



500 Consumers Road  
North York, Ontario M2J 1P8  
PO Box 650  
Scarborough ON M1K 5E3

**Lorraine Chiasson**  
Regulatory Coordinator  
Regulatory Affairs  
phone: (416) 495-5499  
fax: (416) 495-6072  
Email: egdregulatoryproceedings@enbridge.com

February 19, 2014

**VIA RESS, EMAIL and COURIER**

Ms. Kirsten Walli  
Ontario Energy Board  
2300 Yonge Street  
Suite 2700  
Toronto, Ontario  
M4P 1E4

**Re: EB-2012-0459 - Enbridge Gas Distribution Inc. ("Enbridge")  
2014 – 2018 Rate Application  
New and Updated Exhibits**

---

Further to Enbridge Gas Distribution's filing of February 18, 2014, enclosed please find new and updated exhibits as follows:

Company CVs found at Exhibit A1, Tab 6, Schedules 1 and 2 have been updated to reflect job titles changes only.

- Exhibit A1, Tab 6, Schedule 1 updated pages 2, 5 to 8, 13, 24 to 26, 31 to 34, 37 to 39, 44, 50 to 53, 57 to 65, 71, 81, 82, 85, 86, 88, 89, 97, 98, and 100;
- Exhibit A1, Tab 6, Schedule 2 updated page 7;
- Exhibit A1, Tab 6, Schedule 6 (new); and
- Exhibit B2, Tab 9, Schedule 1, page 3.

This submission was filed through the Board's RESS and is available on the Company's website at [www.enbridgegas.com/ratecase](http://www.enbridgegas.com/ratecase).

Yours truly,

(original signed)

Lorraine Chiasson  
Regulatory Coordinator

cc: Mr. F. Cass, Aird & Berlis  
EB-2012-0459 Intervenor

CURRICULUM VITAE OF  
TIM ADAMSON

Experience: Enbridge Gas Distribution Inc.

Manager, Sustainable Energy  
2008

Program Manager, Sustainable Energy  
2002

Senior Advisor, Safety and Environment  
1993

Education: MSc. Soil Surveying and Pedology, University of Reading, UK  
B.Sc. Honours. Soil Science, University of Newcastle upon Tyne, UK.  
Canadian Certified Environmental Practitioner (2005)

Various Other Training Courses (e.g. CSA ISO 14064 – 2,  
Carbon Finance, web writing, marketing for engineers).

Memberships: Chair, Canadian Energy Partnership for Environmental Innovation (CEPEI)  
Board Member, Smart Commute, North Toronto Vaughan

Appearances: (Ontario Energy Board)  
None

CURRICULUM VITAE OF  
TUNDE ADESIPO

Experience: Enbridge Gas Distribution Inc.

Senior Finance Business Partner  
2014

/u

Manager, IT Business Support  
2010

Manager, Internal Controls  
2010

Senior Leader, Governance & Internal Controls  
2007

Deloitte & Touche LLP

Senior Accountant  
2005

UNIC Insurance Plc

Executive Director Finance & Administration  
2001

PricewaterhouseCoopers LLP

Audit Manager  
1998

Senior Auditor  
1993

Education: Masters of Business Administration (Banking & Finance)  
Certified Public Accountant (US CPA)  
Associate Chartered Accountant (ACA)  
Certified Information Systems Auditor (CISA)

Memberships: Information Systems Audit and Control Association (ISACA)

Appearances: (Ontario Energy Board)  
EB-2011-0354

CURRICULUM VITAE OF  
FAHEEM AHMAD

Experience: Enbridge Gas Distribution Inc.

Manager, Customer Portfolio and Policy  
2010

Program Manager, Financial Assessment  
2007

Supervisor, Gas Supply Analysis  
2006

Program Manager, Portfolio Management  
2004

Program Manager, Capital Appropriations  
2003

Senior Advisor, Financial Business Performance  
2001

Enbridge Incorporated

Financial Analyst, Business and Financial Analysis  
2000

Lahore Electricity Supply Company

Manager, Operations  
1996

Education: Certified Management Accountant (CMA)  
Society of Management Accountants, 2004

Master of Business Administration  
Wilfred Laurier University, 1999

Master of Science, Electrical Engineering  
University of Engineering and Technology, Lahore, Pakistan, 1992

Memberships: The Society of Management Accountants of Ontario  
Professional Engineers of Ontario

Appearances: (Ontario Energy Board)  
EB-2011-0354  
EB-2011-0277  
EB-2010-0146  
RP-2002-0133

CURRICULUM VITAE OF  
WILL AKKERMANS

Experience: Enbridge Gas Distribution Inc.

Senior Director, System Operations  
2012

/u

Director, System Operations – Operations Senior VP  
2011

General Manager Ottawa – Operations Leadership  
2007-2010

Director, Customer Care RFP Project – Customer, Reg. & Public Affairs  
2006

General Manager Central Region  
2003-2004

Manager Trans Serv/Gas Supp Operations  
2000

Manager Special Projects  
1999

Manager Supply Management Services  
1996-1998

Supervisor Gas Control  
1994-1996

Supervisor Pipeline  
1993-1994

Pipeline Inspector  
1992

Enbridge Inc.

Director, Business Technology  
2006

Director, Asset Technology Management  
2005-2006

Manager International Business Development  
2000-2003

Education:      Master of Business Admin, 1999  
  
                     Bachelor of Science – Civil Engineering, 1993

Memberships: Professional Engineers of Ontario

CURRICULUM VITAE OF  
JIM ALTON

Experience: Enbridge Gas Distribution Inc.

Director, Safety and Process Management  
2013

/u

Director, Asset Renewal and Improvement  
2012

General Manager, Toronto Region  
2011

Directory, Safety & Reliability  
2009

General Manager, Central Region West  
2008

Group Manager – Work Management Centre  
2006

Manager, Operations Solutions  
2006

Manager, Field Force Transformation  
2004

Manager, Eastern Region Operations  
2001

Manager, Engineering Maintenance  
1999

CSA International

Project Manager, Oil & Gas Standards  
1998

SENES Consultants Limited

Associate and Senior Environmental Engineer  
1990



Consumers Gas Company Ltd

Assistant Manager, Gas Supply  
1987

Project Engineer, LNG Project  
1985

Manager, Operations Information Systems  
1983

Distribution Planning Engineer  
1980

TransCanada Pipelines

Jr. Engineering Assistant  
1977

Education: B.A. Sc., Chemical Engineering  
University of Toronto, 1980

Economics and Fundamental Accounting courses  
York University, 1982

LNG Plant Operations Course  
Institute of Gas Technology, 1985

Microprocessor Based Programmable, Controllers  
University of Toronto, 1986

Canadian Securities Course  
Investment Dealers Association, 1987

Compliance with Environmental Legislation  
University of Toronto, 1990

Queens Executive Management Program  
Queens University, 2003

Memberships: Professional Engineers Ontario

Appearances: (Ontario Energy Board)  
EB-1985-LNG

CURRICULUM VITAE OF  
LINDA AU

Experience: Enbridge Gas Distribution Inc.

Capital Budget Manager  
2007

Capital Budget Supervisor  
1995

Revenue and Gas Cost Analyst  
1991

Canada Post Corporation

Operations Planning and Budget Officer  
1990

Financial Analyst  
1988

Queen Elizabeth Hospital

Senior Accountant  
1986

Education: Certified General Accountant  
CGA Ontario 1991

Bachelor of Business Management  
Ryerson 1986

Appearances: (Ontario Energy Board)

EB-2012-0055  
EB-2011-0354  
EB-2011-0008  
EB-2010-0042  
EB-2009-0172  
EB-2009-0055  
EB-2008-0219  
EB-2006-0034  
RP-2005-0001

CURRICULUM VITAE OF  
PRAMOD BHATIA

Experience: Enbridge Inc.

Senior Manager, Treasury  
2013

Manager, Treasury  
2010

Senior Advisor, Enterprise Risk  
2008

Federal Home Loan Bank of Dallas

Senior Risk Analyst  
2007

Fannie Mae

Senior Portfolio Analyst, Portfolio Risk Management  
2005

Credit Risk Manager, Counterparty Risk Management  
2003

BNP Paribas

Head – Cash Management  
1997

Citibank

Manager  
1995

Education: Master of Science, 2002

Master of Business Administration, 1995

Bachelors of Engineering, 1992

Appearances: (Ontario Energy Board)  
None

CURRICULUM VITAE OF  
ROBERT ALAN BOURKE, CMA

Experience:   Enbridge Gas Distribution Inc.

Manager Regulatory Proceedings  
2004

Manager Budget and Administration – Operations  
2003

Manager Regulatory Accounting  
1998

Senior Analyst Regulatory Accounting  
1995

Supervisor Revenue and Gas Cost  
1992

Centra Gas (Ontario) Inc.

Supervisor, Budget Administration  
1992

Thornhill Glass & Mirror Inc.

Controller  
1988

The Consumer Gas Company Limited

Manager System Customer Billing  
1987

Management Trainee  
1986

Supervisor Income and Cash Budget  
1982

Asst. Supervisor Income and Cash Budget  
1980

Education: Certified Management Accountant (CMA), 1981

Memberships: The Society of Management Accountants Ontario

Appearances: (Ontario Energy Board)

EB-2012-0055

EB-2011-0354

EB-2011-0277

EB-2011-0226

EB-2011-0008

EB-2010-0146

EB-2010-0042

EB-2009-0172

EB-2008-0219

EB-2007-0615

EB-2006-0034

EB-2005-0001

RP-2003-0048

RP-2002-0133

RP-2001-0032

RP-2000-0040

RP-1999-0001

EBRO 497

EBO 179-14/15

CURRICULUM VITAE OF  
JOHN S. BRIGGS

Experience: Enbridge Gas Distribution Inc.

/u

Senior Finance Business Partner  
2013

Manager, Asset Management Services  
2011

Manager, Engineering Budgets  
2008

Manager, Operations Budgets & Administration  
2005

Manager, Capital Knowledge Centre  
2002

Team Lead, Oracle EFS FA, PA, OPA  
2001

GT Group Telecom

Manager, Capital Assets  
2000

A.G. Simpson Automotive Inc.

Manager, Capital Appropriations & Expenditures  
1998

Manager, Financial Reporting  
1994

Alcan Aluminium Ltd.

Manager, Accounts Receivable  
1988

Education: Bachelor of Arts  
Victoria College University of Toronto, 1985

Appearances: (Ontario Energy Board)  
EB-2011-0354  
EB-2005-0001  
RP-2003-0203  
RP-2002-0133

CURRICULUM VITAE OF  
MICHAEL BROPHY

Experience: Enbridge Gas Distribution Inc.

Sr. Manager, Operations Solutions  
2010

Manager, DSM & Portfolio Strategy  
2004

Manager, Sales  
2001

Senior Specialist, Environment Health & Safety  
1999

Education: Masters of Business Administration, University of Toronto  
2004

Masters of Engineering, Civil Engineering, University of Toronto  
1997

B.A.Sc., Civil Engineering, University of Waterloo  
1994

Memberships: Professional Engineers of Ontario

Appearances: (Ontario Energy Board)

EB-2009-0154  
EB-2009-0103  
EB-2008-0384  
EB-2008-0346  
EB-2008-0271  
EB-2007-0893  
EB-2006-0034  
EB-2006-0021  
EB-2005-0001  
EBLO 261/EBC 266/EBA 785  
EBLO 260  
EBLO 261  
EBC 266  
EBA 785  
PL 97

CURRICULUM VITAE OF  
RYAN CHEUNG

Experience: Enbridge Gas Distribution Inc.

Senior Budget Analyst, Budget and Planning  
2010

Supervisor, Margin Planning and Analytics  
2006

Analyst, Volumetric Analysis and Budgets  
2004

TD Canada Trust

Financial Service Advisor  
2000

Education: Bachelor of Arts, in Economic and Statistics  
University of Toronto

Appearances: (Ontario Energy Board)



CURRICULUM VITAE OF  
SAMIR CHHELAVDA, CA, CIA, CRMA

Experience: Enbridge Gas Distribution Inc.

Assistant Controller  
2012

Manager, Strategy Execution and Performance Management  
2011

Chief Auditor  
2010

Manager, Audit Services  
2005

Duffy, Allain & Rutten, LLP

Senior Audit Manager  
2003

AXA Canada Inc.

Senior Financial Analyst  
2002

Ernst & Young, LLP

Audit Manager  
2001

Senior Staff Accountant  
1999

Schwartz, Letivsky, Feldman LLP

Staff Accountant  
1997

Education: Certification in Risk Management Assurance  
Institute of Internal Auditors, 2011

Certified Internal Auditor  
Institute of Internal Auditors, 2006

Chartered Accountant  
Canadian Institute of Chartered Accountants, 2000

Graduate Diploma in Public Accountancy  
McGill University, 1997

Bachelor of Commerce – Accounting  
McGill University, 1995

Memberships: Canadian Institute of Chartered Accountants  
Institute of Chartered Accountants of Ontario  
Institute of Internal Auditors  
Ordre des Comptables Professionnels Agréés du Québec

Appearances: (Ontario Energy Board)  
None

CURRICULUM VITAE OF  
LLOYD A. CHIOTTI

Experience: Enbridge Gas Distribution Inc.

Director, Distribution Asset Management  
2010

Director, Asset Management Strategy  
2006

General Manager, Envision Program  
2003

General Manager, Central Region  
2002

Director, Business Optimization  
2001

Director, Operations Services  
1999

Director, Business Transformation  
1998

Regional General Manager, Central Region  
(incl. Metro, Eastern, Western & Northern Zones)  
1997

Regional General Manager, Metro Region  
1992

Regional General Manager, Western Region  
1989

Director, Information Services  
1987

Manager, Systems Development  
1984

Project Manager, Systems & Planning Dept.  
1979

Datacrown

Data Processing Consultant  
1977

Sears Canada Ltd.

Manager of Programming Services  
1971

Education: Bachelor of Applied Science, Electrical Engineering  
University of Toronto

Masters of Business Administration  
University of Toronto

Memberships: CGA – Chair, Asset Management Task Force  
IGU – Member Working Committee 4 - Distribution

Appearances: (Ontario Energy Board)  
EB-2011-0354  
RP-2003-0203  
RP-2002-0133  
RP-2001-0032  
RP-1999-0001  
EBO 179-14/EBGO 179-15  
EBA 795

CURRICULUM VITAE OF  
JACKIE E. COLLIER

Experience: Enbridge Gas Distribution Inc.

Manager, Rate Design  
2003

Manager, Rate Research  
2000

Senior Rate Research Analyst  
1996

Centra Gas Ontario Inc.

Manager, Rate Design  
1995

Supervisor, Cost of Service Studies  
1990

Education: Bachelor of Business Management  
Ryerson Polytechnical Institute, 1988

Appearances: (Ontario Energy Board)

EB-2012-0055

EB-2011-0354

EB-2011-0277

EB-2011-0242

EB-2010-0146

EB-2009-0172

EB-2009-0055

EB-2008-0219

EB-2008-0106

EB-2006-0034

EB-2005-0001

RP-2003-0203

RP-2003-0048

RP-2002-0133

RP-2001-0032

RP-2000-0040

EBRO 489

EBRO 474-B, 483,484

EBRO 474-A

EBRO 474

EBRO 471

(Régie de l'énergie/Régie du gaz naturel)  
R-3793-2012  
R-3758-2011  
R-3724-2010  
R-3692-2009  
R-3665-2008  
R-3637-2007  
R-3621-2006  
R-2587-2005  
R-3537-2004  
R-3464-2001  
R-3446-2000

CURRICULUM VITAE OF  
LORI CORNWALL

Experience: Enbridge Gas Distribution Inc.

Associate General Counsel & Director, Gas Distribution Law  
2012 - Present

Senior Legal Counsel  
2007 – 2012

Davies Ward Phillips & Vineberg, LLP

Partner, Competition Law and International Trade  
1997 – 2006

Associate  
1995 - 1997

Sole Practitioner – Criminal Law

1992 – 1995

McMillan, LLP (formerly McMillan Binch)

Associate  
1991

Education: Bar Admission Course – Called to the Ontario Bar  
Law Society of Upper Canada, 1991

Masters of Business Administration  
University of Ottawa, 1989

Bachelors of Laws,  
University of Ottawa, 1989

Bachelor of Arts (Honours)  
Carleton University, 1985

Memberships: Law Society of Upper Canada  
Canadian Bar Association/Ontario Bar Association

Appearances: (Ontario Energy Board)  
EB-2011-0354

CURRICULUM VITAE OF  
LAWRENCE COWIE

Experience: Enbridge Gas Distribution Inc.

Manager, Operations, Customer Safety and Compliance  
2012

Manager, Fleet Management  
2009

Field Manager, Operations  
2004

Supervisor, Operations  
1992

Supervisor, Damage Prevention  
1991

1<sup>st</sup> Class Gas Technician  
1978

Labourer  
1976

Education: High School – G.E.D.

Appearances: (Ontario Energy Board)  
None



CURRICULUM VITAE OF  
ANNE M. CREERY

Experience: Enbridge Gas Distribution Inc.

Director, Public and Government Affairs and Customer Ombudsman /u  
2013

Director, Quality & Training  
2012

Group Manager, Work Management Centre  
2010

Manager, Customer Care Operations  
2005

Manager, Business Change Realization  
2004

Union Gas Ltd.

Project Manager, Operations  
2004

District Manager, Operations  
1999

Manager, Solutions Realignment Project  
1997

Manager, Business Support  
1995

Assistant to the Senior Vice-President of Operations  
1993

Supervisor, Sales Administration  
1989

Sales Representative  
1988

Education: Master of Business Administration  
Queen's University, 1997

Honours Bachelor of Commerce  
University of Windsor, 1986

Appearances: (Ontario Energy Board)  
EB-2006-0034

CURRICULUM VITAE OF  
KEVIN CULBERT

Experience: Enbridge Gas Distribution Inc.

Senior Manager, Regulatory Accounting /u  
2014

Manager, Regulatory Accounting  
2003

Senior Analyst, Regulatory Accounting  
1998

Analyst, Regulatory Accounting  
1991

Assistant Analyst, Regulatory Accounting  
1989

Budgets – Capital Clerk, Budget Department  
1987

Accounting Trainee, Financial Reporting  
1984

Education: CMA (3<sup>rd</sup> level)  
Seneca College 1987-89 (business/accounting)

Appearances: (Ontario Energy Board)  
EB-2012-0055  
EB-2011-0354  
EB-2011-0277  
EB-2011-0226  
EB-2011-0008  
EB-2010-0146  
EB-2010-0042  
EB-2009-0172  
EB-2009-0055  
EB-2008-0219  
EB-2008-0104/EB-2008-0408  
EB-2007-0615  
EB-2006-0034  
EB-2005-0001  
RP-2003-0203

CURRICULUM VITAE OF  
DEAN DALPE

Experience: Enbridge Gas Distribution

Director, Storage Operations  
2012

TransAlta Energy Corporation  
1998-2012

Director of Eastern Canada Gas Operations

Plant Manager, Sarnia Regional Cogeneration Facility

Assistant Plant Manager, Sarnia Regional Cogeneration Facility

Maintenance Supervisor, Sarnia Regional Cogeneration Facility

Atomic Energy of Canada

Controls Specialist  
1994

Education: Queen's University, Master of Business Administration (E.M.B.A.)  
2011

China Europe International Business School (CEIBS)  
Business in China Elective, Shanghai, China  
2012

Cambrian College of Technology, Instrumentation Engineering Technologist  
Cambrian College of Technology, Electronic Engineering Technician  
1991

Certification: Certified Industrial Instrument Mechanic  
Certified Industrial Electrician  
4<sup>th</sup> Class Power Engineer

Appearances: (Ontario Energy Board)  
None

CURRICULUM VITAE OF  
JOEL DENOMY

Experience: Enbridge Gas Distribution Inc.

Manager, Gas Supply & Strategy  
2010-Present

Manager, Strategic Planning  
2009-2010

Manager, Economic and Market Analysis  
2007-2009

Supervisor, Economic and Market Analysis  
2006-2007

Senior Market Analyst, Volumetric and Market Analysis  
2003-2006

Market Analyst, Volumetric and Market Analysis  
2002-2003

Education: Chartered Financial Analyst  
CFA Institute, 2006

Master of Arts (Economics)  
University of Waterloo, 2002

Bachelor of Arts (Honours Economics, Finance Specialization)  
University of Waterloo, 1999

Memberships: Canadian Association of Business Economists (CABE)  
Toronto CFA Society

Appearances: (Ontario Energy Board)  
EB-2011-0354  
EB-2010-0333  
EB-2008-0219  
EB-2007-0615  
EB-2006-0034  
EB-2005-0001  
RP-2003-0203

(Regie De L'Energie)  
R-3587-2005  
R-3665-2008

(New York State Public Service Commission)  
08-G-1392

CURRICULUM VITAE OF  
ROB DiMARIA

Experience: Enbridge Gas Distribution Inc.

Manager, Key Accounts and Vendor Relationships  
2009

Account Executive  
2006

Senior Marketing Specialist  
2003

Residential Program Manager  
2001

Senior Analyst, Planning and Evaluation  
2000

Rate Research Analyst  
1998

Plant Accounting Chief Clerk  
1994

Accounting Trainee  
1992

Education: Bachelor of Administration, Business Management, Athabasca University  
Diploma in Accounting and Financial Management, Centennial College

Appearances: (Ontario Energy Board)  
EB-2001-0032

CURRICULUM VITAE OF  
TANYA M. FERGUSON

Experience: Enbridge Gas Distribution Inc.

Senior Manager Strategic Sourcing and Contract Centre  
2013

/u

Senior Manager, Customer Care Operations  
2013

Manager Customer Care Operations, Customer Care  
2010

Manager Customer Care Financial Administration, Customer Care  
2006

Manager Special Projects, Customer Care  
2005

Senior Analyst, Planning and Projects  
2002

Supervisor, Internal Reporting  
2000

Enbridge Services Inc.

Financial Analyst, Financial Reporting  
1999

Enbridge Gas Distribution Inc.

Corporate Accountant, Financial Reporting  
1998

Audit Assistant, Audit Services  
1998

Accounting Trainee, Financial Reporting  
1997

Education: Masters of Business Administration  
York University, 2002

Certified Management Accountant  
Society of Management Accountants, 2000



Bachelor of Commerce (Honours)  
University of Windsor, 1996

Memberships: Certified Management Accountant  
Society of Management Accountants

Appearances: (Ontario Energy Board)  
EB-2011-0354  
EB-2011-0277  
EB-2010-0146  
EB-2005-0001  
RP-2003-0203

CURRICULUM VITAE OF  
M. CRAIG FERNANDES

Experience: Enbridge Gas Distribution Inc.

Senior Manager, Business Development and Strategy.  
2014

/u

Senior Manager, Regulatory, GTA Project  
2013

Manager, Regulatory Project Development  
2011

Senior Project Manager, Major Reinforcements  
2010

Manager, Operations Projects  
2009

Senior Project Manager, Operations Solutions  
2006

Program Manager, Energy Technology  
2005

Celestica Inc.

Global Pricing Advisor  
2003

Senior Regional Cost Engineer  
2002

Financial Cost Engineer  
2000

Manufacturing Engineering Team Leader  
1999

Senior Associate Prototype Engineer  
1997

Carrier Canada Ltd.

Automation Controls Specialist  
1995

Customer Service Representative  
1994

Education: Bachelor of Applied Science, Mechanical Engineering,  
University of Waterloo, 1993

Masters of Business Administration  
University of Toronto, 1999

Memberships: Association of Professional Engineers Ontario, 1997

Appearances: (Ontario Energy Board)  
EB-2011-0354  
EB-2012-0459

CURRICULUM VITAE OF  
RALPH J.W. FISCHER

Experience: Enbridge Gas Distribution Inc.

Director, Regulatory Special Projects  
2011

Enbridge Pipelines Inc.

Director, Planning and Analysis  
2005

Terasen Pipelines (now Kinder Morgan Canada)

Director, Economics and Regulatory Affairs  
2003

EnCana Pipelines

Director, Economics and Regulatory Affairs  
2001

TransCanada PipeLines Ltd.

Director, Economics and Regulatory Affairs (Express Pipeline Partnership)  
Manager, Business Development  
Coordinator, Investor Relations  
Senior Financial and Regulatory Analyst  
1990

Home Oil Company

Senior Financial Analyst, Corporate Planning  
1988

Interprovincial Pipe Line Ltd.

Supervisor, Forecasting  
1981

Education: Honours Bachelor of Science, University of Toronto, Toronto  
Masters of Business Administration (Finance), Schulich School of Business, York  
University, Toronto

Appearances: (Ontario Energy Board)  
EB-2012-0055  
EB-2011-0354

CURRICULUM VITAE OF  
PAUL GREEN

Experience: Enbridge Gas Distribution Inc.

Director, Customer Connections, Work Management and Emergency Programs /u  
2013

Director, Public & Government Affairs and Customer Ombudsman  
2012

Director, Sales  
2008

Market Development  
2005

Direct Energy Business Services

Area Director, Southwest Ontario  
2005

JRL HVAC Inc.

Director, Sales Development  
2003

Direct Energy Essential Home Services

Director, Sales Development  
2002

Enbridge Home Services

Director, Sales Development  
1999

Enbridge Consumers Gas

Manager, Retail Sales and Service  
GTA North and Georgian Bay  
1997

The Consumers' Gas Company Ltd.

Regional Sales Manager  
Western Region  
1994

Commercial / Industrial Sales Manager  
Western Region  
1990

Manager, Innovators Circle  
Human Resources  
1988

Residential Sales Manager  
Metro Toronto Region  
1986

Commercial / Industrial Sales Supervisor  
Metro Toronto Region  
1984

Commercial / Industrial Sales Representative  
Metro Toronto Region  
1981

Residential Sales Representative  
Metro Region  
1979

Customer Account Representative  
Metro Toronto Region  
1977

Merchandise Account Clerk  
October 1976

Education: Bachelor of Administrative Studies  
York University  
1998

Queen's University Executive Development Program  
1998

Syracuse University  
Sales and Marketing Program  
1993 / 1994

Appearances: (Ontario Energy Board)  
EB-2008-0271  
EB-2006-0034  
EB-2006-0021

Grand Valley East Garafraxa Franchise (Leave-to-Construct)  
1994

Dundalk / Flesherton / Markdale Franchise Hearing 1995



CURRICULUM VITAE OF  
ANTON KACICNIK

Experience: Enbridge Gas Distribution Inc.

Manager, Rate Research & Design  
2007

Manager, Cost Allocation  
2003

Program Manager, Opportunity Development  
1999

Project Supervisor, Technology & Development  
1996

Pipeline Inspector, Construction & Maintenance  
1993

Education: Bachelor of Applied Science (Civil Engineering)  
University of Waterloo, 1996

Memberships: Professional Engineers of Ontario

Appearances: (Ontario Energy Board)  
EB-2012-0055  
EB-2011-0354  
EB-2011-0277  
EB-2011-0008  
EB-2010-0146  
EB-2010-0042  
EB-2009-0172  
EB-2009-0055  
EB-2008-0106  
EB-2008-0219  
EB-2007-0615  
EB-2007-0724  
EB-2006-0034  
EB-2005-0551  
EB-2005-0001

(RÉGIE DE L'ÉNERGIE)  
R-3724-2010  
R-3665-2008  
R-3637-2007  
R-3621-2006  
R-3587-2006  
R-3537-2004

CURRICULUM VITAE OF  
SAGAR KANCHARLA

Experience: Enbridge Gas Distribution Inc.

Director, Business Performance  
2011

Director, Strategy, Research & Planning  
2008

Manager, Planning & Economics  
2007

Manager, Financial and Economic Assessment  
2005

Manager, Financial Assessment  
2003

Senior Advisor, Financial Assessment  
2002

Enbridge Inc.

Financial Analyst, Business & Financial Analysis  
2000

GE Silicones India Pvt. Ltd., India

Manager – Market Development  
1996

Ciba Specialty Chemicals Ltd., India

Product Manager – Pigments Division  
1994

Marketing Executive – Polymers Division  
1992

Education: Masters of Business Administration  
McMaster University, 2000

Post Graduate Diploma in Management  
Indian Institute of Management, Ahmedabad, India, 1992

Bachelor of Engineering (Civil Engineering)  
Andhra University, Visakhapatnam, India, 1990

Membership: Society of Utility and Regulatory Financial Analysts

Appearances: (Ontario Energy Board)  
EB-2011-0354  
EB-2011-0277  
EB-2007-0615  
EB-2006-0066  
EB-2006-0034  
EB-2005-0539  
EB-2005-0001  
RP-2004-0015  
RP-2003-0203

CURRICULUM VITAE OF  
LORRAINE KENNEDY

Experience: Enbridge Gas Distribution Inc.

Senior Finance Business Partner /u  
2014

Manager, Budgets and Scorecard  
2008

Supervisor Business Support  
2005

Sr. Analyst, Budget & Financial Reporting  
2001

Analyst, Opportunity Development  
1999

Balance Sheet Clerk, Finance  
1997

Intermediate Bank Reconciliation Clerk, Finance  
1992

Accounts Payable Clerk, Finance  
1991

Education: Queens Leadership Program  
2010

Dale Carnegie Training - Presentation Skills  
2010

Facilitation First – Internal Consulting Workshop  
2010

Centennial College C.I.  
Business Administration – General Management Diploma  
1980 to 1983

Appearances: (Ontario Energy Board)  
EB-2011-0354

CURRICULUM VITAE OF  
MATTHEW KIRK

Experience: Enbridge Gas Distribution Inc.

Cost Allocation Manager, Regulatory Affairs  
2012

Senior Rate Design Analyst, Regulatory Affairs  
2010

Rate Design Analyst, Regulatory Affairs  
2009

Market Analyst, Economic and Market Analysis  
2006

Education: Master of Arts (Economics)  
Wilfrid Laurier University, 2006

Bachelor of Arts (Honours Economics)  
McMaster University, 2005

Memberships: Canadian Association of Business Economists (CABE)

Appearances: (Ontario Energy Board)  
EB-2012-0055  
EB-2011-0354

(Régie de L'Energie)  
R-3793-2012

CURRICULUM VITAE OF  
TARA KATHLEEN KNIGHT, CA

Experience: Enbridge Gas Distribution Inc.

Manager, Capital Management  
2012

Manager, Financial Reporting & Analysis  
2008

Supervisor, External Reporting & Pensions  
2006

Rogers Communications Inc.

Senior Financial Analyst  
2005

PricewaterhouseCoopers LLP

Senior Associate  
2003

Cooperative Education Program  
2000 - 2002

Education: Chartered Accountant (CA), 2005

Master of Accounting, University of Waterloo, 2003

Honours Bachelor of Arts – Accounting, University of Waterloo, 2002

Memberships: Institute of Chartered Accountants of Ontario (ICAO)  
Multiple Sclerosis Society of Canada – Finance Committee

Appearances: (Ontario Energy Board)  
None

CURRICULUM VITAE OF  
DANNY KO

Experience: Enbridge Gas Distribution Inc.

Senior Budget Analyst  
2011

IBM

Financial Analyst  
2004

Education: Certified General Accountant (CGA), 2009

Bachelors of Business Administration, 2004

Bachelors of Science, 2000

Appearances: (Ontario Energy Board)  
None



CURRICULUM VITAE OF  
KERRY LAKATOS-HAYWARD

Experience:     Enbridge Gas Distribution

Director, Customer Care  
2010

Director, Operations Services  
2008

Director, Business Development & Strategy  
2006

Manager, Business Development & Strategy  
2003

Manager, Volumetric & Market Analysis  
2000

Manager, Multi-Family Marketing  
1997

Senior Economist, Economic Studies  
1995

Ontario Hydro

End Use Economist, Load Forecasts  
1994

Evaluation Analyst, Planning & Evaluation  
1992

Education:     Bachelor of Arts (Specialist in Economics)  
University of Toronto, 1990

Master of Science in Planning (Environmental Planning)  
University of Toronto, 1992

Queen's Executive Program, 2005

Certificate in Carbon Finance, 2008

Appearances: (Ontario Energy Board)  
EB-2011-0354  
EB-2011-0277  
RP-2006-0034  
RP-2005-0001  
RP-2003-0203  
RP-2003-0048  
RP-2002-0133  
RP-2001-0032  
RP-2000-0040

CURRICULUM VITAE OF  
DOUGLAS F. LAPP

Experience: Enbridge Gas Distribution Inc.

Director, Operations Strategy and Logistics  
2013

/u

Director, Operations Governance and Control  
2012

Chief Engineer  
2011

Director, Engineering & Construction  
2010

Chief Safety Officer  
2006

Manager, Chief Operations & Logistics Engineer  
2003

General Manager, Niagara Region  
2002

Manager, Operations & Engineering Ozz Energy Project  
2001

Manager, Distribution Planning  
1999

Manager, Year 2000 Business Continuity Planning  
1998

Manager, Distribution Operations, Northern Region  
1995

Manager, System Regulation  
1994

Manager, Engineering Projects  
1991

Manager, Planning & Technical Services, Niagara Region  
1990

Supervisor, Maintenance, Metro Toronto Region  
1989

Senior Distribution Engineer, Congas Engineering Canada Ltd.  
1988

Senior Engineer, Operations Engineering  
1987

Project Engineer, Eastern Region  
1985

Operations Engineer, Operations Engineering  
1982

Education: Queens Executive Program, 1998

University of Toronto  
Master of Engineering in Welding, 1990

University of Waterloo  
Bachelor of Applied Science in Civil Engineering, 1982

Memberships: Professional Engineers of Ontario

Appearances: (Ontario Energy Board)  
EB-2011-0354  
EB-2007-0615  
EB-2006-0034  
RP-2005-0001  
RP-2003-0203  
RP-2002-0133  
RP-2000-0040  
RP-1999-0001  
EBRO 495  
EBRO 487/ EBRO 485  
EBLO 241  
EBLO 256/EBA 737/EBC 246  
EBLO 261/EBA 785/EBC 266  
EBA 795

CURRICULUM VITAE OF  
LISA L. LAWLER

Experience: Enbridge Gas Distribution Inc.

Director, Asset and Integrity Management  
2013

/u

Director, Integrity  
2010

Chief Engineer  
2008

Manager, Enbridge Ontario Wind Power Project  
2006

Manager, Strategic Distribution Alliance  
2004

Manager, Distribution Planning  
2001

Manager, Operations Eastern Region  
1999

Manager, Distribution Expansion  
1997

General Supervisor, Maintenance (West)  
1996

Supervisor, Construction & Maintenance Administration  
1995

Operations Engineer  
1991

Congas Engineering Canada Limited  
(a former subsidiary of The Consumers' Gas Company Ltd.)  
International Marketing Engineer  
1989

Education: Master of Business Administration  
Wilfrid Laurier University, 1989

Bachelor of Applied Science, Chemical Engineering, Honours Program  
University of Waterloo, 1988

Memberships: Professional Engineers of Ontario

Appearances: (Ontario Energy Board)  
EB-2011-0354  
RP-2002-0133

CURRICULUM VITAE OF  
JAMIE LeBLANC

Experience: Enbridge Gas Distribution Inc.

Director, Energy Supply and Policy  
2013

General Manager - Gazifère Inc.  
2010

Manager, Finance and Control – Enbridge Gas New Brunswick Inc.  
2005

Supervisor, Financial Reporting – Enbridge Gas New Brunswick Inc.  
2004

Education: Chartered Accountancy Designation  
Atlantic School of Chartered Accountants, 1998

Bachelor Business Administration  
University of New Brunswick, Fredericton, 1996

Memberships: The New Brunswick Institute of Chartered Accountants

Appearances: (Régie de l'énergie/Régie du gaz naturel)  
R-3793-2012  
R-3758-2011

(New Brunswick Energy and Utilities Board)  
Cost of Capital for Enbridge Gas New Brunswick (EGNB) – 2010  
EGNB Financial Results 2009 – 2010  
EGNB Cost of Service Study – 2010  
EGNB LFO Rate Changes – 2010  
EGNB Various Rates and HFO Rates - 2010  
EGNB Development Period – 2009  
EGNB Financial Results 2008 – 2009  
EGNB Financial Results – 2007 - 2009

CURRICULUM VITAE OF  
RAYMOND LEI

Experience: Enbridge Gas Distribution Inc.

Senior Manager, Budgets and Business Support  
2014

Manager, Budgets and Business Support  
2010

Manager, Corporate Budgets and Analysis  
2007

Manager, Financial Analysis  
2007

Senior Analyst, Planning and Projects  
2005

Rogers Wireless Inc.

Senior Analyst, Budgets and Forecast  
2001

Royal LePage Relocation Services Ltd.

Financial Analyst  
2000

Kodak (China) Limited

Business Analyst  
1995

Education: Certified General Accountant  
Certified General Accountants of Ontario, 2005

Master of Business Administration  
York University, 2000

Bachelor of Arts in Commerce and Economics  
Sichuan University, China

Memberships: Certified General Accountant, Ontario



Appearances: (Ontario Energy Board)  
EB-2012-0055  
EB-2011-0354  
EB-2011-0277  
EB-2011-0008  
EB-2010-0146  
EB-2010-0042  
EB-2009-0172

CURRICULUM VITAE OF  
LEE LIAUW

Experience: Enbridge Gas Distribution Inc.

/u

Process Improvement Specialists  
2014

Cost Allocations Specialist  
2012

Manager, Business Performance  
2008

Manager, Scorecard & Capital Appropriation  
2002

Manager, Management Reporting & Analysis  
2001

Ontario Hospital Association  
1990

Financial Controller

Manager, Finance & Control

Manager, General Accounting

Education: CFA (Chartered Financial Analyst) Charterholder  
September 2005

CMA (Certified Management Accountant)  
1988

Bachelor of Commerce  
University of Toronto 1981

Membership: Society of Management Accountants of Ontario  
Institute of Management Accountants  
Institute of Certified Financial Analysts  
Toronto Society of Financial Analysts

Appearances: (Ontario Energy Board)  
EB-2011-0354  
EB-2005-0001

CURRICULUM VITAE OF  
MICHAEL LISTER

Experience: Enbridge Gas Distribution Inc.

Senior Manager, Regulatory Policy and Strategy  
2013

/u

Manager, Regulatory Policy & Strategy  
2010

Manager, Investment Planning  
2006

Manager, Volumetric & Market Analysis  
2004

Supervisor, Volumetric & Market Analysis  
2003

Sr. Market Analyst, Volumetric & Market Analysis  
2002 - 2003

NRI Industries Inc.

Production Scheduler, Logistics  
1999-2000

Fairlee Fruit Juices Ltd.

Raw Materials Coordinator  
1998

Coats Canada Inc.

Production Planner, Materials & Logistics  
1996-1997

Education: Chartered Financial Analyst  
CFA Institute, 2005

Master of Business Administration  
York University, 2002

Bachelor of Commerce  
St. Mary's University, 1996

Memberships: CFA Institute  
Toronto CFA Society

Appearances: (Ontario Energy Board)  
EB-2011-0354  
EB-2010-0060  
EB-2009-0172  
EB-2009-0084  
EB-2007-0615  
EB-2005-0001  
RP-2003-0203

(New York Public Service Commission)  
05-G-1635

(New York Public Service Commission)  
08-G-1392

CURRICULUM VITAE OF  
TREVOR MACLEAN

Experience: Enbridge Gas Distribution Inc.

Director, Distribution Planning and Records  
2013

/u

Director, Market Development & Sales  
2012

Director, Business & Market Development  
2008

Enbridge Gas New Brunswick

Manager, Distribution Operations  
2006

Manager, Sales & Marketing  
2004

RLG International

Consultant  
2000

825929 Alberta Ltd

Consultant  
1997

ISM (IBM Global Services)

Director, Systems Integration  
1995

Manager Operations, Systems Integration  
1994

National Defence/Canadian Forces

Military Officer  
1986

Education: Master of Business Administration  
Queen's University, 1995

Bachelor of Arts (Special)  
University of Alberta, 1986

Appearances: (Ontario Energy Board)  
EB-2012-0055  
EB-2011-0354

CURRICULUM VITAE OF  
ANDREW MANDYAM

Experience: Enbridge Gas Distribution Inc.

/u

Director, Regulatory Affairs  
2013

Senior Manager, Incentive Regulation Financial Planning  
2013

Manager, Marketing and Energy Efficiency  
2011

Manager, Demand Side Management and Portfolio  
2010

Customer Information System Replacement Project Business Manager  
2007 - 2009

Manager, Customer Care and Customer Information System Program Operations  
2006

Manager, Information Technology Solutions and Support  
2005

Senior Project Manager, Information Technology Solutions and Support  
2003

Oracle Corporation

Practice Manager  
1997 – 2003

Compaq Canada

Program Manager  
1995 – 1997

Ontario Hydro

Associate Engineer  
1990 - 1995

Education: B.A.Sc. Mechanical Engineering  
University of Toronto  
1990

Memberships: Professional Engineers of Ontario  
Project Management Institute

Appearances: (Ontario Energy Board)  
EB-2011-0354  
EB-2011-0295  
EB-2011-0277  
EB-2010-0146  
EB-2010-0175  
EB-2010-0029  
EB-2009-0172  
EB-2006-0034



CURRICULUM VITAE OF  
STEVE MCGILL

Experience: Enbridge Gas Distribution Inc.

Senior Manager, Customer Care, Finance, Contracts & Collections  
2013

/u

Manager, Customer Care Finance & Contracts  
2012

Manager, Billing & Customer Systems  
2005

Manager, Strategic Projects & Market Analysis  
2003

Manager, Customer Support & Advocacy  
2000

Manager, Customer Accounting Projects  
1995

Manager, Large Volume Billing  
1992

Manager, Industrial Sales, Metropolitan Toronto  
1990

Manager, Rate & Contract Administration  
1987

Rate Research Analyst  
1985

Market Analyst  
1981

Distribution Planner  
1979

TransCanada Pipelines Limited

Junior Statistician

Junior Draftsman

Education: Bachelor of Arts (Honours Geography), University of Toronto, 1978

Miscellaneous short courses in Public Utility Management,  
General Management, and Accounting

Other: Member of the Board of Directors and Treasurer of the Oshawa Ski Club

Appearances: (Ontario Energy Board)

EB-2012-0055

EB-2011-0354

EB-2011-0277

EB-2011-0226

EB-2006-0034

EB-2005-0001

RP-2003-0203

RP-2002-0133

RP-2001-0032

RP-2000-0040

RP-1999-0058

RP-1999-0001

EBRO 497-01

EBRO 497

EBRO 495

EBRO 492

EBRO 490

EBRO 487

EBO 179-14/15

CURRICULUM VITAE OF  
DARREN MCILWRAITH

Experience: Enbridge Gas Distribution Inc.

Senior Manager, Business Development and DSM Technology  
2009

Enbridge Solutions Inc.

Manager, Product Development  
2006

Direct Energy Marketing Limited

Director, Customer Analytics  
2004

Director, Financial Services  
2002

Enbridge Commercial Services Inc.

Director, Financial Services  
2001

Enbridge Gas Distribution Inc.

Manager, Budgets  
2000

Supervisor, Budgets & Forecasts  
1998

Economic Analyst  
1996

Education: Master of Arts: Business Economics, Wilfrid Laurier University – 1996  
Bachelor of Commerce, University of Guelph - 1994

Appearances: (Ontario Energy Board)  
None

CURRICULUM VITAE OF  
CHRIS MEYER

Experience: Enbridge Gas Distribution Inc.

Manager, External Communications  
2011

Manager, Executive Communication Support  
2008

Senior Communication Advisor  
2001

Education: Strategic Communication Management Certificate  
(Ithaca College), 2008

Bachelor of Applied Arts, Journalism  
(Ryerson), 1990

Memberships: International Association of Business Communicators (Accredited)

Appearances: (Ontario Energy Board)  
EB-2011-0354

CURRICULUM VITAE OF  
BIJU MISRA

Experience: Enbridge Gas Distribution Inc.

Director Information Technology,  
2013

Sr. Manager Business Applications,  
2009

IT Solution & Support Manager, Information Technology,  
2008

Sr. Project Manager, Information Technology,  
2007

Project Manager, Information Technology,  
2006

Education: Bachelor of Science, Electrical Engineering. Kansas State University  
Certificate, Business Management Fundamentals. University of Toronto

Memberships: Project Management Institute (PMI)

Appearances: (Ontario Energy Board)  
EB-2011-0354

CURRICULUM VITAE OF  
DONALD RITCHIE (RITCH) MURRAY, PEng

Experience:    Enbridge Gas Distribution Inc

Manager, Natural Gas for Transportation Business Development  
Jan 2013 to present

Project Manager, LNG Business Development  
Jan 2012 to Dec 2012

Project Manager, Engineering Major Works  
Nov 2009 to Jan 2012

Project Manager, Engineering Standards and Technical Services  
Jun 2008 to Nov 2009

Program Manager, Asset Management  
Jun 2006 to Jun 2008

Field Manager, Quality Acceptance  
Aug 2003 to Aug 2004

Engineering Project Leader  
Jun 2000 to Aug 2003

Enbridge Gas New Brunswick Inc

Manager, Planning and Technical Services  
Aug 2004 to Jun 2006

Education:    Master of Business Administration  
Ryerson University, 2008

Bachelor of Engineering (Mechanical)  
Dalhousie University, 2000

Bachelor of Science (Biology)  
Acadia University, 1994

Memberships: Professional Engineers of Ontario  
Professional Engineers and Geoscientists of New Brunswick

Appearances: Petitcodiac River Crossing Project, Leave to Construct Hearing, 2006  
(New Brunswick Energy and Utilities Board)

CURRICULUM VITAE OF  
STUART MURRAY

Experience: Enbridge Gas Distribution Inc.

Senior Manager, Investment Review  
2013

Manager, Investment Review and Economic Analysis  
2011

Manager, Investment Review and Customer Growth  
2008

Manager, Financial Assessment  
2006

Pitney Bowes Canada

Project Manager, Enterprise Program Office  
2003

Finance Manager, Service Operations  
2001

Finance Manager, New Business Development  
2000

Canadian Tire Corporation

Business Analyst, Marketing Finance  
1997

Financial Analyst, Corporate Planning  
1996

Education: Master of Business Administration  
McMaster University, 1995

B.A. Economics, Administrative & Commercial Studies  
University of Western Ontario – 1993

Membership: None

Appearances: (Ontario Energy Board)  
EB-2011-0354  
EB-2006-0034

CURRICULUM VITAE OF  
ERIK NACZYNSKI, P.Eng

Experience: Enbridge Gas Distribution Inc.

Senior Manager, Asset Management Optimization  
2014

/u

Manager, System Analysis and Design  
2010

Manager, Records and GIS  
2009

Project Manager, Major Projects  
2006

Engineering Project Leader  
2005

Union Gas

Distribution Planning EIT  
2003

Education: Bachelor of Engineering and Management

Memberships: Professional Engineers Ontario

Appearances: (Ontario Energy Board)  
EB-2007-0692  
EB-2006-0305



CURRICULUM VITAE OF  
FIONA OLIVER-GLASFORD

Experience: Enbridge Gas Distribution Inc.

Senior Manager, Market Policy and DSM  
2013

Union Gas Distribution

Manager, CDM Business Development and Policy  
2010

Manager, DSM Strategy  
2008

Manager, DSM EM&V  
2007

Manager, DSM Programs/Marketing  
2006

Manager, Market Research & Analysis  
2005

Canadian Energy Efficiency Alliance

Director, Operations

Summerhill Group

Marketing Manager

Corus Entertainment

Marketing Manager, YTV, Documentary Channel and Scream TV

Towers Watson

Associate/Analyst

Education: York University – Schulich School of Business  
Masters of Business Administration

Western University – Huron College  
Bachelor of Arts

Memberships: None

Appearances: (Ontario Energy Board)  
None

CURRICULUM VITAE OF  
EDWARD PHAGOO

Experience: Enbridge Gas Distribution Inc.

Manager – IT Solutions and Support  
2010

Program manager  
2009

Sr. Project Manager  
2007

Rogers Communication Inc..

Sr. Project Manager  
1990

Education: Bachelors of Science, Devry University

Memberships: Project Management Institute

Appearances: (Ontario Energy Board)  
None

CURRICULUM VITAE OF  
BRAD S. PILON

Experience: Enbridge Gas Distribution Inc.

Manager, Finance and Administration  
Gas Storage  
2001-Present

Manager, Administration - Gas Storage  
1991-2001

Tecumseh Storage Analyst  
1988-1991

Manager, Marketing Studies  
1986-1988

Financial Analyst, Exploration  
1982-1986

Education: Executive Education Program for the Natural Gas Industry  
University of Colorado  
1990

Graduate Studies  
Masters of Business Administration Program  
University of Western Ontario  
1979-1980

Bachelor of Arts, Economics  
University of Western Ontario  
1979

Memberships: Ontario Petroleum Institute

Appearances: (Ontario Energy Board)  
EB-2011-0354  
RP-2003-0203  
EBRO 466  
EBRO 455

CURRICULUM VITAE OF  
SANDEE QIAN

Experience: Enbridge Gas Distribution Inc.

Ops Budget & Analysis Manager, Finance  
2012

Manager Margin Budget & Analysis, Finance  
2010

Manager Financial Analysis, Corporate Budget & Analysis  
2008

Program Manager Capital Appropriation & Scorecard, Finance  
2006

Senior Financial Analyst, Financial Assessment  
2006

Financial Analyst, Financial Assessment  
2004

Motorola (China) Electronics Ltd.

Senior Analyst  
1995

Education: Certified Management Accountant (CMA), 2007

Master of Business Administration  
York University, 2003

Bachelor of Engineering  
Northwestern Polytechnic University, China

Memberships: The Society of Management Accountants Ontario

Appearances: (Ontario Energy Board)  
EB-2011-0354

CURRICULUM VITAE OF  
PETER RAPINI

Experience: Enbridge Gas Distribution Inc.

Sr Manager, Facilities Services  
2010

Manager, IT Technical Services  
2003

Enbridge Commercial Services

Manager, Computer Operations  
2000

The Consumer Gas Company Limited

Manager Client Technology Management  
1997

Supervisor Network Support  
1992

Sr Coordinator Network – IS Analyst  
1988

Coordinator Network  
1984

Intermediate Operator  
1982

Jr Operator  
1981

Tape Librarian  
1981

Education: Herzing College

Memberships: International Facility Management Association (IFMA)

BOMA

Appearances: (Ontario Energy Board)  
None

CURRICULUM VITAE OF  
BARRY REMINGTON

Experience: Enbridge Gas Distribution Inc.

Manager, Property Taxes  
Land Services Department  
1990

Bell Canada

Manager, Property Valuation  
Property Tax Department  
1978

Marathon Realty Company Limited

Property Tax Representative  
1976

Ministry of Revenue – Assessment Division

Property Assessor  
1973

Memberships: Canadian Property Tax Association, Inc. (CPTA)  
(Past President of CPTA in 1996)  
Institute of Municipal Assessors  
Institute for Professionals in Taxation (IPT)

Committee: CPTA Board of Directors – National Treasurer  
CPTA Past Presidents Committee  
IPT Canadian Liaison Committee

Education: Assessment Administration Diploma  
Loyalist College, 1973

Appearances: Assessment Review Board (ARB)  
Assessment Appeal Tribunal for Property Assessment and Taxation  
  
(Ontario Energy Board)  
EB-2011-0354

CURRICULUM VITAE OF  
ROCCO RICCIO

Experience: Enbridge Gas Distribution Inc.

Lead, Facilities Services Governance  
2011

Manager, Facilities Services  
2006

Supervisor, Facilities Services  
2003

Manager, Finance regulatory  
2002

Manager, Capital Knowledge Centre  
2000

Manager, Financial Statement Forecasts  
1996

Manager, Budgets and Administration, Information Services  
1993

Supervisor, Income and Cash Budgets  
1986

Supervisor, Capital Budgets  
1982

Accounting Trainee  
1980

Education: Certified General Accountant  
Certified General Accountants Association of Ontario, 1990

Accounting/Finance Diploma  
Ryerson Polytechnical Institute, 1980



Appearances: (Ontario Energy Board)  
EB-2011-0277  
RP-2002-0133  
RP-2001-0032  
RP-2000-0040  
RP-1999-0001  
EBRO 497  
EBRO 495

CURRICULUM VITAE OF  
JAMES E. SANDERS, P.Eng.

Experience: Enbridge Gas Distribution

Vice President, Engineering and Integrity  
2013

/u

Director, Market and Business Development  
2012

Director, Storage Operations  
2008

Manager, Strategic Distribution Alliances  
2006

Duke Energy Gas Transmission  
Manager, Major Projects  
2005

Union Gas Limited  
Manager of Operations Support  
2003

Manager Operation Engineering  
2000

Manager of Business Development  
1999

Manager of Operations and Construction  
1993

Planning and Project Engineer  
1989

Nuclear Activation Services Ltd.  
Manager of Operations  
1986

Education: McMaster University

Masters of Engineering and Public Policy  
2010-2011

University of Waterloo  
Bachelor of Applied Science, Civil Engineering  
1981-1986

Memberships: Professional Engineers of Ontario, 1988, 40537201

Appearances: (Ontario Energy Board)  
EB-2011-0354  
RP-2003-0063  
E.B.A. 691  
E.B.A. 691  
E.B.C. 206,  
E.B.A. 670  
E.B.A. 700-708  
E.B.C. 233-255  
E.B.L.O. 253  
E.B.C. 213  
E.B.A. 687

CURRICULUM VITAE OF  
HULYA SAYYAN

Experience: Enbridge Gas Distribution Inc.

Advisor, Economic & Market Analysis  
2011

Senior Market Analyst  
2007

Risk Software Technologies

Economic Specialist  
2005

Marmara University

Assistant Professor, Econometrics Department  
2002

Instructor, Econometrics Department  
2001

Research Assistant, Econometrics Department  
1994

Education: Ph.D. in Econometrics  
Marmara University, 2000

Master of Science in Statistics  
Marmara University, 1995

Bachelor of Science in Statistics  
Mimar Sinan University, 1992

Memberships: Toronto Association for Business & Economics (CABE)

Appearances: (Ontario Energy Board)  
EB-2011-0354  
EB-2011-0277  
EB-2010-0146

CURRICULUM VITAE OF  
JASON SHEM

Experience: Enbridge Gas Distribution Inc.

Senior Advisor, Financial Reporting  
2012

Financial Analyst  
2011

SF Partnership, LLP

Senior Accountant  
2009

Ernst & Young

Senior Accountant  
2008

Staff Accountant  
2007

Education: Chartered Accountant (CA), 2010

Memberships: Institute of Chartered Accountants of Ontario

Appearances: (Ontario Energy Board)  
None

CURRICULUM VITAE OF  
DONALD R. SMALL

Experience: Enbridge Gas Distribution Inc.

Senior Manager, Gas Supply  
2013

/u

Manager, Gas Costs and Budget  
2010

Manager, Gas Cost Knowledge Centre  
2003

Manager, Gas Costs and Budget  
1989

Co-ordinator, Gas Costs  
1984

Financial Statement Accountant  
1980

Chief Clerk, Financial Statements  
1979

Advanced Accounting Trainee  
1978

Education: Business Administration Diploma  
Ryerson Polytechnical Institute, 1978

Appearances: (Ontario Energy Board)

EB-2011-0354  
EB-2011-0277  
EB-2010-0146  
EB-2009-0172  
EB-2009-0055  
EB-2008-0219  
EB-2008-0106  
EB-2006-0034  
EB-2005-0001  
RP-2003-0203  
RP-2003-0048  
RP-2002-0133  
RP-2001-0032  
RP-2000-0040  
RP-1999-0001

EBRO 497  
EBRO 495  
EBRO 492  
EBRO 490  
EBRO 487  
EBRO 485  
EBRO 479  
EBRO 473  
EBRO 465

CURRICULUM VITAE OF  
RYAN SMALL

Experience: Enbridge Gas Distribution Inc.

Senior Analyst, Regulatory Accounting  
2006

Analyst, Regulatory Accounting  
2004

Supervisor, Gas Cost Reporting  
2001

Senior O&M Clerk  
2000

Bank Reconciliation Clerk  
1999

Accounting Trainee  
1998

Education: Certified Management Accountant,  
The Society of Management Accountants of Ontario, 2003

Diploma in Accounting,  
Wilfrid Laurier University, 1997

Bachelor of Arts in Economics  
The University of Western Ontario, 1996

Appearances: (Ontario Energy Board)  
EB-2012-0055  
EB-2011-0354  
EB-2011-0008



CURRICULUM VITAE OF  
PATRICIA A. SQUIRES

Experience: Enbridge Gas Distribution

Director, Operations and Governance and Support Services  
2013

/u

Director, Strategy, Planning and Analytics  
2011

Manager, Operations PMO  
2011

Manager, Market Development  
2008

Manager Mass Markets and New Construction Market Development  
2006

Manager, Energy Technology  
2004

Manager, DSM and Program Evaluation  
2001

Manager, Planning and Evaluation  
1998

Senior Evaluation and Market Planning Analyst  
1997

Conservation Analyst  
1994

Economic Researcher  
1991

Research Assistant  
1990

Education: Master in Business Administration (candidate)  
Rotman School of Management, 2014  
University of Toronto

Master in Environmental Studies  
York University, 1996

Bachelor of Applied Arts (Applied Geography)  
Ryerson Polytechnic University, 1990

Certificate in Economic Analysis  
Ryerson Polytechnic University, 1990

Appearances: (Ontario Energy Board)

EB-2011-0354

EB-2010-0175

EB-2009-0172

EB-2009-0154

EB-2008-0150

EB-2006-0034

EB-2006-0021

RP-2003-0203

RP-2003-0048

RP-2002-0133

RP-2000-0040

RP-1999-0001

(Régie du Gaz Naturel)  
R-3355-96

CURRICULUM VITAE OF  
MARGARITA SUAREZ-SHARMA

Experience: Enbridge Gas Distribution Inc.

Manager, Economic & Market Analysis  
2012

Manager, Cost Allocation  
2008

Manager, DSM Reporting & Analysis  
2005

Analyst, Rate Design  
2004

Senior Analyst, DSM Planning and Evaluation  
2002

Senior Economic Analyst, Economic & Financial Studies  
1998

The Canadian Institute

Conference Producer  
1997

Margaret Chase Smith Center for Public Policy

Research Assistant  
1995

Education: Master of Arts in Economics  
University of Maine, 1995

Bachelor of Arts in Economics  
University of Maine, 1993

Appearances: (ONTARIO ENERGY BOARD)

EB-2011-0354

EB-2011-0277

EB-2010-0146

EB-2009-0172

EB-2008-0219

EB-2008-0106

(RÉGIE DE L'ÉNERGIE)

R-3758-2011

R-3724-2010

R-3692-2009

R-3665-2008

CURRICULUM VITAE OF  
STEFAN SURDU

Experience: Enbridge Gas Distribution Inc.

Sr. Engineering Manager, Measurement & Regulation,  
Technology and Customer Safety  
Since 2012

Manager, Special Projects and Distribution Technology  
2011-2012

Sales Manager, Commercial Markets  
2006 - 2011

Program Manager, Energy Technology  
2006

Program Manager, Business Markets  
2005 - 2006

Energy Solutions Consultant  
2003 - 2005

Finn Projects Inc.

Project/Energy Engineer  
2002 – 2003

Alfa Laval AB, Europe Central-East

Regional Sales Manager  
2000-2001

Applications Engineer  
1998-1999

National R&D Institute for Turbo-Engines, Romania

New Product Development Engineer  
1997-1998

Education: M.Eng., Mechanical Engineering, Thermo-Mechanics of Machinery  
Polytechnic University of Bucharest, Romania  
1998

B.Eng., Mechanical Engineering  
Polytechnic University of Bucharest, Romania  
1997

Memberships: Professional Engineers Ontario

Appearances: (Ontario Energy Board)  
EB-2011-0295

CURRICULUM VITAE OF  
NICK THALASSINOS

Experience: Enbridge Gas Distribution Inc.

Chief Engineer  
2012

General Manager, Central Region  
2010

Manager, Project Management Office  
2009

Manager, Asset Management Solutions  
2006

Manager, Business Transformation Development  
2003

Manager, Operations  
2001

Manager, Construction  
2000

Manager, Operations Engineering  
1995

Senior Engineer  
1993

Engineer Operations  
1991

Engineer Distribution  
1990

Engineer Distribution Planning  
1989

Education: Professional Engineer, 1991

B.A.Sc. (Mechanical)  
University of Waterloo, 1989

Memberships: Ontario Society of Professional Engineers

CSA Z662 Technical Committee

Appearances: (Ontario Energy Board)  
EB-2012-0451



CURRICULUM VITAE OF  
MICHELLE TIAN

Experience: Enbridge Gas Distribution Inc.

Manager Operations Reporting  
2013

Senior Financial Analyst, Operations Business Support  
2010

Senior Financial Analyst, Corporate Budgets  
2007

Evergreen  
Accounting & Human Resources Coordinator  
2006

Education: Certified Management Accountant, 2008  
Honours Bachelor of Commerce, Queen's University, 2006

Memberships: The Society of Management Accountants Ontario

Appearances: (Ontario Energy Board)  
None

CURRICULUM VITAE OF  
CHRIS TOMAN

Experience: Enbridge Gas Distribution Inc.

Senior Manager, Operations Systems  
2013

/u

Sr. Manager Direct Purchase – Customer Care  
2013

Sr. Manager Customer Systems – Customer Care  
2009

Solution Manager CIS Project - Customer Care  
2007

Manager Strategic Planning – Opportunity Development  
2005

Business Systems Manager – Solutions Delivery Group  
2004

Business Program Manager – Process and Projects  
2001

Business Systems Manager – Transportation Contracting  
2000

Analyst System Support & Development – Contract Support & Compliance  
1997

Supervisor Market Systems – Market Planning & Evaluation  
1994

Control Clerk LVB Systems – Key Account Services  
1991

Clerk - Records & Stationery  
1989

Education: Business Administration Diploma

Project Management Professional (PMP)

Memberships: Project Management Institute

Appearances: (Ontario Energy Board)  
None

CURRICULUM VITAE OF  
MINA TORRIANO

Experience: Enbridge Gas Distribution Inc.

Senior Manager, Operational Finance  
2014

/u

Manager, Operational Finance  
2013

Manager, Business Support  
2010

Manager, Operations Accounting  
2006

Manager, Financial Asset Management  
2005

Supervisor Asset Reporting and Analysis  
2000

The Consumers Gas Company Ltd

Assistant Plant Accountant  
1996

Systems Coordinator  
1992

Plant Accounting Clerk  
1987

Education: Accounting Degree – Humber College of Applied Arts & Technology

Appearances: (Ontario Energy Board)  
EB-2011-0354

CURRICULUM VITAE OF  
SHEILA TROZZI

Experience: Enbridge Gas Distribution Inc.

Sr. Manager Human Resources Business Support  
2010

Human Resources Business Partner  
2004

Human Resources Consultant  
1998

Employee Relations Representative  
1989

Human Resources Records Clerk  
1980

Billing Clerk  
1976

Education: Certified Human Resources Professional (CHRP 1993)

Memberships: Human Resources Professional Association

Appearances: (Ontario Energy Board)  
EB-2011-0354

CURRICULUM VITAE OF  
MICHAEL WAGLE

Experience: Enbridge Gas Distribution Inc.

/u

Director, Network Operations  
2013

Director, Operations  
2013

Operations Manager, Toronto Region,  
2011

Operations Manager, Central Region  
2008

Technical Services Manager, Eastern Region  
2005

Field Management Manager, EnVision Project  
2003

Operations Supervisor, Toronto Region  
2002

Construction Supervisor, Central Region  
2002

Engineering Project Leader  
2000

Pipeline Design and Analysis Supervisor, Eastern Region  
1998

Education: Carleton University  
Bachelor of Mechanical Engineering, 1998

Memberships: Professional Engineers of Ontario

Appearances: (Ontario Energy Board)  
EB-2011-0354

CURRICULUM VITAE OF  
BARRY C. YUZWA

Experience: Enbridge Gas Distribution Inc.

Controller  
2011

Director, Finance & Control  
2010

Enbridge Inc.

Senior Director, Chief Audit Executive  
Audit Services & Internal Controls  
2007

Director, Audit Services  
1999

Safeway Inc./Canada Safeway Limited

Manager, Corporate Audit Services  
1991

Deloitte & Touche

Audit Manager  
1987

Education: Certified Internal Auditor  
Institute of Internal Auditors  
2003

Chartered Accountant  
Canadian Institute of Chartered Accountants  
1986

Bachelor of Commerce-Accounting  
University of Calgary  
1983

Memberships: Canadian Institute of Chartered Accountants  
Institute of Chartered Accountants of Alberta  
Institute of Chartered Accountants of Ontario  
Institute of Internal Auditors  
Financial Executives International, Canada  
Corporate Executive Board, Audit Directors and Risk Management  
Advisory Council  
University of Calgary, Haskayne School of Business,  
Mentorship Program  
Enbridge Inc. Mentorship Program

Appearances: (Ontario Energy Board)  
EB-2012-0055  
EB-2011-0354  
EB-2011-0277  
EB-2011-0008

CURRICULUM VITAE OF  
IRENE CHAN

Experience: Enbridge Gas Distribution

Senior Manager, Productivity and Business Analytics  
2013

Manager, Gas Accounting and Analytics  
2012

Manager, Margin Accounting, and Gas Analytics  
2011

Manager, Margin Accounting, Business Performance and Analytics  
2010

Manager, Margin Budgets and Accounting  
2007

Manager, Margin Planning and Analysis  
2006

Manager, Volumetric Analysis and Budgets  
2003

Supervisor, Volumetric Analysis  
2001

Senior Analyst, Volumes Knowledge Centre  
2000

Economic Analyst, Economic Studies  
1998

Queen's University

Instructor, Economics Department  
1997

Research/Teaching Assistant, Economics Department  
1992-1997

International Monetary Fund

Summer Intern, Research Department  
1996

Consultant, Research Department  
1994



Bank of Canada

Research Assistant, Research Department  
1991

Education: Certified Management Accountant,  
The Society of Management Accountants of Canada, 2006

Ph.D. in Economics  
Queen's University, 1998

Master of Arts in Economics  
Queen's University, 1993

Bachelor of Arts (Honours) in Economics  
University of Western Ontario, 1991

Memberships: Toronto Association for Business & Economics  
The Society of Management Accountants of Canada

Appearances: (Ontario Energy Board)

EB-2012-0055  
EB-2011-0354  
EB-2011-0008  
EB-2010-0042  
EB-2009-0172  
EB-2009-0055  
EB-2008-0219  
EB-2007-0615  
EB-2006-0034  
EB-2005-0001  
RP-2003-0203  
RP-2002-0133

CURRICULUM VITAE OF  
CATHY EGAN

Experience: Enbridge Gas Distribution Inc.

Director of System Measurement, Quality & Training  
2013

Director of Safety  
2012

Director of Safety & Training  
2010

General Manager, Niagara Region  
2008

President & General Manager, St. Lawrence Gas  
2006

Group Manager, Work Management Centre  
2005

Manager, New Construction & Mass Markets  
2002

Manager, Mass Markets  
2001

Market Sector Manager  
1999

Group Manager Energy Efficiency Programs  
1998

Manager, Distribution Expansion CR & NR  
1997

Manager, Customer Attachment  
1995

Manager, Metro Call Distribution Center  
1994

Senior Supervisor Customer Inquiry  
1991

Supervisor, Customer Service  
1990

Representative, Telephone Service  
1990

Operator, Telephone Service  
1987

Clerk, Telephone Contact  
1986

Education: M.B.A., Clarkson University, Pottsdam, New York  
Degree Business, Ryerson University, Toronto

Memberships: Board member of the HRAC Toronto Chapter  
Board member of the United Way of St. Catharines and EnerQuality Corporation  
Board member of Habitat for Humanity, Toronto

Appearances: (Ontario Energy Board)  
None

CURRICULUM VITAE OF  
CATHERINE HO, CPA, CA

Experience: Enbridge Gas Distribution Inc.

Manager, Accounting  
2012

Manager, Gas Accounting  
2012

Manager, Finance Projects  
2008

Senior Audit Advisor  
2005

Ernst & Young LLP

Senior Staff Accountant  
2004

Horwath Orenstein LLP

Staff Accountant  
2002

Goldfarb, Shulman, Patel & Co. LLP

Staff Accountant  
2000

Education: Chartered Accountant, 2005

Certified Public Accountant – Delaware, 2004

University of Waterloo – Waterloo ON

- Master of Accounting (MAcc), 2003
- Bachelor of Arts Honours Chartered Accountancy Studies – Co-operative program (Dean's Honours List), 2002

Memberships: Institute of Chartered Accountants of Ontario (ICAO)

Appearances: (Ontario Energy Board)  
EB-2013-0046

CURRICULUM VITAE OF  
TREVOR W. TUCK

Experience: Enbridge Gas Distribution Inc.

Director, Distribution Protection  
2013

Manager, Operations Central Region East  
2011

Manager, Work Management Centre Operations  
2008

Manager, Engineer Capital Projects ESTS  
2007

Manager, Special Projects ESTS  
2006

Manager, Engineering Special Projects  
2005

Project Manager, Engineering  
2004

Project Engineer, Industrial Thermo Polymer Inc.  
2002

Project Engineer, Applied Materials Japan Inc.  
2001

Instructor, Aeon Inc.  
2000

Mechanical Designer, Silex Inc.  
1999

Mechanical Designer, Samuel Acme Inc.  
1998

Education: Masters of Business Administration, Finance  
Schulich School of Business, York University, 2006

Bachelor of Applied Science, Mechanical Engineering  
University of Windsor 1998

Memberships: Professional Engineers Ontario

Appearances: (Ontario Energy Board)  
EB-2006-0034

CURRICULUM VITAE OF  
THO VUONG, P.Eng.

Experience: Enbridge Gas Distribution Inc.

Manager, Process Safety  
2014

/u

Manager, System Measurement  
2011

Construction Manager, Central Region West  
2008

Manager, Work Management Centre  
2006

Project Manager, FieldVision  
2004

Manager, Joint Utility Construction  
2002

Project Leader, Engineering  
2000

Supervisor, Special Projects  
1999

Supervisor, Planning and Technical Services  
1998

Supervisor, Construction and Maintenance  
1997

Pipeline Inspector, Construction  
1995

Education: Professional Engineer (P.Eng.), 1997  
B.A.Sc., University of Waterloo, 1995

Memberships: Professional Engineers Ontario

Appearances: (Ontario Energy Board)  
None

**LARRY E. KENNEDY****TECHNICAL SPECIALTIES**

Public Utility Plant Depreciation  
Public Utility Plant Accounting

**PERSONAL INFORMATION**

Diploma, Applied Arts - Business Administration, Northern Alberta Institute of  
Technology, 1978

Member, Society of Depreciation Professionals  
Certified Depreciation Professional

**EXPERIENCE**

Mr. Kennedy joined Gannett Fleming, Inc. in January 1999 and is a Vice President of Gannett Fleming Canada ULC. His responsibilities include the assembly of data, the preparation and review of depreciation studies, advice to clients regarding asset retirement obligation accounting, plant accounting issues, and provision of general regulatory litigation support.

Representative assignments include:

- International Financial Reporting Standards (IFRS). Mr. Kennedy has been retained by numerous clients encompassing most Canadian Provinces and Territories. The assignments included the review of company's assets and depreciation practices to provide opinion on the compliance to the IFRS. The assignments have also included the issuance of opinion to the External Auditors of Utilities to comment on the manner in which the Utilities can minimize differences in the regulatory ledgers and the accounting records used for financial disclosure purposes. Mr. Kennedy has also presented to the Canadian Electric Association, the Society of Depreciation Professionals and to the British Columbia Utilities Commission on this topic.
- Fortis Inc. Studies have included the development of annual and accrued depreciation rates for the electric distribution assets in Alberta and for the generation, transmission, and distribution assets in British Columbia. The FortisBC Inc. studies were completed and filed with the BCUC in 2005, 2010 and 2011 encompassing both the FortisBC electric and natural gas companies. FortisAlberta studies were completed in 2004 (updated in 2005), 2009 and 2010. Elements of the studies included the development of average service lives using the retirement rate method of analysis, development of net salvage estimates, compliance with IFRS, and the determination of appropriate annual accrual and accrued depreciation rates.
- BC Hydro. This assignment included the development of an average service life study for all of the BC Hydro's electric generation, transmission, distribution and general plant assets. The study, which was prepared for submission to the British Columbia Utilities Commission ("BCUC"), included development of depreciation policy for the company, development of procedures to extract data from the company databases, tours of the company facilities, interviews with operational and management representatives, and the compilation of a detailed report. The assignment has included the support of the study through the regulatory process. Mr. Kennedy has also completed a review of the cost allocation procedures and practices which was filed with the BCUC in 2010.

**LARRY E. KENNEDY**

- AltaLink LP. A study was developed for submission to the Alberta Utilities Commission (“AUC”) in 2002. The study included the estimation of service life characteristics, and the estimation of net salvage requirements for all electric transmission assets. A net salvage study and technical update was also filed with the Board in 2004. Since 2004 additional depreciation studies were filed in 2005, 2010 and 2012.
- Newfoundland and Labrador Hydro. Mr. Kennedy developed a comprehensive depreciation study that included the development of depreciation policy and rates for Newfoundland and Labrador Hydro. The study provided a significant review of the previous depreciation policy, which included use of a sinking fund depreciation method and provided justification for the conversion to the straight-line depreciation method. The study, which was prepared for submission to the Newfoundland and Labrador Utilities Commission, included a significant amount of discussion regarding the development of depreciation policy for the company. The study also included development of procedures to extract data from the company databases, tours of the company facilities, interviews with operational and management representatives, development of appropriate net salvage rates, development of average service life estimates, and the compilation of the report for submission in a General Tariff Application. Additional studies were also completed in 2008 and 2010. The 2010 study was the subject of Regulatory Review in 2012.
- ATCO Electric. Studies have included the development of annual and accrued depreciation rates for the electric transmission and distribution systems for the Alberta Assets of ATCO Electric, in addition to the generation, transmission, and distribution assets of Northland Utilities (NWT) Inc. and the distribution assets of Northland Utilities (Yellowknife) Inc. The ATCO Electric studies were submitted to the AUC for review, while the Northland Utilities Inc. studies were submitted to the Northwest Territories Utilities Board and Yukon Electric Company Limited (YECL) was submitted to Yukon Public Utilities Board. Elements of the studies included the service life analysis for all accounts using the retirement rate analysis, discussion with management regarding outlook, and the estimation of net salvage requirements.
- ENMAX Power Corporation. Studies have included the development of annual and accrued depreciation rates for all depreciable electric transmission assets. Elements of the studies included the service life analysis for all accounts using the retirement rate analysis, discussion with management regarding outlook, and the estimation of net salvage requirements. Studies were prepared for submission to the Alberta Department of Energy and more recently for submission to the Alberta Energy and Utilities Board. Similar studies have also been completed for submission for the ENMAX Electric Distribution assets for submission to the AUC. The ENMAX distribution asset assignments also included an extensive asset verification project where the plant accounting and operational asset records were verified to the field assets actually in service.
- Manitoba Hydro. A study was developed to determine the appropriate depreciation parameters for all electric generation, transmission and distribution assets. The study was submitted to the Manitoba Public Utilities Board. Elements of the study included a field review of electric generation and transmission plant, the service life analysis for all accounts using the retirement rate analysis, discussion with management regarding outlook, and the estimation of net salvage requirements. A similar study was also completed in 2006. Mr. Kennedy has also consulted with Manitoba Hydro on issues regarding IFRS compliance and required componentization.



**LARRY E. KENNEDY**

- Centra Gas Manitoba, Inc. The study included development of annual and accrued depreciation rates for all gas plant in service. Elements of the study included a field inspection of metering and compression facilities, service buildings and other gas plant; service life analysis for all accounts using the retirement rate analysis on a combined database developed from actuarial data and data developed through the computed method; discussions with management regarding outlook; and the estimation of net salvage requirements. A similar study was completed in 2006. Mr. Kennedy has also consulted on issues regarding IFRS compliance and required componentization.
- TransCanada PipeLines Limited – Alberta Facilities. The assignment included working with the company to develop the appropriate depreciation policy to align with the organization's overall goals and objectives. The resulting depreciation study, which was submitted to the Alberta Energy and Utilities Board, incorporated the concepts of time-based depreciation for gas transmission accounts and unit based depreciation for gathering facilities. The data was assembled from two different accounting systems and statistical analysis of service life and net salvage were performed. For gathering accounts, the assignment included the oversight of the development of appropriate gas production and ultimate gas potential studies for specific areas of gas supply. Field inspections of gas compression, metering and regulating, and service operations were conducted. Studies were completed in 2002 and 2004, 2007, 2009 and 2012.
- TransCanada PipeLines Limited – Mainline Facilities. The study prepared for submission to the National Energy Board of Canada ("NEB") included the development of annual and accrued depreciation rates for gas transmission plant east of the Alberta – Saskatchewan border. Elements of the study included a field inspection of compression and metering facilities, service life and net salvage analysis for all accounts. The study was completed in 2002, and was supported through an appearance before the NEB. Study updates have been completed in 2005, 2007, 2009 and an additional full and comprehensive study has been submitted to the NEB for review in 2011.
- AltaGas Utilities Inc. A number of depreciation studies have been completed, which included the assembly of basic data from the Company's accounting systems, statistical analysis of retirements for service life and net salvage indications, discussions with management regarding the outlook for property, and the calculations of annual and accrued depreciation. The studies were prepared for submission to the Alberta Energy and Utilities Board.
- Mackenzie Valley Pipeline Project. This assignment included the review of the proposed depreciation schedule for the proposed Mackenzie Valley Pipeline. The review included a discussion of the policies used by the company and the depreciation concepts to be included in a depreciation schedule for a Greenfield pipeline. The review was supported through appearance at the oral public hearings before the National Energy Board of Canada.
- Alberta Municipal Affairs. The first assignment was conducted in two phases. The first phase involved significant consultation with the Alberta Department of Municipal Affairs and various stakeholder groups to develop a report outlining the method of depreciation that would most appropriately result in a fair market value assignment for the Province's oil and gas pipelines, and for all segments of the electric industry (generation, transmission and distribution). The second phase of the project was to develop specific depreciation schedules to implement the recommendations that were accepted by Alberta Municipal Affairs for the oil and gas pipelines, as well as for all three aspects of the Province's electric industry. A second assignment related to developing models for the determination of the fair assessment value for the Province's Telecommunication and Railway Systems was completed in 2004, and was updated in 2005 and 2006.

---

**LARRY E. KENNEDY**

- Property Tax Appeals. Mr. Kennedy has provided expert evidence regarding the fair market valuation for a number of clients before the Alberta Municipal government Board.
- The City of Calgary. These assignments consisted of providing advice and testimony for the City of Calgary on depreciation issues in various general rate applications. Elements of these assignments include the review of applicant evidence and policies, development of information requests, submission of evidence, response to information requests, and providing expert testimony.

Mr. Kennedy has successfully completed the series of week-long programs offered by Depreciation Programs, Inc. and is a past president of the Society of Depreciation Professionals.

Mr. Kennedy has appeared as an expert witness before various regulatory boards as summarized in the attached "Summary of Appearances".

LARRY E. KENNEDY				
SUMMARY OF CASES WHERE EVIDENCE WAS PROVIDED BUT APPEARANCES WERE NOT REQUIRED				
<u>Year</u>	<u>Client</u>	<u>Applicant</u>	<u>Regulatory Board</u>	<u>Proceeding Number</u>
2000	AltaGas Utilities Inc.	AltaGas Utilities Inc	Alberta Energy and Utilities Board	Decision 2002-43
2001	ENMAX Power Corporation	ENMAX Power Corporation – Electric Transmission Assets	Alberta Department of Energy	N/A
2002	Centra Gas British Columbia	Centra Gas British Columbia	British Columbia Utilities Commission	N/A
2002	ENMAX Power Corporation	ENMAX Power Corporation – Electric Transmission Assets	Alberta Department of Energy	N/A
2003	Centra Gas Manitoba	Centra Gas Manitoba	Manitoba Public Utilities Board	N/A
2003	Manitoba Hydro	Manitoba Hydro	Manitoba Public Utilities Board	N/A
2003	City of Calgary	ATCO Pipelines	Alberta Energy and Utilities Board	1292783
2003	City of Calgary	ATCO Electric –ISO Issues	Alberta Energy and Utilities Board	N/A
2004	AltaGas Utilities Inc.	AltaGas Utilities Inc.	Alberta Energy and Utilities Board	1305995
2005	Yukon Energy Corporation	Yukon Energy Corporation	Yukon Utilities Board	N/A
2005	NOVA Gas Transmission Ltd.	NOVA Gas Transmission Ltd.	Alberta Energy and Utilities Board	1375375
2005	FortisAlberta Inc.	FortisAlberta Inc.	Alberta Energy and Utilities Board	1371998
2005	ATCO Electric	ATCO Electric	Alberta Energy and Utilities Board	1399997
2005	The City of Red Deer	The City of Red Deer Electric System	Alberta Energy and Utilities Board	1402729
2005	Northland Utilities (Yellowknife) Inc.	Northland Utilities (Yellowknife) Inc.	Northwest Territories Utilities Board	N/A
2005	Northland Utilities (NWT) Inc.	Northland Utilities (NWT) Inc	Northwest Territories Utilities Board	N/A
2005	ENMAX Power Corporation	ENMAX Power Corporation- Transmission Assets	Alberta Energy and Utilities Board	N/A
2005	FortisBC, Inc	FortisBC, Inc	British Columbia Utilities Commission	N/A
2005	New Brunswick Board of Commissioners of Public Utilities	New Brunswick Power Distribution and Customer Service Company	New Brunswick Board of Commissioners of Public Utilities	N/A
2005	British Columbia Transmission Corporation	British Columbia Transmission Corporation	British Columbia Utilities Commission	N/A
2005	Manitoba Hydro	Manitoba Hydro	Manitoba Public Utilities Board	N/A
2005	Centra Gas Manitoba	Centra Gas Manitoba	Manitoba Public Utilities Board	N/A
2005	FortisAlberta Inc.	FortisAlberta Inc.	Alberta Energy and Utilities Board	N/A
2006	BC Hydro	BC Hydro	British Columbia Utilities Commission	N/A
2007	Enbridge Pipelines Limited	Enbridge Pipelines Limited	National Energy Board of Canada	RH-2-2007
2007	FortisAlberta Inc.	Fortis Alberta Inc.	Alberta Energy and Utilities Board	1514140
2007	Kinder Morgan	Terasen (Jet fuel) Pipeline Limited	British Columbia Utilities Commission	N/A

LARRY E. KENNEDY				
SUMMARY OF CASES WHERE EVIDENCE WAS PROVIDED BUT APPEARANCES WERE NOT REQUIRED				
<u>Year</u>	<u>Client</u>	<u>Applicant</u>	<u>Regulatory Board</u>	<u>Proceeding Number</u>
2008	ATCOGas	ATCOGas	Alberta Utilities Commission	1553052
2008	Heritage Gas	Heritage Gas Ltd.	Nova Scotia Utility and Review Board	N/A
2008	ENMAX Power Corporation	ENMAX Power Corporation	Alberta Utilities Commission	1512089
2008	City of Lethbridge Electric System	City of Lethbridge	Alberta Utilities Commission	N/A
2009	AltaGas Utilities Inc.	AltaGas Utilities Inc.	Alberta Utilities Commission	N/A
2010	Enbridge Pipelines Limited - Line 9	Enbridge Pipelines Limited - Line 9	National Energy Board of Canada	N/A
2010	Kinder Morgan	Kinder Morgan	National Energy Board of Canada	N/A
2010	Pacific Northern Gas	Pacific Northern Gas	British Columbia Utilities Commission	N/A
2011	SaskPower	SaskPower	Internal Review Committee	N/A
2011	FortisAlberta Inc.	Fortis Alberta, Inc.	Alberta Utilities Commission	1607159
2011	Quilq	Quilq	Utilities Rates Review Council	N/A
2011	Heritage Gas Ltd.	Heritage Gas Ltd.	Nova Scotia Utility and Review Board	N/A
2011	ATCO Electric	Northland Utilities (NWT) Inc.	Northwest Territories Utility Board	N/A
2012	Newfoundland and Labrador Hydro	Newfoundland and Labrador Hydro	Newfoundland and Labrador Board of Commissioners of Public Utilities	N/A
2012	City of Red Deer	City of Red Deer	Alberta Utilities Commission	1608641
2012	Enbridge Gas Distribution Inc.	Enbridge Gas Distribution Inc.	Ontario Energy Board	EB 2011-0345
2012	Northwest Territories Power Corporation	Northwest Territories Power Corporation	Northwest Territories Public Utilities Board	N/A

LARRY E. KENNEDY				
SUMMARY OF APPEARANCES BEFORE REGULATORY BOARDS				
Year	Client	Applicant	Regulatory Board	Proceeding Number
1999	ENMAX Corporation	Edmonton Power Corporation	Alberta Energy and Utilities Board	980550
2001	City of Calgary	ATCO Pipelines South	Alberta Energy and Utilities Board	2000-365
2001	City of Calgary	ATCO Gas South	Alberta Energy and Utilities Board	2000-350
2001	City of Calgary	ATCO Affiliate Proceeding	Alberta Energy and Utilities Board	1237673
2003	AltaLink Management Ltd	AltaLink Management Ltd	Alberta Energy and Utilities Board	1279345
2003	TransCanada PipeLines Limited	TransCanada PipeLines Limited	National Energy Board of Canada	RH-1-2002
2003	City of Calgary	ATCO Gas	Alberta Energy and Utilities Board	1275466
2003	City of Calgary	ATCO Electric	Alberta Energy and Utilities Board	1275494
2004	NOVA Gas Transmission Limited	NOVA Gas Transmission Limited	Alberta Energy and Utilities Board	1315423
2004	ENMAX Power Corporation	ENMAX Power Corporation	Alberta Energy and Utilities Board	1306819
2004	Westridge Utilities Inc	Westridge Utilities Inc.	Alberta Energy and Utilities Board	1279926
2004	Heritage Gas Ltd.	Heritage Gas Ltd.	Nova Scotia Utility and Review Board	N/A
2004	Central Alberta Midstream	Central Alberta Midstream	Municipal Government Board of Alberta	N/A
2004	AltaLink LP	AltaLink LP	Alberta Energy and Utilities Board	1336421
2004	Central Alberta Midstream	Central Alberta Midstream	Municipal Government Board of Alberta	N/A
2005	AltaGas Utilities Inc.	AltaGas Utilities Inc.	Alberta Energy and Utilities Board	1378000
2005	ATCO Power	ATCO Power	Municipal Government Board of Alberta	N/A
2005	ENMAX Power Corporation	ENMAX Power Corporation- Distribution Assets	Alberta Energy and Utilities Board	1380613
2006	AltaLink LP	AltaLink LP	Alberta Energy and Utilities Board	1456797
2006	Imperial Oil Resources Ventures Limited	McKenzie Valley Pipeline Project	National Energy Board of Canada	GH-1-2004
2008	ATCO Electric	Yukon Electrical Company Limited	Yukon Utilities Board	N/A
2009	Fortis Alberta Inc.	Fortis Alberta, Inc.	Alberta Utilities Commission	1605170
2010	Gazifere	Gazifere	La Regie de L'Energie	R-3724-2010

LARRY E. KENNEDY				
SUMMARY OF APPEARANCES BEFORE REGULATORY BOARDS				
<u>Year</u>	<u>Client</u>	<u>Applicant</u>	<u>Regulatory Board</u>	<u>Proceeding Number</u>
2010	ATCO Electric	ATCO Electric	Alberta Utilities Commission	1606228
2011	ATCO Gas	ATCO Gas	Alberta Utilities Commission	1606822
2011	Gaz Metro	Gaz Metro	La Regie de L'Energie	R-3752-2011
2011	AltaGas Utilities Inc.	AltaGas Utilities Inc.	Alberta Utilities Commission	1606694
2011	AltaLink	AltaLink	Alberta Utilities Commission	1606895
2011	FortisBC Energy, Inc.	FortisBC Energy, Inc.	British Columbia Utilities Commission	3698627
2011	TransAlta Utilities Corporation	TransAlta Utilities Corporation	Municipal Government Board of Alberta	N/A
2012	FortisBC, Inc.	FortisBC, Inc.	British Columbia Utilities Commission	3698620
2012	TransCanada PipeLines Limited	TransCanada PipeLines Limited	National Energy Board of Canada	RH-003-2011
2012	Manitoba Hydro	Manitoba Hydro	Manitoba Public Utilities Board	2013/2013 GRA
2013	IntraGaz Incorporated	IntraGaz Incorporated	La Regie de L'Energie	R-3807-2012
2013	AltaLink LP	AltaLink LP	Alberta Utilities Commission	1608711
2013	Yukon Electrical Company Limited (YECL)	Yukon Electrical Company Limited (YECL)	Yukon Utilities Board	Appearance Pending
2013	ENMAX Power Corporation	ENMAX Power Corporation	Alberta Utilities Commission	Appearance Pending
2013	Enbridge Gas Distribution	Enbridge Gas Distribution	Ontario Energy Board	Appearance Pending

CAPITAL BUSINESS AREA: FACILITIES AND GENERAL PLANT (2014 – 2016)

1. The purpose of this evidence is to present the Facilities and General Plant capital expenditures budget for the 2014, 2015 and 2016 forecast period. Facilities and General Plant expenditures relate to Facilities Services and Fleet & Equipment. This exhibit provides the Ontario Energy Board (the “Board”) with a detailed breakdown and explanation of the various categories of capital expenditure spends and justification for planned major projects over \$2 million.

Role of Facilities Services and Fleet & Equipment

2. The Facilities Services department manages all Enbridge Gas Distribution Inc. (“Enbridge”, or the “Company”) facilities (currently 20 properties, 11 owned and 9 leased, totaling 818,000 square feet) ensuring that appropriate facilities and workspace is available to support and respond to the operational requirements of the Company and provides 24/365 response to all building emergencies. The department is responsible for the planning and utilization of buildings to provide a safe and healthy work environment for all building occupants while optimizing the use of and efficiency of all facilities and ensuring adherence to building codes and by-laws, fire codes, and environmental regulations.
3. Facilities Services conducts strategic property planning, acquisition and disposal of properties, lease administration, asset management and internal project management of all reconfiguration, relocation, renovation and construction projects. The daily operation of buildings and grounds entails the maintenance and upgrade of building systems, energy management initiatives, premise security, life safety systems, business continuity planning, mail and delivery and housekeeping services.

Witnesses: D. Lapp  
P. Rapini  
R. Riccio

4. The Fleet & Equipment group has the overall responsibility for the administration, operation and maintenance of the utility fleet including cars and trucks, utility trucks and service vans. In addition, this group administers and maintains the heavy equipment employed such as backhoes, lifting equipment and welding machines. This group also maintains the smaller tools utilized by the Company including jackhammers and drills.
5. The Fleet & Equipment group manages the purchase and acquisition of all transportation equipment, including light duty and medium duty vehicles required for the safe and reliable operation of the utility. It also includes the purchase and acquisition of all heavy work equipment and small tools. Included with the capital associated with transportation equipment are the capital costs associated with converting and operating the fleet using compressed natural gas for fuel (NGV).

Capital Budget for Facilities and General Plant

6. Table 1 provides a summary of forecast capital expenditures by plant account for Facilities and General Plant for the 2013 to 2016 forecast period.

Table 1

	(\$000)	Col. 1	Col. 2	Col. 3	Col. 4
Item No.		Estimate 2013	Budget 2014	Budget 2015	Budget 2016
1.1	Structures and Improvements	6,865	8,000	8,100	6,500
1.2	Leasehold Improvements	558	4,920	3,120	270
1.3	Office Furniture and Equipment	1,932	4,630	4,680	4,380
1.4	Fleet & Equipment	6,310	6,064	6,129	6,143
1.	Total	15,665	23,614	22,029	17,293

Witnesses: D. Lapp  
P. Rapini  
R. Riccio



7. Table 2 provides a detailed breakdown of Facilities and General Plant capital expenditures into categories of spend and major projects over \$2 million for the 2014 to 2016 forecast period.

Table 2

	(\$000)	Col. 1	Col. 2	Col. 3	Col. 4
Item No.		Estimate 2013	Budget 2014	Budget 2015	Budget 2016
	<u>Categories of Spend:</u>				
1.1	New Workspace and Alterations	3,208	3,745	2,685	2,810
1.2	Building Improvements and Upgrades	4,215	5,625	3,435	3,960
1.3	Office Furniture and Equipment	1,932	4,630	4,680	4,380
1.4	Light & Medium Duty Transportation Equipment	3,260	3,080	3,080	3,080
1.5	Heavy Work Equipment	815	770	770	770
1.6	Small Tools & Equipment	1,618	1,575	1,575	1,575
1.7	NGV Equipment	<u>617</u>	<u>639</u>	<u>703</u>	<u>719</u>
1.	Sub-Total	15,665	20,064	16,929	17,293
	<u>Projects over \$2 million:</u>				
2.	Relocation of the Meter Shop to a Leased Property	0	3,550	0	0
3.	Convert Vacated Space at VPC into Offices	0	0	2,100	0
4.	Relocation of Fleet Garage to a Leased Property	0	0	3,000	0
5.	Total	<u>15,665</u>	<u>23,614</u>	<u>22,029</u>	<u>17,293</u>

/c

8. A description of the items addressed within each of the categories of spends identified are as follows:
- New Workspace and Alterations. This category includes capital expenditures required to build new offices, conference rooms and common areas as well as industrial workspace such as warehousing and

Witnesses: D. Lapp  
P. Rapini  
R. Riccio

operations yards at any of the existing owned and leased buildings as well as any new additional facilities that are acquired. The needs of the Company are changing constantly and it is critical that the facilities meet the demands in an effective and timely manner. While the workspace standards and designs are developed to allow maximum flexibility without constant staff workspace reconfigurations and relocations, it is necessary to adapt to meet the changing demands.

- b. Building Improvements and Upgrades. This category includes capital expenditures required to maintain the existing portfolio of buildings and includes replacement of building components such as roofs, windows, doors, carpet and ceiling tiles, building system upgrades (HVAC, electrical, life safety systems, data center), site improvements (landscaping, parking lots, fencing, gates, equipment yards) and energy efficiency projects (lighting, automated building controls). The individual building components have a finite life from a functional, operating cost and risk perspective. Several examples include:
- A roof or a chiller may have a useful life of 15 to 20 years depending on the maintenance performed over the years; however, failing to replace it at the end of its life cycle time will eventually result in equipment failure, high operating costs and occupant disruption.
  - Site improvements are essential in upgrading to meet current municipal and Enbridge safety standards.
  - Structural components of buildings such as exterior walls, staircases, do not age gracefully may require major restoration.

Witnesses: D. Lapp  
P. Rapini  
R. Riccio

- c. Office Furniture and Equipment. This category includes capital expenditures required to both replace existing furniture and equipment and furnish all new planned building space. This grouping includes system furniture, chairs, conference room and common space furniture, file cabinets and bookcases. Furniture replacement is required as the existing system furniture was implemented over 25 years ago and is at end of its life cycle.

The Company's existing REFF furniture systems were purchased in the mid-1980s when the concept of systems furniture was first implemented. The office environment has evolved immensely over the past thirty years.

- Warranty, obsolescence & fatigue: existing REFF furniture systems had a 10 year warranty which reflected anticipated use length. Today, that has increased to 15 or 20 years which is recognized by LEED and well beyond the expected lifecycle of the product. Enbridge systems furniture is approaching 30 years and if a replacement program is not initiated, fatigue and failure will become an issue.
- Ergonomic requirements are changing; supporting the Company's goal to zero injuries in the office, the height of the existing fixed workstation at 29" is a contributing factor of repetitive strain injury. Current standard workstations allow for adjustable height work surfaces - allowing the employee to adjust their primary work surface to the appropriate height or to stand - the current approach to ergonomics.
- A growing body of research links high quality indoor environments with access to natural light and views to gains in productivity, decreased absenteeism and improved employee morale. Providing for the

Witnesses: D. Lapp  
P. Rapini  
R. Riccio

building occupants a connection between indoor spaces and the outdoors through the introduction of mid height workspace systems and perimeter placement. These strategies will improve the indoor environment of Enbridge facilities by exposing occupants to natural light.

- Workstation design to make use of materials and features reducing the “cubical feel”. New systems are designed to allow for wiring of power and networks.
  - Attraction and engagement is a concern of many organizations today. It’s not just about attracting and retaining - it’s about engaging employees while they are in their workplace. The Company’s new systems furniture helps create an engaging and collaborative environment.
- d. Light & Medium Duty Transportation Equipment. This category includes light duty vehicles, which are all vehicles under 4500 kg, including cars, pick-up trucks and vans, and medium duty vehicles, which are vehicles over 4500 kg, including utility trucks, flat-bed trucks, dump trucks and trailers.
- e. Heavy Work Equipment. This category includes pieces of heavy work equipment including backhoes, welding machines, compressors and lifting devices such as hiabs and sidebooms.
- f. Small Tools & Equipment. This category includes small tools and equipment, including jackhammers, drills, soil compactors, combustible gas indicators, generators, etc.

Witnesses: D. Lapp  
P. Rapini  
R. Riccio

- g. NGV Equipment. This category includes fleet vehicle NGV conversion kits and their installation as well as the associated NGV cylinders.

Currently, about 75% of the Company's fleet vehicles are either dedicated natural gas or bi-fuel (natural gas and gasoline). Also included are the capital costs associated with the NGV compressor station facilities used for refueling the Company fleet at Enbridge facilities.

9. There is one major project within the Facilities and General Services capital expenditures for 2014 to 2016. That project relates to activities to remove non-office functions from the Company's Victoria Park Complex ("VPC") site to other locations, and then to use the vacated space for office functions. The costs related to this major project are set out at Items 2 to 4 of Table 2 above. This project is discussed within the project description document appended as "Attachment 1".
10. The following sections provide details about the forecast budgets for Facilities and General Plant for 2014 to 2016.

#### 2014 Budget

11. The 2014 capital expenditure budget for Facilities and General Plant is \$23.6 million. Set out below is a breakdown of the categories of spend and major projects for 2014:
- i. New Workspace and Alterations – \$3.8 million. The general activities under this category are described above. The most significant projects planned for 2014 include:

Witnesses: D. Lapp  
P. Rapini  
R. Riccio

- Thorold Data Center expansion (phase 2) - \$350,000
- Thorold mezzanine conference center - \$500,000
- Thorold parking lot expansion - \$240,000
- Building addition to the Technical Operations Centre for Engineering Materials Evaluation Center - \$1.25 million (\$625,000 in 2014 and \$625,000 in 2015)
- Leasehold improvements for a new operations facility replacing the Casselman operations depot - \$500,000

The balance of the budget for this category of spend is required for workspace reconfigurations and relocations necessary to meet the changing demands in the various owned and leased facilities.

- ii. Building Improvements and Upgrades – \$5.6 million. The general activities under this category are described above. The most significant projects planned for 2014 include:

- VPC Head Office parking lot repaving and sidewalks and lighting - \$560,000
- Brampton Colony Court Operations Depot renovations and upgrades - \$750,000
- Scarborough Kennedy Road Operations Depot renovations and upgrades - \$750,000
- Thorold office renovation - \$300,000
- Ottawa Coventry Road Administrative building 1<sup>st</sup> floor office renovation - \$350,000

Witnesses: D. Lapp  
P. Rapini  
R. Riccio

The balance of the budget for this category of spend is required for upgrades to maintain the existing portfolio of buildings.

- iii. Office Furniture and Equipment – \$4.6 million. The general activities under this category are described above. For 2014, much of the budget is required to replace existing furniture that is well beyond its expected lifecycle for the planned office renovation projects at the both Brampton Colony Court and Scarborough Kennedy Road operations depots and both the Thorold and Ottawa Coventry Road administrative offices. This grouping includes system furniture, chairs, conference room and common space furniture, file cabinets and bookcases.
- iv. Fleet & Equipment - \$5.4 million. The Capital costs for these items relates to replacement of these assets, or additions to the asset pool. Replacement occurs when the assets come to the end of their serviceable life, or the required maintenance costs are not justified relative to replacement. The Company's budget assumes that Enbridge will maintain the same pool of fleet vehicles over the 2014 to 2016 period.
  - Light & Medium Duty Transportation Equipment - \$3.08 million. There are no forecast increases in the light & medium duty transportation equipment units through the forecast period. This number is expected stay at the 2013 levels of 815 units. The cost forecast is based on review of the list of vehicles likely to require replacement (based on age and repair history) and forecasting the replacement cost for such vehicles.
  - Heavy Work Equipment - \$0.77 million. There are no forecast increases in the heavy work equipment units through the forecast period. This number

Witnesses: D. Lapp  
P. Rapini  
R. Riccio

is expected stay at the 2013 levels of 405 units. The cost forecast is based on review of the list of vehicles likely to require replacement (based on age and repair history) and forecasting the replacement cost for such vehicles.

- Small Tools & Equipment - \$1.58 million. Due to the variety of items in this category and their associated unit costs, the number of tool and equipment units varies from year to year. The cost forecast is based on estimates of replacement requirements for tools and equipment, as well as allowance for new technologies and tools that may enhance safety and efficiency of operations (ie. keyhole technology) that become available over the 2014 to 2016 term.
- iii. NGV Equipment - \$0.64 million. The NGV costs primarily relate to three items:
- a. Compressed Natural Gas (CNG) cylinders for Company fleet vehicles. These are the fuel storage cylinders onboard the vehicles. When a gasoline vehicle is converted to run on natural gas, a new cylinder is installed. There are mandated inspection and retesting / recertification requirements for these cylinders they have been installed. The associated cost is estimated from the number of cylinders due to expire in any given year multiplied by the historical cost to retest/recertify
  - b. Conversion of new fleet vehicles. There are two cost components associated with converting new vehicles purchased by the Company to NGV. The first is the cost to buy and install conversion kits for the new vehicles, while the second is the cost to buy and install fuel storage cylinders for these same vehicles.

Witnesses: D. Lapp  
P. Rapini  
R. Riccio



- c. CNG refueling stations. There are costs associated with capital improvements to allow ongoing operation of the refueling stations used to fuel Enbridge's fleet. This includes replacement or refurbishment of worn major components (dispenser nozzle replacements, dryers refurbishment, compressor rebuilds, etc).
- iv. Planned major projects over \$2 million in 2014 are as follows:
  - Relocation of the Meter Shop from VPC to a Leased Property - \$3.6 million. This project is required to relocate the meter shop operation from its current VPC head office location to a more appropriate location in a leased facility. Details for this project are discussed within the project description document at Exhibit B2, Tab 10, Schedule 1, Attachment 1.

#### 2015 Budget

12. The 2015 capital expenditure budget for Facilities and General Plant is \$22.0 million. Set out below is a breakdown of the categories of spend and major projects for 2015 :
- i. New Workspace and Alterations - \$2.7 million. Included in the 2015 budget is \$625,000 for the completion of the building addition to the Technical Operations Centre for EMEC warehouse space expansion. This project is planned to start in 2014 for a total cost of \$1.25 million over the two year period. The balance of the budget for this category of spend is required for workspace reconfigurations and relocations necessary to meet the changing demands in the various owned and leased facilities.

Witnesses: D. Lapp  
P. Rapini  
R. Riccio

- ii. Building Improvements and Upgrades – \$3.4 million. There are two significant projects planned for 2015:
- Ottawa Coventry Road Administrative building 2<sup>nd</sup> and 3<sup>rd</sup> floor office renovation project - \$350,000.
  - Emergency Operations Centre (“EOC”) at the VPC Head Office - \$1.2 million over the 2015 and 2016 forecast period (\$500,000 in 2015 and \$700,000 in 2016). As the Company has adopted the Incident Command System (“ICS”) model for emergency response, the need for a dedicated EOC was identified to improve the emergency response capacity within Enbridge Gas Distribution.

The balance of the budget for this category of spend is required for upgrades to maintain the existing portfolio of buildings.

- iii. Office Furniture and Equipment – \$4.7 million. In 2015, significant planned projects include replacement of existing furniture that is well beyond its expected lifecycle for the planned office renovation at the Ottawa Coventry Road administrative offices and approximately one half of the furniture required for the new office space planned for the VPC head office facility will be purchased.
- iv. Fleet & Equipment - \$5.4 million. The Fleet & Equipment budget is forecast to remain flat through the 2014 to 2016 period. The explanation of these costs is set out above. category are developed based on the depreciation of these assets, where replacement generally occurs, either once they have come to the end of their useful life, or the required maintenance costs are not justified relative to replacement.

Witnesses: D. Lapp  
P. Rapini  
R. Riccio

- v. NGV Equipment - \$0.70 million. See above.
- vi. Planned major projects over \$2 million in 2015 are the following:
- Conversion of the vacated space at VPC into office space - \$2.1 million.  
Once the meter shop relocation project is completed, the vacated space at the Victoria Park Complex will be transformed into office space to accommodate forecasted office space needs at the head office, thus avoiding significant lease costs and associated build out costs to occupy nearby office towers. Details for this project are discussed within the project description document at Exhibit B2, Tab 10, Schedule 1, Attachment 1.
  - Relocation of the Fleet Garage to a Leased Property - \$3 million. The fleet garage at the VPC head office services the entire GTA with a primary focus on Operations with heavy vehicles, construction equipment, pickup trucks and smaller support vehicles. There are several safety issues regarding the mixed use nature of the VPC head office facility with both industrial and office functions on the same site. The project plan is to secure a new building shell on a suitable site and to retire the current building. Details for this project are discussed within the project description document at Exhibit B2, Tab 10, Schedule 1, Attachment 1.

#### 2016 Budget

13. The 2016 capital expenditure budget for Facilities and General Plant is \$17.3 million. Set out below is a breakdown of the categories of spend and major projects for 2016 :

Witnesses: D. Lapp  
P. Rapini  
R. Riccio

- i. New Workspace and Alterations – \$2.8 million. In 2016, the most significant project planned is \$550,000 for the expansion of the parking lot at the VPC head office facility. The project plan is to demolish the 45 year old fleet garage and construct a new parking lot in its place to meet the parking space requirements at the VPC head office. The balance of the budget for this category of spend is required for workspace reconfigurations and relocations necessary to meet the changing demands in the various owned and leased facilities.
- ii. Building Improvements and Upgrades – \$4.0 million. There is one significant project planned for 2016:
  - A budget of \$700,000 is for the completion of the Emergency Operations Centre (“EOC”) at the VPC Head Office. This project is planned to start in 2015 for a total cost of \$1.2 million over the two year period.

The balance of the budget for this category of spend is required for upgrades to maintain the existing portfolio of buildings.

- iii. Office Furniture and Equipment – \$4.4 million. In 2016, replacement of existing furniture that is well beyond its expected lifecycle will continue and the balance of the new furniture required for the new office space planned for the VPC head office facility will be purchased.
- iv. Fleet & Equipment - \$5.4 million. The Fleet & Equipment budget is forecast to remain flat through the 2014 to 2016 period. The explanation of these costs is set out above. .

Witnesses: D. Lapp  
P. Rapini  
R. Riccio

- v. NGV Equipment - \$0.72 million. See above.
- vi. There are no planned major projects over \$2 million in 2016.

Productivity

14. There are productivity savings that are included within the Facilities and General Plant budget for the 2014 to 2016 forecast period. Examples of productivity savings include the following:
- i. Enbridge has negotiated directly with its preferred furniture manufacturer, in order to obtain the maximum discount pricing available, and has locked in this pricing for five years;
  - ii. Enbridge has implemented a process through which high value construction materials (such as wall systems, flooring and HVAC) are directly procured by Facilities Services and supplied to the general contractor, thus avoiding significant mark-ups on construction projects;
  - iii. The plan to create additional office and parking space at VPC will be cost-effective. This will allow the Company to reduce the amount of high-cost office space being leased, as employees currently in leased space can move to the VPC site. By doing this, the Company can take advantage of the tenant common areas and support space that already exists at VPC, rather than paying for such amenities as part of the rent for the currently leased space. The cost of the leased space to house the relocated meter shop and fleet garage will be less than the cost of the office space that Enbridge will be

Witnesses: D. Lapp  
P. Rapini  
R. Riccio

vacating, since industrial building lease rates are 40% to 50% lower than office space lease rates.

- iv. Enbridge has negotiated transportation and heavy work equipment pricing through a strategic sourcing initiative where savings are achieved through single sourcing with automobile manufacturers over a multi-year period, with savings based on volume discounts.
- v. Minor increases or variations in fleet and equipment units over the 2014 to 2016 period will be accommodated through efficiencies in the management of the fleet and equipment inventory.
- vi. Currently, compressed natural gas for vehicles is approximately 40 per cent less expensive than gasoline or diesel. The increased utilization of compressed natural gas for vehicles will improve efficiencies in the operation of the Company fleet. With vehicle manufacturers re-emerging in the production of natural gas powered cars and trucks as Original Equipment Manufacturers ("OEMs"), the availability of these vehicles will continue to increase the penetration of NGVs in the Company fleet.

Witnesses: D. Lapp  
P. Rapini  
R. Riccio