulatory impact assessment for electricity markets, producers, consumers, the environment and the economy
- Research partnerships for innovative strategies to promote efficiency and efficient demand management
- Regulatory project management, strategy, submissions and expert testimony
- Stakeholder management through consultations, coalitions and associations

#### University of Toronto, Faculty of Applied Science and Engineering

Adjunct Professor (January 2009 to present)

Energy policy for third year engineering science students

#### **Association of Major Power Consumers in Ontario**

President (August 2005 to present)

The Association of Major Power Consumers in Ontario is a not-for-profit consumer interest advocacy organization—representing business consumers in the forestry, chemical, mining and minerals, steel, petroleum products, cement, automotive and manufacturing industries.

- Executive management of the Association, including governance, finance, administration, events, membership services, human resources, information technology, strategic policy, advocacy and communications, stakeholder engagement and public relations
- Appointed to Independent Electricity System Operator <u>IESO Board of Directors' Stakeholder Advisory Committee</u>
- Developed and delivered research project and report on industrial <u>Conservation through Dialogue and Design</u> with funding from the Conservation Bureau of the Ontario Power Authority

#### **Ontario Energy Association**

Acting President and Chief Executive Officer (December 2004 – April 2005)

Vice President, Public Affairs and External Relations (March 2003 - December 2004; May 2005 to June 2005)

The Ontario Energy Association is an energy trade organization representing firms involved in the transmission, distribution and marketing of natural gas, and the generation, transmission, distribution and marketing of electricity across Ontario.

- Appointed to Minister's <u>Advisory Panel on Improvements to Ontario's Environmental Assessment Process</u> (Fall 2004); led industry-government workshop on environmental assessment and subsequent member committee process to prepare detailed recommendations for input to government and stakeholders
- Facilitated OEA Task Force on Bill 100; wrote OEA submission and presented at hearings of the Standing Committee on Social Policy
- Led Task Force on DSM to make detailed submissions representing the OEA as a member of the OEB <u>Advisory Group on Demand-Side</u> <u>Management and Demand Response</u> consultation process
- Developed and executed Industry Leaders' Symposium on <u>Effective Customer Communications</u> with participation from industry, government and regulators

#### **Mirant Canada Energy Marketing**

Account Executive (March – November 2002)

Mirant is an independent power company based in Atlanta, Georgia.

- Participated in the development of wholesale market rules and regulations to manage business risks and build the company's brand awareness and corporate reputation
- Developed business plan and marketing strategy for structured wholesale power products for industrial and commercial accounts
- Targeted business opportunities for mid-marketing and trading groups, contributing to profits from power sales
- Built relationships with key customers and suppliers
- Represented the company in senior level meetings with government officials, regulators and in industry associations to advance business interests and promote effective market policy and regulation

#### **TransAlta Energy Corporation**

Manager, Commercial Operations (September 2001 to March 2002)

Manager, Regulatory Affairs (August 1999 to August 2001)

TransAlta is a power generation and energy marketing company with 50 facilities (8468 MW of capacity) in Canada, the United States, Mexico, and Australia.

· Led team to obtain all necessary environmental and regulatory permits and approvals for \$450 million Sarnia Regional Cogeneration Project

- on time and under budget
- Led negotiations to secure commercial agreements, design and construction contracts, and regulatory arrangements for transmission design and construction, including a First Nation Band Council Resolution, municipal resolutions and easements
- Led the <u>Cogenerators Alliance</u> to represent gas-fired generators at National Energy Board hearings on gas transmission tariffs, resulting in significant avoided costs for Alliance members
- Led the <u>Clean Energy Markets Group</u> to advocate for effective emission trading regulations
- Represented generator interests on the Ontario Energy Board Advisory Group to establish a Transmission System Code in Ontario

#### **Ontario Ministry of Energy, Science and Technology**

Executive Assistant to Assistant Deputy Minister of Energy (December 1997 - August 1999)

- Led policy and regulation for Electricity Product Labeling and Environmental Information Disclosure to consumers
- Provided administrative support and policy advice to the Assistant Deputy Minister and senior government officials

#### **Ontario Ministry of Environment and Energy**

Policy Analyst (1994), Economist (1995) and Senior Economist (1995 to 1997)

- Led policy development process and initiated successful <u>Pilot Emission Reduction Trading</u> project
- Represented Ontario in national consultations on emissions trading and climate change, and the National Pollutant Release Inventory
- Participated in Expert Round Table on Emission Trading at the National Round Table on Environment and the Economy
- Managed research for database and developed a model for <u>Capital Forecasts for Water And Sewage Treatment Infrastructure</u> in support of \$300 million capital grant program for municipalities
- Developed and delivered a training course on <u>Economic Analysis of Environmental Policy</u>

#### **Ontario Campaign for Action on Tobacco**

Assistant to the Executive Director (1993 to 1994)

OCAT was founded by the Canadian Cancer Society Ontario Division, the Heart and Stroke Foundation of Ontario, the Non-Smokers' Rights Association, the Ontario Lung Association and the Ontario Medical Association in 1992 to secure the passage of Ontario's <u>Tobacco Control Act, 1994</u>, making tobacco sales and supply to minors illegal, eliminating the sale of tobacco in pharmacies and vending machines, and making public places smoke-free.

- Established, organized and administered the Campaign office
- Researched and analyzed health policy issues, legislation and regulations, to advise senior stakeholders in the public health community

## Hickling Corporation (formerly VHB Research and Consulting)

Consultant (1991 to 1993)

Hickling Corporation is a Canadian owned management consulting company with headquarters in Ottawa.

 Clients included Ontario Hydro, the Ontario Ministry of Environment and Energy, the National Round Table on the Environment and the Economy, the House of Commons Standing Committee on Energy, Mines and Resources, the Ontario Federation of Anglers and Hunters and the Northern Ontario Tourist Outfitters Association and the United States National Wildlife Federation

#### **Energy Probe Research Foundation**

Forestry Researcher (1990 to 1991)

The Energy Probe Research Foundation has four main goals: to provide the public, media, business, and government with information on resource-related issues; to promote sustainable resource use; to encourage individual responsibility and accountability; and to help Canada contribute to global justice and prosperity.

- Testified at Ontario Energy Board hearings on Ontario Hydro rate proposals with respect to forecasting nuclear generation capacity and future cost impacts of predicted plant outages
- Published <u>A Cost-Benefit Analysis of Logging the Carmanah Creek Watershed</u> in British Columbia, garnering national media coverage and leading to the creation of a new provincial park to protect the watershed

#### City of Toronto, Department of Public Works and the Environment

■ Delivered course on Environmental Economics (2004)

#### **Independent Power Producers' Society of Ontario**

Provided strategic public affairs counsel to the board of directors (2003)

#### **World Wildlife Fund Canada**

■ Produced report on the <u>Economic Value of Endangered Spaces</u> (1993)

#### Teme-Augama Anishnabai First Nation

Facilitated development and prepared a Sustainable Resource Management Plan (1992)

#### **British Columbia Ministry of Transportation and Highways**

Engineering Aide (1983, 1984 to 1987)

- Worked as a surveyor and technician on highway construction projects (Highway 5 near Little Fort, Highway 97 north of Mackenzie, Coquihalla Phase 1 near Merritt and Phase 3 near Peachland), skills in survey methods and practice, drafting, estimating, project management and construction policy
- Served as Shop Steward for BC Government Employees' Union local (1986)

## **Education**

#### Fellow, Leadership for Environment and Development

LEAD International (1995 to 1998)

One of 15 Canadians chosen in 1995 to participate in a two-year professional development and scholarship programme sponsored by the Rockefeller Foundation, the International Development Research Centre and the National Round Table on the Environment and Economy.

#### **Facilitative Leadership Diploma**

Faculty of Environmental Studies, York University (1996)

#### **Bachelor of Arts (Economics)**

University of British Columbia (1990)

## Volunteer experience

#### **Canadian Environmental Defence Fund Foundation**

President (2003-2005)

#### **Environmental Defence Canada**

Director, Treasurer and Chair of the Development Committee of the Board (2000-2004)

## **Independent Power Producers' Society of Ontario**

Director (2001-2002)

#### **LEAD Canada Alumni Association**

Member of the National Steering Committee for LEAD Canada (1998) and elected President of LEAD Canada Alumni Association (1998 to 2000)

#### **Ontario Lung Association**

Member of Community Advisory Committee, Metro Toronto and York Region (1996-1998)

## Anindya Sen

Department of Economics
University of Waterloo
200 University Avenue
Waterloo, Ontario
Canada N2L 3G1

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Email: asen@watarts.uwaterloo.ca

**DATE OF BIRTH** April 1<sup>st</sup> 1969

PLACE OF BIRTH Saskatoon, Canada

**EMPLOYMENT** 

July 2005 to present: Associate Professor of Economics, University of Waterloo

Sept. 2002 to present: Affiliated Research Scientist, Center for Behavioral Research and

Program Evaluation, Faculty of Health Sciences, University of Waterloo

Sept. 1999 – June 2005: Assistant Professor of Economics, University of Waterloo

June 1998 - Aug. 1999: Economist, Competition Bureau, Federal Government of Canada

#### **EDUCATION**

1998	Ph.D., Economics, University of Toronto.
1992	M.A., Economics, Concordia University
1990	B.A. (Hons.), Economics, University of Delhi

#### **AWARDS**

- Distinguished Teacher of the Year Award, 2004; given by the students of the Economics Society.
- Nominee, University Distinguished Teacher of the Year Award, 2004

#### **GRANTS**

#### External

- Principal Investigator (with Emma Pierard), "Maternal Smoking, Infant Birth Weight, and Cigarette Taxes", SSHRC Standard Research Grant, (\$30, 000), 07/07 07/09
- Co-investigator, "Improving Access to Canadian Smoking Data", Canadian Tobacco Research Initiative, (\$1,500,000). 08/04-08/09

• Co-Investigator, "Improving the Population Impact of Telephone Counselling for the Treatment of Smoking", Heart and Stroke Foundation, (\$1,209,618) 08/01-06/06.

#### Internal

- Internal SSHRC 4A Award (\$5,000), 2006-07
- CBRPE Faculty Award (\$20,000), 2001-03
- New Faculty Research Award (\$5,000), University of Waterloo, 2000

#### RESEARCH INTERESTS

Health Economics, Industrial Organization

#### PUBLISHED RESEARCH

#### **Public & Health Economics**

"Estimating the Effects of Cigarette Taxes on Birth Outcomes," with Emmanuelle Pierard, conditionally accepted, *Canadian Public Policy*.

"Teen employment, poverty, and the minimum wage: evidence from Canada", with Corey Van De Waal and Kathleen Rybczynzki, forthcoming, *Labour Economics*.

"Estimating the impact of cigarette taxes on youth smoking participation, initiation, and persistence: evidence from Canada.", with Tony Wirjanto, forthcoming, *Health Economics* 

"Obesity, smoking, and cigarette taxes: evidence from the Canadian Community Health Surveys", with Mahdiyeh Entezarkheir and Alan Wilson, *Health Policy*, 97, 2010, pp.180–186.

"Do Changes In Cigarette Taxes Impact Youth Smoking? Evidence From Canadian Provinces," with Hideki Ariizumi and Daciana Driambe, *Forum of Health Economics and Policy*, 13(2), 2010.

"Intergenerational correlations in educational attainment: birth order and family size effects from Canada.", with Anthony Clemente, *Economics of Education Review*, 29(1), 2010, pp. 147 – 155.

"Estimating the impacts of household behavior on youth smoking: evidence from Ontario, Canada." *Review of Economics of the Household*, 7(2), 2009, pp. 189-218.

"Estimating the impact of beer prices on the incidence of sexually transmitted diseases: cross-province and time series evidence from Canada.", with May Luong, *Contemporary Economic Policy*, 26(4), 2008, pp. 505-517

- "Does increased abortion lead to lower crime? Evaluating the relationship between crime, abortion, and fertility." *The B.E. Journal of Economic Analysis & Policy* 7(1) (Topics), 2007.
- "Estimating the impact of seat belt use on traffic fatalities: empirical evidence from Canada.", with Brent Mizzen, *Canadian Public Policy*, September 2007.
- "Do stricter penalties or media publicity reduce alcohol consumption by drivers?", *Canadian Public Policy* 31(4), December 2005.
- "Is health care a luxury? new evidence from OECD data", *International Journal of Health Care Finance and Economics* 5(2), June 2005, pp. 147-164.
- "Estimating price elasticities when there is smuggling: the sensitivity of smoking to price in Canada.", with Jonathan Gruber and Mark Stabile, *Journal of Health Economics* 22(5), September 2003, pp. 821-42.
- "An empirical test of the offset hypothesis", *Journal of Law and Economics* 44(2), October 2001, pp.481-510.
- "Do stricter penalties deter drinking and driving? An empirical investigation of Canadian impaired driving laws", *Canadian Journal of Economics* 34(1), February 2001, pp. 149-164.
- "Will stricter penalties deter drunk driving?", Policy Options 20(7) 1999, pp. 54-57.

#### **Industrial Organization**

- "Estimating the impacts of outlet rationalization on retail prices, industry concentration, and sales: empirical evidence from Canadian gasoline markets," with Peter Townley, *Journal of Economics and Management Strategy*, 19(3), pp. 605-633.
- "Does increasing the market share of smaller firms result in lower prices?", *Review of Industrial Organization*, 26(4), 2005, pp. 371-389.
- "Higher prices at the gas pump: international crude oil price fluctuations or local market concentration? An empirical investigation.", *Energy Economics*, vol. 25, no. 3, May 2003, pp. 269-88.
- "Does local competition impact interest rates charged on small business loans? Empirical evidence from Canada",, with Ted Mallett, *Review of Industrial Organization*, 19(4), December 2001, pp.435- 450.
- "Jury still out on internet benefits: more branches keep bank's loan rates low", with Ted Mallett, and Ruma Sondhi, *Canadian Business Economics* 8(3), February 2001, pp.21-29.

## **Work Published in Conference Proceedings**

Sen, Anindya, "Traffic fatalities and seatbelt laws", Canadian Transport Research Forum Meetings.

## **Working Papers**

"Do price ceilings result in lower retail gasoline prices? Evidence from Canada.", with Anthony Clemente, Dennis Lu, and Linda Jonker, revised and resubmitted

"Estimating the impacts of vertical integration on wholesale prices: empirical evidence from Canadian gasoline markets.", revised and resubmitted,

"Overshifting and tax incidence in oligopolistic industries: evidence from the Canadian cigarette industry.", revisions requested.

"Vertical integration and strategic behavior: evidence from Canadian gasoline markets.", with Mikko Packelen, revisions requested.

"Teen fertility, welfare transfers, and the minimum wage: evidence from Canada.", with Hideki Ariizumi, revisions requested.

"Retail prices, vertical product differentiation, and market concentration: evidence from Canadian gasoline markets.", with Marc Duhamel and Hideki Ariizumi under review.

"Static and dynamic merger effects: evidence from the divestiture of Texaco's Canadian assets.", with Mikko Packelen, under review.

"Do lower cigarette taxes result in more smoking? Evidence from the Canadian national experiment.", with Nafeez Fatima, under review.

"How do we reward ourselves? Evidence on the returns to publications.", with Hideki Ariizumi and Natasha De Sousa.

"Income shifting and "kiddie tax" legislation: evidence from Canada.", with Andrew Bauer, under review.

"Does smoking result in lower employee productivity? Evidence from Canada."

"Retail gasoline prices, market shares, and local competition: evidence from station level data.", with Wai Hong Choi and Dennis Lu.

"Minimum wage effects by gender, age, and business cycle: cross-province and time-series evidence from Canada.", with Corey Van De Waal, Kathleen Rybczynzki, and Jason Chang

- "Does price discrimination explain inter-city differences in retail gasoline prices?", with Alain Nimubona.
- "More police officers less crime? Cross-province and time-series evidence from Canada.", with George Orlov.
- "Do good looking professors earn more? Evidence from economics departments in Ontario.", with Frances Woolley and Marcel Voia.

## **Current Ph.D. Supervision**

Wai Hong Choi, "Essays in Retail Competition and Prices." (Ongoing)

## **Consulting Reports**

- "Wages and industrial concentration: evidence from the Canadian Manufacturing sector.", for Industry Canada.
- "Productivity, concentration, and free trade: empirical evidence from the Canadian manufacturing sector.", report for Industry Canada.
- "What determines the profitability of a retail gasoline outlet? A study for the competition bureau of Canada." http://www.competitionbureau.gc.ca/PDFs/RetailGasolineOutlet-e.pdf, (2006).
- "Estimating the economic benefits of the marine transport industry in Canada", (with Peter Dungan and LECG LLC), report for Transport Canada (<a href="http://www.cmc-ccm.com/acrobat/MIBS-FinalReport.pdf">http://www.cmc-ccm.com/acrobat/MIBS-FinalReport.pdf</a>), 2004.
- "A cost benefit analysis of the multi jurisdictional disclosure system", (with Poonam Puri and LECG LLC), report for the Ontario Securities Commission (<a href="http://www.osc.gov.on.ca/Regulation/Confidence/pic\_20030627\_cba-disclosure-system.pdf">http://www.osc.gov.on.ca/Regulation/Confidence/pic\_20030627\_cba-disclosure-system.pdf</a>), 2003.
- "Estimating the impact of mergers among bread manufacturers in Canada", report for the Competition Bureau, Industry Canada, 2001.
- "Competition and gasoline prices in Eastern Canada", report for the Competition Bureau, Industry Canada, 2000.

#### PRESENTATION OF RESEARCH

#### **At Conferences**

Canadian Economics Association Meetings, 2009, 2007, 2006, 2005, 2004, 2003, 2002; Interdisciplinary Conference Sponsored by the National Cancer Institute of Canada, University

of Waterloo, 2001; Canadian Law and Economics Association Meeting, 2009, 2003, 2000, 1999; International Business and Economics Society Meetings, 1999; Canadian Transport Research Forum Meetings, 1999.

#### **Invited Presentations at Universities**

2009 University of Windsor, Carleton University

2007 McMaster University, University of Toronto, York University

2005 University of Western Ontario

2004 University of Guelph, McMaster University.

2001 Ryerson University, York University, University of Toronto, University of Western Ontario.

2000 McMaster University, Faculty of Health Studies, University of Waterloo.

#### Other

- "Evaluating the Economic Impact of the Marine Transport Industry", presented to Transport Canada, 2004.
- "Inferring the Presence of Market Power from Tax Hikes", presented to the Competition Bureau, Industry Canada, 2003.
- "Estimating the Impact of Mergers among Bread Manufacturers", presented to the Competition Bureau, Industry Canada, 2001.
- "Competition and Gasoline Prices in Eastern Canada", presented to the Competition Bureau, Industry Canada, 2000.
- Expert Testimony on the Causes of Rising Gas Prices, House of Commons Industry Committee, 1999.

#### **TEACHING**

## **Courses Taught**

Undergraduate: ECON 445 (Industrial Organization), ECON 361 (Cost Benefit Analysis), ECON 341 (Public Expenditure), ECON 321 (Econometrics), ECON 201 (Microeconomics)

Graduate: Industrial Organization, Public Finance, Health Economics

#### **SERVICE**

#### **Department Level**

Recruiting Committee, 2010
Promotions and Tenure Committee, 2008-2010
Director, Seminar Series, 2000-01, 2003-04
Member, Graduate Committee, 2010, 2009, 1999-2005 – part of committee that designed and introduced the Ph.D. program

Member, Undergraduate Committee, 2008

## Refereeing

Journal of Political Economy, Canadian Journal of Economics, Journal of Health Economics, Journal of Public Economics, Review of Industrial Organization, Journal of Risk and Insurance, Economic Inquiry, Social Science and Medicine, Journal of Policy Analysis and Management, Contemporary Economic Policy, Southern Economic Journal.

#### DARREN MACDONALD

#### PROFESSIONAL EXPERIENCE

- GERDAU AMERISTEEL CORPORATION, Whitby, Ontario, 2001-Present
  - o **Director of Energy** 2006-Present
  - o Corporate Energy Manager 2001-2006
- ENBRIDGE GAS DISTRIBUTION INC., Whitby, Ontario, 1992-2001
  - o Energy Management Consultant, 1999–2001
  - o Technical Specialist, 1997-1999
  - o Manager, Large Volume Accounts, 1995–1997
  - o Commercial/Industrial Utilization Consultant, 1993–1995
  - o Industrial Process Technologist, 1992-1993
- ROGERS COMMUNICATIONS INC.—DBS Inc., Oshawa, Ontario, 1990-1992
  - Field Operations Manager
- ONTARIO HYDRO RESEARCH, Toronto, Ontario, 1988-1990
  - o Combustion Research Technologist

#### PROFESSIONAL DEVELOPMENT

**Certified Energy Management Consultant**, Association of Energy Engineers (AEE, US)

Chartered Industrial Consultant, American Gas Association, Institute of Gas Tech

#### **Professional Associations**

Member of the Board of Directors the Electricity Consumers Resource Council Member of the Energy Committee of the Steel Manufacturers Association Member of the Board of Directors of the Industrial Energy Consumers of America Former member of the Board of Directors of the Industrial Gas Users Association and the Association of Major Power Consumers of Ontario

#### **EDUCATION**

**Bachelor of Chemical Engineering Technology**, Ryerson Polytechnic University, Toronto, 1988

Darren MacDonald is the Director of Energy for Gerdau Ameristeel's 21 steel making facilities in the United States and Canada. Mr. MacDonald leads a team responsible to secure competitive arrangements for the supply of electricity, natural gas, oxygen and industrial gases necessary to meet the energy requirements of the Company's Canadian and US operations through risk management strategies; energy related political and regulatory intervention and plant operating strategies.

Mr. MacDonald represents Gerdau Ameristeel's interest in many regional industrial group's at the Board of Director or Steering committee level in both Canada and the US.

Prior to his current position with Gerdau Ameristeel, Mr. MacDonald worked for Enbridge Gas Distribution Inc where he held positions of increasing responsibility focused on energy utilization and contracting. Prior to Enbridge, Mr. MacDonald worked for Ontario Hydro conducting research to reduce emissions from thermal power plants

#### **Prior Testimony**

- Ontario Energy Board, Hydro One Networks Inc., File # EB-2008-0272, Direct Testimony in AMPCO filing Feb 14, 2009
- Corporation Commission of the State of Oklahoma, Public Service Company of Oklahoma, Cause No. 200700449, Responsive Testimony Filed February 25, 2008
- Federal Energy Regulatory Commission, PJM Interconnection, LLC, Docket No. ER07-508, Affidavit filed Feb. 23, 2007 and Supplemental Affidavit filed March 27, 2007
- Ontario Energy Board, Hydro One Networks Inc., File # EB-2006-0501, Direct Testimony in AMPCO filing Feb 14, 2007
- Ontario Energy Board, Ontario Energy Board Act, 1998, S.O.1998, c.15, Schedule B, Testified in support of Evidence filed by IGUA and AMPCO, July 20, 2006
- New Jersey Board of Public Utilities, Public Service Electric and Gas, Docket No. ER02050303, Direct Testimony Filed 1/22/03
- New Jersey Board of Public Utilities, Jersey Central Power and Light, Docket No. E02070417, Direct Testimony Filed 12/20/02

# Paolo Dottori Vice President, Energy, Environment and Technology Tembec Entreprises Inc.

*Paolo Dottori* was named Vice President, Energy, Environment and Technology of Tembec in October 2006. Mr. Dottori joined the Company in 1987, and over the course of his career has worked in various roles in the areas of engineering, project management, maintenance, construction, purchasing and operations. In 2000, Mr. Dottori began supporting major projects in engineering as well as merger and acquisition activities.

Mr. Dottori is actively involved with committees and industry associations focused on solutions in the electricity and energy sectors, notably currently acting as a Director and Treasurer of the Board of AMPCO, the Association of Major Power Consumers in Ontario and a past Director of the Board of IGUA, the Industrial Gas Users Association.

Mr. Dottori has a degree in mechanical engineering from the University of Toronto, which he received in 1986.