



September 11, 2013

Ontario Energy Board  
2300 Yonge Street  
Suite 2700  
Toronto, Ontario  
M4P 1E4

Attention: Ms. Kirsten Walli, Board Secretary

**RE: EB-2012-0451 – Greater Toronto Area (“GTA”) LTC Project**  
**EB-2012-0433 – Parkway West Project**  
**EB-2013-0074 – Brantford – Kirkwall/Parkway D Project**  
**Union Gas Limited – Witness CVs**

Dear Ms. Walli,

Please find attached the Witness CVs for the Parkway Projects hearing.

Yours truly,

*[original signed by]*

Karen Hockin  
Manager, Regulatory Initiatives

cc: Crawford Smith, Torys  
All Intervenors

**M. RICHARD BIRMINGHAM**  
**Vice President, Regulatory, Lands and Public Affairs**  
**Union Gas Limited**  
**A Spectra Energy Company**

**Experience:** Vice President, Regulatory, Lands and Public Affairs  
June 2013

Vice President, Regulatory Affairs and Lands  
January 2013

Vice President, Regulatory and Public Affairs  
January 2012

Vice President, Regulatory, Government, Aboriginal and Public Affairs  
January 6, 2011

Vice President, Regulatory and Public Affairs  
February 2010

Vice President, Regulatory Affairs  
August 2009

Vice President, Finance and Regulatory Affairs  
February 2008

Vice President, Regulatory Affairs  
September 2007

Vice President, Regulatory Affairs & Economic Development  
May 2005

Vice President, Marketing and Regulatory Affairs  
June 2003 – May 2005

Vice President, Regulatory Affairs and Business Services  
March 2002 – June 2003

Vice President, Finance and Business Services  
July 2000 – March 2002

Vice President, Market Management  
July 1999 – July 2000

Vice President, Sales and Customer Support  
February 1999 – July 1999

Vice President, Regulatory Affairs

1997 - 1999

Director, Regulatory Affairs  
1994 - 1997

Manager, Regulatory Proceedings  
1992 - 1994

Manager, Accounting  
1990 - 1992

Manager, Regulatory Accounting  
1989 - 1990

**SKD Manufacturing** (automotive parts manufacturer)  
Plant Controller, 1988

**Hiram Walker - Allied Vintners Limited** (distiller)  
Corporate Development Analyst, 1987 - 1988

**Duomatic Olsen Inc.** (furnace manufacturer)  
Director, Finance & Administration, 1986 - 1987  
Controller, 1985 - 1986  
Chief Accountant, 1983 - 1985

**Deloitte Haskins & Sells** (chartered accountants)  
Senior Accountant, 1981 - 1983  
Junior Accountant, 1979 - 1980

**G.H. Ward & Partners** (chartered accountants)  
Junior Accountant, 1977 - 1978

**Education:** Chartered Accountant, 1982  
Bachelor of Mathematics, University of Waterloo, 1981

**Memberships:** Canadian Institute of Chartered Accountants  
Institute of Chartered Accountants of Ontario  
Financial Executives International Canada  
Stratford Festival - Member, Endowment Foundation Committee

**Appearances: Ontario Energy Board**

EB-2011-0210  
EB-2005-0473  
RP-2003-0063  
RP-2003-0130 / EB-2003-0056  
RP-2002-0130

RP-2000-0078  
RP-1999-0017  
E.B.R.O. 499  
E.B.O. 177-17  
E.B.R.O. 462

**Statement of Qualifications**  
**Michelle George**

**Experience:**           **Union Gas Limited**

Director, Major Projects  
2012

Director, Engineering Planning & Support  
2009

Manager, Engineering Evaluation Services  
2008

Manager, Operations Support & Administration  
2008

Manager, Distribution Operations Support & Administration  
2005

Manager, Operations (Halton)  
2004

Manager, Utility Services, (Ancaster & Burlington)  
1999

Operations Support Co-ordinator  
1998

Operations Engineer  
1998

District Engineer (Waterloo)  
1995

**Education:**           Bachelor of Engineering & Management, McMaster University  
1995

**Memberships:**       Professional Engineers Ontario

**Appearances:**       None

**Bruce Henning**  
**Vice President**

**ICF International**

## **EDUCATION**

B.S., Economics, Massachusetts Institute of Technology, Cambridge, Massachusetts, 1978

## **PROFESSIONAL CREDENTIALS**

Instructor, Gas Rate Fundamentals, University of Wisconsin, Madison, Wisconsin, 1995-1996  
Instructor, Advanced Utility Ratemaking, University of Maryland, College Park, Maryland, 1995-1996  
Instructor, Introduction to Utility Accounting, University of Richmond, Richmond, Virginia, 1996  
Member, FERC Pipeline Competition Task Force, 1993  
Member, NARUC Technical Advisors, Gas Integrated Resource Planning, 1993.

## **EXPERIENCE OVERVIEW**

Bruce Henning has worked in the area of natural gas and energy economics for 32 years. Mr. Henning re-joined Energy and Environmental Analysis, Inc (EEA) in January of 1997. EEA was acquired by ICF International in January 2007. Mr. Henning provides clients with regulatory analysis, support and testimony, strategic and competitive analysis, gas supply planning, and natural gas pricing analysis and forecasting. Mr. Henning testified before the United States Senate Committee on Energy and Natural Resources on the relationship between gas and electric markets in California and the Senate Committee on Governmental Affairs on the impact of the Enron bankruptcy on electricity and gas markets. Mr. Henning's work is cited in FERC Order Nos. 637 and 637-a.

Project areas include analysis of short-term natural gas markets, analysis of LDC rate design alternatives, LDC gas supply planning and gas-electric interdependency. In addition, Mr. Henning conducted a study of the impacts of growing power generation demand for natural gas on gas industry infrastructure requirements and the impact of a single Northeast RTO in electricity markets. Mr. Henning developed a framework for applying Decision-based Cost Analysis for a Midwest LDC service and rates evaluation and has provided analysis of innovative rate design alternatives including price cap regulation, performance-based rates, and benchmarked rates.

Prior to returning to EEA, Mr. Henning served as the Chief Economist for the American Gas Association. In his 15 years at AGA, he was responsible for economic analysis of gas utility regulation and FERC pipeline regulation, short and long term energy and economic forecasts and modeling, and the statistics publications and analysis of AGA. He was a member of the FERC Pipeline Competition Task Force and the NARUC Technical Advisors Groups for Gas Integrated Resource Planning. He has served as an instructor for Gas Rates Fundamentals at the University of Wisconsin and Advanced Ratemaking for Gas Utilities at the University of Maryland. Mr. Henning received his B.S. in economics at the Massachusetts Institute of Technology, completing his thesis under Robert Solow, Nobel Laureate in Economics.

## **PROJECT EXPERIENCE**

### **Gas-Electric Interdependency and Harmonization**

White Paper prepared for NERC for inclusion in the 2013 Special Reliability Assessment: Accommodating an Increasing Dependence on Natural Gas for Electric Power 10 months. Mr. Henning was a principal author of the white paper prepared for the North American Reliability Corporation for the Phase II assessment. The white paper described the differences between the regulatory framework and operating practices of in the gas industry and electric industry. The white paper presented the analysis framework for including gas fuel supply reliability into electric reliability and resource adequacy assessment that was presented in the 2013 Special Reliability Assessment.

Analysis of methods to evaluate and interpret natural gas pipeline operational capacity data in the assessment of reliability of service to power generation and other gas shippers, four months. Working with natural gas pipeline representatives, Mr. Henning has evaluated the operational capacity data required by FERC for public disclosure to consider how this data should be collected, analyzed and interpreted in the context of the availability of gas pipeline service. The objective is to provide a statically valid data set for use in evaluating electric industry reliability and resource adequacy.

### **Gas Supply Planning**

Analysis, review of proposals, and recommendation and regulatory support for the award of the primary gas purchase contract, two years. Mr. Henning directed the analysis for Centra Gas Ltd (LDC owned by Manitoba Hydro) in the review analysis and regulatory defense of the primary gas purchase contract for the utility. Factors considered included the changing dynamics of natural gas production and LNG deliveries as well as the interface of system gas purchases with the operation of the utility's customer choice program.

Natural Gas Storage Optimization, 18 months. Mr. Henning designed and directed the analysis of the optimal level of natural gas storage as a component to the overall natural gas portfolio for Michigan Consolidated Natural Gas, the natural gas utility owned by DTE Energy. Mr. Henning submitted direct and rebuttal testimony in the gas cost recovery proceeding defending the proposed approach to storage management.

### **Strategic Planning for Natural Gas Utilities**

Mr. Henning provides clients with natural gas pricing analysis and forecasts. Working with EEA's modeling group, Mr. Henning incorporates forecast results into risk management and estimates the economic value of natural gas transmission, distribution, and storage assets.

Union Gas Limited, 11 Years. Mr. Henning has worked with Union Gas Limited, to evaluate the market value of new and existing gas transportation and storage assets. These analyses assess the risks to these assets due to weather and oil price uncertainty as well as the development of competing projects.

Mr. Henning was the principal author of "Restructuring Activity of Natural Gas Local Distribution Companies" published by GRI. The analysis compiled information regarding current restructuring activity, identified the key forces that will shape future restructuring trends, and developed scenarios describing the industrial organization of gas distribution services in future years. The analysis considered the functional requirements of LDC activities, the core competencies of LDCs, and the assets available to LDCs.

New York Gas Group. Mr. Henning authored a study of the liquidity gas market. In that study, Mr. Henning devised a quantitative metric to evaluate the relative market liquidity at different market centers that considers trading volume, price behavior, number of participants, and the physical characteristics of the market center.

Multi-Client Study: American Gas Association and Interstate Natural Gas Association of America. Mr. Henning's analysis of "Short-term Natural Gas Markets" was widely cited in FERC Order 637. The analysis was used by FERC to provide quantitative support for the removal of price caps in the short-term capacity release market.

Electricity Market Structure and Design, Mirant. In conjunction with Mr. E. Harry Vidas of EEA, Mr. Henning conducted an analysis of the efficiency benefits of a single Northeast Regional Transmission Organization (RTO). Mr. Henning and Mr. Vidas submitted testimony detailing this analysis to the FERC.

Mr. Henning has served as an expert witness in a civil litigation proceeding providing analysis of pipeline services, pipeline expansion, and natural gas markets. Mr. Henning has provided testimony before the Missouri Public Service Commission in gas supply incentive program proceedings and prudence reviews. Mr. Henning assisted an LDC client in the preparation of rate design testimony for the "green field" construction of a gas distribution system.

### **Gas Market Design**

Design of Australian Natural Gas Short-term Trading Market (STTM), one year. As a senior member of the project team, Mr. Henning provided analysis and advice on the structure and design of proposed the STTM. The market was designed for initial implementation in South Australia and New South Wales, but allows for implementation throughout Eastern Australia. The design approach successfully incorporated the elements of the physical structure of the Australian natural gas industry, the business relationships between the entities, and current laws, regulations and contract terms. Mr. Henning was the principle liaison with the Board Level members of the Australian Gas Market Leaders Group.

### **Regulatory Analysis and Support**

Economic Advisor, American Gas Association, 9 years. The national trade association of natural gas distribution companies currently retains Mr. Henning to provide economic analysis and market impact analysis. The work

focuses on the interaction between federal and state regulatory initiatives and is directly involved in the policy development of the LDC community.

Expert Witness, Union Gas Ltd. and Eastern Distributor Group, 5 years. Testimony before the National Energy Board of Canada and the Ontario Energy Board regarding natural gas markets and market structure, and market competition and market power.

Evaluation of fuel procurement hedging in terms of industry “Best Practices.” Mr. Henning has performed “best practices” analysis and review of the hedging practices for a large Florida utility with annual gas and oil purchases in excess of \$6 billion dollars. The report was submitted to the State regulatory authority and accepted as demonstrating prudence.

Natural Gas Hedging Strategy, Piedmont Natural Gas et.al. Mr. Henning has provided analysis of gas supply hedging programs including seminars for the North Carolina Public Service Commission, the Tennessee Regulatory Authority, and a session at the 2001 Annual Meeting of the National Association of Regulatory Utility Commissioners.

Congressional Testimony. In June 2001, Mr. Henning testified before the United States Senate Committee on Energy and Natural Resources on the interaction of natural gas and electricity markets in California. In January 2002, Mr. Henning testified before the United States Senate Committee on Governmental affairs on the impact of the Enron bankruptcy on natural gas and electricity markets. Mr. Henning has provided testimony before the Federal Energy Regulatory Commission on natural gas and electricity issues and before the Canadian National Energy Board on the structure of the gas market and market liquidity.

### **Investment Analysis and Due Diligence**

Mr. Henning and the ICF Team have been engaged by firms to provide analysis of investment opportunities including the acquisition of natural gas transmission and storage facilities, contracting for capacity, commodity contracts and fuel supply plans and forecasts for electric generation. Mr. Henning is the lead analyst focusing on regulatory and market risk.

### **TESTIMONY**

1. “Surrebuttal Testimony of Bruce B. Henning”, LaClede Gas Co., Case No. GT-2001-329 (dated March 2001). Mr. Henning submitted testimony on behalf of LaClede before the Missouri Public Service Commission. Mr. Henning’s testimony concerned the firm transportation discount component of LaClede Gas Company’s Gas Supply Incentive Plan.
2. “Statement of Bruce B. Henning Before the United States Senate Committee on Energy and Natural Resources” (dated June 19, 2001). Mr. Henning’s statement addressed the natural gas and electric markets in California and its relation to the North American gas and electricity markets.
3. “Affidavit of E. Harry Vidas and Bruce B. Henning”, Regional Transmission Organizations, Docket No. RT01-99-000, (dated October 8, 2001). Mr. Henning submitted comments on behalf of Mirant, et al. before FERC. Mr. Henning’s comments concerned the efficiency benefits of a single Northeast Regional Transmission Organization.
4. “Supplemental Affidavit of E. Harry Vidas and Bruce B. Henning”, Regional Transmission Organizations, Docket No. RT01-99-000, (dated October 26, 2001). Mr. Henning submitted comments on behalf of Mirant, et al. before FERC. Mr. Henning’s comments concerned the efficiency benefits of a single Northeast Regional Transmission Organization.
5. “Statement of Bruce B. Henning: Before the United States Senate Committee on Governmental Affairs” (dated January 24, 2002). Mr. Henning’s statement addressed the impact of the Enron bankruptcy on natural gas and electricity markets.
6. “Written Evidence of Bruce B. Henning and Michael D. Sloan”, TransCanada PipeLines Limited, Hearing Order RH-1-2002 (dated May 2002). Mr. Henning submitted written evidence before the National Energy Board on behalf of Enbridge Gas Distribution Inc., Societe En Commandite Gaz Metro, and Union Gas

Limited. Mr. Henning's written evidence concerned the proposed establishment of the Southwest Z and its impact on market liquidity.

7. "Rebuttal Testimony of Bruce B. Henning", Aquila, Inc. d/b/a Aquila Networks, Case Nos. GR-2000 and GR-2001-461 (dated November 2002). Mr. Henning submitted testimony on behalf of Aquila Networks before the Missouri Public Service Commission ("MPSC"). Mr. Henning's testimony addressed the Actual Cost Adjustment for Aquila Networks.
8. "Rebuttal Testimony of Bruce B. Henning on Behalf of Atmos Energy Corporation", In the Matter of Atmos Energy Corporation's Purchased Gas Adjustment Factors to be Reviewed in Its 2000-2001 Actual Cost Adjustment, Case Nos. GR-2001-396 and GR-2001-397 (dated February 28, 2003). Mr. Henning submitted testimony on behalf of Atmos Energy Corporation before the MPSC. Mr. Henning's testimony addressed the Actual Cost Adjustment for Atmos Energy Corporation.
9. "Analysis of FERC Staff Report Investigating California Natural Gas and Electricity Prices", San Diego Gas & Electric Co., Docket Nos. EL00-95-045 and EL00-98-42, prepared by Bruce B. Henning and Michael Sloan, (dated October 15, 2002). Mr. Henning submitted a report on behalf of Energy and Environmental Analysis, Inc. ("EEA") before the Federal Energy Regulatory Commission ("FERC"). Mr. Henning's report concerned issues related to FERC's investigation of natural gas and electricity prices.
10. "Written Evidence of Bruce B. Henning and Michael D. Sloan on Behalf of Union Gas Limited", Hearing Order RP-2000-0005 (dated October 29, 2003). Mr. Henning submitted written evidence on behalf of Union Gas Limited before the Ontario Energy Board. Mr. Henning's written evidence addressed issues related to the compensation of landowners for the use of natural gas storage pools located on their property.
11. "Written Evidence of Bruce B. Henning and Michael D. Sloan", TransCanada PipeLines Limited, Hearing Order RH-3-2004 (dated June 21, 2004). Mr. Henning submitted written evidence before the National Energy Board on behalf of Enbridge Gas Distribution Inc., Societe En Commandite Gaz Metro, and Union Gas Limited. Mr. Henning's written evidence concerned the impact of the proposed North Bay Junction on Eastern Canadian Natural Gas Markets.
12. "Statement of Bruce B. Henning on Behalf of American Gas Association", Price Discovery in Natural Gas and Electric Markets, Docket Nos. PL03-3-005, et al. (dated June 25, 2004). Mr. Henning submitted a statement on behalf of American Gas Association ("AGA") before FERC. Mr. Henning's comments concerned the AGA's response to a FERC Staff report on price indices used in pipeline tariffs.
13. "In Response to the Notice of Inquiry on FERC Policy Regarding Selective Discounting", Notice of Inquiry Policy for Selective Discounting by Natural Gas Pipelines, Docket Nos. RM05-2-000 and RM07-7-000 submitted by Bruce B. Henning, (dated March 31, 2005). Mr. Henning submitted comments on behalf of INGAA before FERC. Mr. Henning's comments concerned FERC's selective discounting policy.
14. "Expert Report of Bruce B. Henning", California Department of Water Resources v. Sempra Energy Resources, AAA Case No. 74 198 Y 00193 04 VSS (dated May 25, 2005). Mr. Henning submitted a report on behalf of Hennigan, Bennet and Dorman LLP before the American Arbitration Association. Mr. Henning's report concerned his review of an energy purchase agreement between the California Department of Water Resources and Sempra Energy Resources.
15. "Rebuttal Expert Report of Bruce B. Henning", California Department of Water Resources v. Sempra Energy Resources, AAA Case No. 74 198 Y 00193 04 VSS (dated July 19, 2005). Mr. Henning submitted a report on behalf of Hennigan, Bennet and Dorman LLP before the American Arbitration Association. Mr. Henning's report concerned his review of an energy purchase agreement between the California Department of Water Resources and Sempra Energy Resources.
16. "Report: The Impact of Rabaska LNG Imports on Quebec and Ontario Natural Gas Markets", authored by Bruce B. Henning and Michael Sloan (dated November 2005). Mr. Henning submitted a report on behalf of Rabaska Limited Partnership before the Canadian Environmental Assessment Agency. Mr. Henning's report concerned a market study to assess the impacts of imports into Québec on the Ontario and Quebec natural gas markets. "Presentation of Bruce B. Henning: Determinants of Natural Gas Commodity Prices in the Alabama Gas Market", Docket U-4708 (dated January 31, 2006). Mr. Henning made a presentation to the Alabama Public Service Commission regarding the factors influencing gas markets in Alabama gas service territories.

17. "Prepared Direct Testimony of Bruce. B. Henning on Behalf of Marathon Oil Company", Docket U-06-02, (dated March 10, 2006). Mr. Henning submitted testimony on behalf of Marathon Oil Company to the Regulatory Commission of Alaska supporting the approval of a gas supply contract between Alaska Pipeline Company and Marathon Oil Company.
18. "Prepared Direct Testimony of Bruce. B. Henning on Behalf of PPM Energy", Docket RP-06-407-000, (dated June 14, 2007). Mr. Henning submitted testimony on behalf of PPM Energy to the Federal Energy Regulatory Commission on the Policy and Economic Efficiency issues associated with "Rolled-in" rate treatment of facilities expansion costs.
19. "Prepared Cross-Answering Testimony of Bruce. B. Henning on Behalf of PPM Energy", Docket RP-06-407-000, (dated August 7, 2007). Mr. Henning submitted testimony on behalf of PPM Energy to the Federal Energy Regulatory Commission on the Policy and Economic Efficiency issues associated with "Rolled-in" rate treatment of facilities expansion costs.
20. "Prepared Direct Testimony of Bruce. B. Henning on Michigan Consolidated Natural Gas ", Docket U-15451, (dated December 28, 2007) Mr. Henning submitted testimony and Exhibits presenting an analysis of optimal storage utilization.
21. Initial Expert Report of Mr. Bruce B. Henning In the matter of Howell Petroleum Corp. v. Williston Basin Interstate Pipeline Co. v. Anadarko Petroleum Corp. (Civil Action 24024, District Court, Fifth Judicial District, Park County, Wyoming) Mr. Henning submitted a report quantifying damages from the unauthorized removal of natural gas from a natural gas storage facilities totaling more than \$100 million dollars.
22. "Meeting Natural Gas Requirements in Ontario, Canada, and the United States: Supply Source Forecast to 2030", Docket EB-2007-0707 (dated July 30, 2008) Mr. Henning submitted exhibits examining natural gas supply, flow patterns and infrastructure adequacy to meet North American gas requirements.
23. "Evidence of Bruce B. Henning", TransCanada Pipeline 2012-2013 Toll Application, Hearing Order RH-003-2011, March 9, 2012 before the National Energy Board. Mr. Henning submitted evidence regarding TCPL's Business and Services Restructuring Proposal and Mainline Final Tolls 2012-2013 and the impact on gas markets in Canada.
24. "Reply Evidence of Bruce B. Henning," Nova Scotia Power, Fuel Adjustment Mechanism Audit, Docket P-893, Nova Scotia Utility and Review Board, August 27, 2012. Mr. Henning submitted evidence regarding the structure and performance of natural gas markets in the Canadian Maritimes Provinces and the Northeast United States.

## **PUBLICATIONS**

1. Pipeline and Storage Infrastructure Requirements for a 30 Tcf U.S. Gas Market, INGAA Foundation, May 1999.
2. Natural Gas Storage Overview in a Changing Market Environment, Gas Research Institute, November 1999.
3. Multi-Client Study of Pipeline Capacity Contracts Held by Affiliated and Non-Affiliated Pipeline Customers and Managed by Assets Managers and Agents, Pipeline Data Report, Energy and Environmental Analysis, Inc. January 2001.
4. Restructuring Activities of Natural Gas Local Distribution Companies, GRI Baseline Center, Gas Research Institute, June 2000.
5. Supplying Natural Gas for Peaking in a 30+ Tcf Market, (Contributing Author), National Energy Technology Laboratory, U.S. Department of Energy, May 2002.
6. Analysis of Natural Gas Market Liquidity at Points Affecting New York LDC's, New York Gas Group, February 2003.
7. Natural Gas and Energy Price Volatility, prepared for Oak Ridge National Laboratory, October 2003.
8. An Updated Assessment of Pipeline and Storage Infrastructure for the North American Gas Market; verse Consequences of Delays in the Construction of Natural Gas Infrastructure, INGAA Foundation, July 2004.

9. Discussion of Effects of Long-term Gas Commodity and Transportation Contracts on the Development of North American Natural Gas Infrastructure, INGAA Foundation, August 2005.
10. Can Regulators Do Anything about High Natural Gas Prices? Recommended Actions to Help Reduce Consumer Costs and Gas Price Volatility, INGAA Foundation, January 2007.
11. Assessment of Natural Gas Commodity Options for Centra Manitoba, Centra Manitoba, January 2007.
12. Storage Planning and Optimization for MichCon GCR Customers, DTE Energy, December 2007.
13. A Proposed Design for the Natural Gas Short Term Trading Market for Australia, Gas Market Leaders Group, January 2008.
14. Understanding Natural Gas Storage: What Creates Value for the Public and Gas Market Participants?, California Energy Commission, Public Interest Research Program, June 2008.
15. Long-term Contracting for Natural Gas: Examination of the Issues that Affect the Potential for the Increased Use of Contracting to Stabilize Consumer Prices, ICF, June 2011.
16. The Economy and Shale Play Pivotal Role in Price Outlook, Kevin R. Petak and Bruce B. Henning, The American Oil and Gas Reporter, December 2009.
17. Partners in Reliability: Gas and Electricity, Bruce Henning and Judah Rose, Power Magazine, September 1, 2012

#### **EMPLOYMENT HISTORY**

EEA, an ICF International Company	Vice President	1997–present
American Gas Association	Chief Economist	1991-1997
American Gas Association	Associate Director, Economic Analysis	1987-1991
American Gas Association	Manager, Economic Analysis	1985-1987
American Gas Association	Manager, TERA User Services	1981-1985
Energy and Environmental Analysis, Inc	Economic Professional	1978-1981

**Statement of Qualifications**  
**Dave Hockin**

**Experience:**

**Union Gas Limited**

Manager, Affiliate Accounting and Reporting  
2010

Manager Affiliate Relations  
2005

Team Lead Product Development  
2001

Administrator, Financial Analysis  
2000

Manager, Market Development and Project Management  
1998

Strategic Planning  
1996

Manager, Distribution Business Development  
1995

Manager, Direct Purchase Development / Gas Distribution  
Expansion, 1993

Sales Manager, Windsor Division  
1990

Manager, Direct Purchase  
1988

Co-ordinator, Direct Purchase  
1986

**Dome Petroleum - Calgary**

Sulphur Supply and Sales Representative  
1984

**Experience (cont'd)** Co-ordinator NGL Operations - Marketing  
1981

Traffic Analyst  
1980

**Education:** Bachelor of Arts (Economics), Wilfred Laurier University,  
1979

Certified General Accountant  
2005

**Memberships:** Certified General Accounting

**Appearances:** **(Ontario Energy Board)**  
EBRO 499  
EBRO 493/494  
EBRO 484  
EBLO 252 et al/EBLO 254 et al  
EBLO 253/EBC 225-233/EBA 700-708  
EBRO 486/EBO 177-07  
EBC 213/EBA 687  
EBLO 248/EBC 207/EBA 676  
EBC 210/EBA 680  
EBC 209/EBA 679  
EBC 208-01/EBA 678-01  
EBC 208/EBA 678  
EBC 206/EBA 670  
EBRO 476 (Direct Purchase)  
EBRO 462  
EBRO 456-4  
EBRO 456  
EBRO 412-III

**Statement of Qualifications**  
**Mark Isherwood**

**Experience:**           **Union Gas Limited**

Vice President, Business Development, Storage and Transmission  
2012

General Manager, Business Development, Storage and  
Transmission  
2010

Director, Business Development, Storage and Transmission  
2005

Director, Acquisition  
2002

Strategic Manager, Industrial Markets  
1999

Manager, Industrial Markets  
1989

Supervisor, Contract Sales  
1988

Coordinator, Direct Purchase  
1986

Operations Engineer  
1985

Assistant to Operations Engineer  
1982

**Education:**           Master of Business Administration  
University of Windsor, 1990

Bachelor of Commerce  
University of Windsor, 1988

Bachelor of Engineering (Chemical)  
University of Waterloo, 1982

**Memberships:**       Professional Engineers of Ontario

**Appearances: (Ontario Energy Board)**

EB-2012-0433/EB-2012-0451/EB-2013-0074  
EB-2012-0087  
EB-2011-0210  
EB-2011-0038  
EB-2010-0300  
EB-2010-0039  
EB-2009-0422  
EB-2008-0411  
EB-2007-0724  
EB-2005-0520  
EB-2005-0551  
EB-2005-0201  
RP-2004-0213  
RP-2003-0063  
RP-2002-0130/EB-2003-0056  
RP-2000-0117

**(National Energy Board)**

RH-1-2000  
RH-3-2004

**Statement of Qualifications**  
**Jim Redford**

**Experience:**

**Union Gas Limited**

Director, Business Development and Upstream Regulation  
2013

Director, Business Development and Strategic Accounts  
2012

Director, Business Development  
2011

**St. Clair Pipelines**

Director, Marketing & Storage Development  
2009

Director, Marketing & Storage  
2008

Project Director, Marketing  
2006

**Union Gas Limited**

Project Manager  
2005

Manager, Quality & Performance  
2004

Manager, Process Implementation  
2002

Project Manager, Fit for Purpose Initiatives  
2001

**Maritimes and Northeast Pipeline**

Manager, Construction  
2000

Project Manager, Laterals  
1997

**Experience (cont'd) Union Gas Limited**

Senior Pipeline Engineer  
1994

Intermediate Pipeline Engineer  
1993

Pipeline Engineer  
1990

Assistant Pipeline Engineer  
1989

**Peto MacCallum Ltd. – Toronto**  
1987

**Education:** Professional Engineer  
1990

Bachelor of Applied Science (Geological Engineering)  
University of Toronto  
1987

**Memberships:** Association of Professional Engineers of Ontario (A.P.E.O.)

**Appearances:** **(Ontario Energy Board)**  
EB-2012-0433/EB-2012-0451/EB-2013-0074  
EB-2011-0210  
EB-2005-0551

**(National Energy Board)**  
GH-4-98  
GH-2-99  
GH-4-99

**Statement of Qualifications**  
**Paul Rietdyk**

**Experience:**

**Union Gas Limited**

Vice president Engineering, Construction and Storage &  
Transmission Operations  
2012

Vice President, Distribution Operations  
2007

Director Distribution Operations  
2004

Director Operations Administration & Support  
2002

Director Operations Engineering & Support  
1999

Manager Operations Support  
1999

Manager Technical Support  
1998

Manager Operations – Windsor  
1995

Division Sales Manager – Windsor  
1993

Manager Operations Administration - Windsor  
1991

Division Supervisor Plant Services - Halton  
1990

Supervisor Plant Construction - Hamilton  
1988

Supervisor Mapping & Standards - Windsor  
1987

Distribution Planning Engineer  
1986

Operations Engineer  
1984

Assistant to Operations Engineer  
1982

**Education:** University of Western Ontario – Bachelor of Engineering Science  
(Civil)

University of Windsor (Ontario) – Bachelor of Commerce

**Memberships:** Professional Engineers of Ontario  
(since 1984)

**Appearances:** **(Ontario Energy Board)**  
EB-2012-0433/EB-2012-0451/EB-2013-0074

**Statement of Qualifications**  
**Chris R. Shorts**

**Experience:**

**Union Gas Limited**

Director Gas Supply  
2012

Business Unit Liaison  
2011

Manager, Product and Process Development  
2008

Strategic Manager, Sales Services  
2007

Manager, Ontario Power Markets  
1999

Commercial Manager, Steel and Power Markets  
1997

Manager, Industrial Gas Delivery Services  
1994

Administrator, Direct Purchase  
1990

Coordinator, Direct Purchase  
1988

Regulatory Accounting Analyst  
1986

**Canadian Imperial Bank of Commerce**

Administration Officer  
1984

**Education:**

Honours, Bachelor of Commerce, University of Windsor  
1984

**Appearances: (Ontario Energy Board)**

EB-2011-0210  
EB-2008-0106  
EB-2007-0725  
EB-2005-0551  
EBRO 493/494  
EBRO 486  
EBRO 476 (DP)

**Statement of Qualifications**  
**Greg Tetreault**

**Experience:**           **Union Gas Limited**

Manager, Rates and Pricing  
2008

Manager, Gas Management Services  
2005

Team Lead, Gas Management Services  
2001

Nominations Specialist, Gas Management Services  
1999

Business Analyst, Industrial Marketing and Sales  
1998

**Education:**           Honours Bachelor of Commerce, Finance, University of Windsor  
1998

Bachelor of Arts, Geography, University of Windsor  
1995

**Memberships:**       None

**Appearances:**       **(Ontario Energy Board)**  
EB-2012-0337  
EB-2012-0087  
EB-2011-0210  
EB-2011-0283  
EB-2011-0038  
EB-2011-0025  
EB-2010-0039  
EB-2008-0411  
EB-2008-0106