



CANADIAN GAS ASSOCIATION  
ASSOCIATION CANADIENNE DU GAZ

### Monday, February 24th, 2020

1:00 pm - 7:00 pm

**Registration**  
Grand Foyer 2/3

4:00 pm - 6:00 pm

**Exhibitor Set Up**  
Imperial 1/2/3/4/6/8

6:00 pm

**Free Evening**

[Click HERE to see what you can do in Calgary](#)

### Tuesday, February 25th, 2020

7:00 am - 5:00 pm

**Registration**  
Grand Foyer 2/3

7:30 am - 8:30 am

**Breakfast**  
Grand Foyer 2/3

8:30 am - 8:45 am

**Chair and CGA Welcome**  
Imperial 5/7/9  
Speaker: Timothy Egan, President, Canadian Gas Association

8:45 am - 9:00 am

**Host Welcome**  
Imperial 5/7/9

9:00 am - 9:30 am

**Safety Awards**  
Imperial 5/7/9

- 9:30 am - 10:15 am **Keynote Address - The Future of Energy in Canada**  
Imperial 5/7/9  
Speaker: Jocelyn Bamford, President and Founder, Coalition of Concerned Manufacturers and Businesses of Canada
- 10:15 am - 10:30 am **Refreshments**  
Grand Foyer 2/3
- 10:30 am - 10:45 am **OEIC Roundtables Kick-off Session**  
Imperial 5/7/9
- [Click HERE for more information](#)
- 10:45 am - 11:00 am **Transition to Roundtable Sessions**
- 11:00 am - 12:00 pm **Operations/Maintenance**  
Doll/Herald  
Speaker: Kevin Ouder Kirk, CEO, SANG
- 11:00 am - 12:00 pm **Engineering/Technology and Innovation**  
Imperial 5/7/9  
Chair: Daina Makarenko, Director, Engineering Services, AltaGas Utilities
- 11:00 am - 12:00 pm **Integrity/Damage Prevention**  
Neilson 1  
Chair: Clinton Windhorst, Sr. Engineer, Pipeline Integrity, ATCO
- 11:00 am - 12:00 pm **Construction/Safety**  
Walker/Bannerman  
Chair: Sean Dalton, Supervisor, Construction & Maintenance - Leduc, Operations & Engineering, AltaGas Utilities  
Chair: Dale McIsaac, Supervisor, Special Projects Crew, Operations & Engineering, AltaGas Utilities
- 12:00 pm - 1:15 pm **Lunch with Exhibitors**  
Imperial 1/2/3/4/6/8
- 1:15 pm - 1:30 pm **Transition to Roundtable Sessions**
- 1:30 pm - 2:30 pm **Operations/Maintenance**  
Doll/Herald  
Speaker: Kevin Ouder Kirk, CEO, SANG
- 1:30 pm - 2:30 pm **Engineering/Technology and Innovation**  
Imperial 5/7/9  
Chair: Daina Makarenko, Director, Engineering Services, AltaGas Utilities
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- 1:30 pm - 2:30 pm **Construction/Safety**  
Walker/Bannerman

Chair: Sean Dalton, Supervisor, Construction & Maintenance - Leduc, Operations & Engineering, AltaGas Utilities  
Chair: Dale McIsaac, Supervisor, Special Projects Crew, Operations & Engineering, AltaGas Utilities

2:30 pm - 2:45 pm

**Refreshments**

Grand Foyer 2/3

2:45 pm - 3:15 pm

**OEIC Roundtable - Wrap Up**

Imperial 5/7/9

3:15 pm - 4:15 pm

**What's Current**

Imperial 5/7/9

4:15 pm - 7:00 pm

**Grand Exhibition Reception**

Imperial 1/2/3/4/6/8

**Wednesday, February 26th, 2020**

8:00 am - 5:00 pm

**Registration**

Grand Foyer 2/3

8:00 am - 9:00 am

**Breakfast**

Grand Foyer 2/3

9:00 am - 9:45 am

**An Introduction to The Federation of Alberta Gas Co-ops Ltd.**

Imperial 5/7/9

Speaker: Tom Kee, Executive Director, Federation of Alberta Gas Co-ops Ltd.

The Federation of Alberta Gas Co-ops is an organization representing Alberta's co-operative, municipal & First Nations natural gas utilities. Every member of the Federation is owned or governed by their communities. This plenary will discuss the history, unique make-up of its membership, day-to-day operations & the goals & objectives of the Co-op & its members.

9:45 am - 10:30 am

**Integration of Hydrogen into the Canadian Energy System**

Imperial 5/7/9

Moderator: Kevin Larmer, Canadian Gas Association

Speaker: Sam McDermott, Enbridge Gas Inc.

Speaker: Brodie Chalmers, Manager, Opportunity Development, ATCO

Speaker: Aaron Hoskin, Natural Resources Canada

With the rapid growth in the profile of hydrogen as a potential energy source, this panel will discuss current activities, potential future directions & what policies or roadmaps will be required to fully optimize this readily available, zero emissions fuel source.

10:30 am - 11:00 am

**Refreshments with Exhibitors**

Imperial 1/2/3/4/6/8

11:00 am - 11:15 am

**Transition to Concurrents**

11:15 am - 12:00 pm

## **Operations/Maintenance - In-Line Inspection of an Unpiggable Gas Pipeline**

Doll

Speaker: Jap-Jyotan Sidhu, Gas Integrity Engineer, Manitoba Hydro

In 2019, Manitoba Hydro performed an in-line inspection of 9km of natural gas pipeline using Pipetel's Explorer robot. In this session Manitoba Hydro will share how this unpiggable in-line inspection approach compares to traditional in-line inspection in regards to pipeline preparation, project timeline, execution and tool validation. Additionally, the presentation will speak to specific challenges that were avoided due to using this method of in-line inspection.

11:15 am - 12:00 pm

## **Engineering/Technology and Innovation - Improved Leak Surveys Through Integration in Energir GIS Platform**

Herald

Speaker: Sylvain Coulombe, Engineer, Integrity Management, Énergir

Speaker: Line Champagne, Analyst, GIS, Énergir

Enhancements to Énergir's mobile leak detection surveys: When Énergir chose the Gazomat/ECOTEC technology for its mobile leak detection activities 5 years ago, it envisioned the solution would eventually enable an entirely paperless process. Since then, the system hardware has been updated, additional vehicles were added to the fleet, and the development of a paperless environment is on the verge of being deployed. The presentation will start with a report of the updates made to the system mounted in the vehicles. A description of the development stages of the new environment and how Énergir leveraged ESRI (ArcGIS) applications and the ever changing mobile device industry to achieve its goal will follow. The numerous benefits to the field personnel, administrative support staff and the quality of the surveys will also be explained.

11:15 am - 12:00 pm

## **Integrity/Damage Prevention - Watercourse Crossings Management Program: Screening, Assessments, and Monitoring**

Bannerman

Speaker: Jalpa Pal, Pipeline Integrity Engineer, ATCO

This session will cover ATCO's approach to managing and ensuring the integrity of watercourse crossings including: identification of hazardous areas, assessment, monitoring strategies, and analyses of vortex-induced vibration.

11:15 am - 12:00 pm

## **Construction/Safety - GIS Integrated - Material Tracking and Traceability**

Walker

Speaker: Mathew Desbiens, Manager, GIS, AltaGas Utilities

In 2016 AltaGas Utilities initiated a Material Tracking and Traceability project. 2019 was the first year AltaGas Utilities used ASTM F2807 compliant hardware and an enterprise GIS system in the field. This presentation will review: the steps involved in execution of this project, the challenges of deploying this project in the field, realized benefits, and future plans for ASTM F2897 compliant Material Tracking and Traceability at AltaGas Utilities.

12:00 pm - 1:30 pm

## **Lunch with Exhibitors**

Imperial 1/2/3/4/6/8

1:30 pm - 1:45 pm

**Transition to Concurrents**

1:45 pm - 2:30 pm

**Operations/Maintenance - Strategies for Locate Activities**

Bannerman

Speaker: Caroline Lessard, Manager, GIS, Énergir

Speaker: Benoit Pronovost, Énergir

Énergir is changing its locate process as a result of the increase in the number of demands in a context of shortage of labour and increased importance given to damage prevention and health and safety. This session will cover what the steps and challenges are to face this new reality.

1:45 pm - 2:30 pm

**Engineering/Technology and Innovation - Private Gas Downstream Systems & Sub-metering**

Herald

Speaker: Alfie Manias, Supervisor Utilization Engineering & Management of Change, Enbridge Gas Inc.

Awareness for the industry and fuel distributors in high density urban environments where vertical multifamily residential buildings are being constructed and natural gas is its primary energy source. This presentation will provide a look into Enbridge Gas Inc's reaction to industry pressure for natural gas private gas piping and sub metering while addressing its evolving gas policy with the amalgamation of Legacy companies Union Gas and Enbridge Gas Distribution. Including a code review as it applies to the topic.

1:45 pm - 2:30 pm

**Integrity/Damage Prevention - A Data Driven Model for Distribution System Integrity**

Doll

Speaker: Jason Skow, Co-Founder, Principal Engineer, Integral Engineering

Speaker: Thomas Dessen, Consulting Engineer, Integral Engineering

Machine learning provides powerful techniques for developing predictive models to assist operators of distribution systems in prioritizing mitigation actions such as service upgrades and inspection programs. These models can complement 'lagging indicators' such as historical failures with 'leading indicators' that point to areas that would benefit from proactive programs before problems arise. However, it is important to scrutinize and verify the validity of the model predictions and ensure that the relationships implied by the model reflects reality. When using machine learning in engineering applications, it is important to ensure models are interpretable and consistent with expert judgement and experience. In this presentation we will describe a recent project to develop a model for predicting leaks in distribution services that was developed in collaboration with SaskEnergy. The methodology we will describe ensures the models retain high interpretability and provide valid predictions that reflect reality.

1:45 pm - 2:30 pm

**Construction/Safety - 3D/VR Modelling**

Walker

Speaker: Draydan Power, T&D Standards Engineer, FortisBC Energy Inc.

FortisBC, in partnership with Selkirk College, is developing a VR modelling program. An electrical sub-station is being built within this program and allows an Engineering planner or Project Manager to walk through a design fully placed out in scale before construction and modify any component. Although developed for an electrical asset, this technology has similar capabilities for our gas assets.

2:30 pm - 3:00 pm

**Refreshments with Exhibitors**

Imperial 1/2/3/4/6/8

3:00 pm - 3:45 pm

**CSA Z260 Pipeline System Safety Metrics**

Imperial 5/7/9

Speaker: Graham Emmerson, Enbridge Inc.

CSA Z260 Pipeline system safety metrics was published in first edition in mid-2019. Work is underway for the next edition which will bring distribution systems into the scope of the standard.

3:45 pm - 4:30 pm

**Merrimack Valley 2018 Incident**

Imperial 5/7/9

Speaker: John Anderson, Director Business Development, Emerson Automation Solutions

In September of 2018, a tragic incident in Merrimack Valley in Massachusetts on a low pressure distribution system that caused ripples throughout the natural gas delivery industry. One year later in 2019, the NTSB delivered its assessment of the incident along with recommendations. Several new regulations and pending legislation is being considered and PHMSA will be considering these regulations along with the 2019 Pipeline Reauthorization act. Many operators are not waiting for new regulations but are taking a more proactive approach. Many are implementing new procedures and enhancements to current infrastructure to prevent this type of accident in the future. The discussion will center around what is the expected changes in the regulatory framework that will be implemented in the future because of this event.

4:30 pm - 6:00 pm

**Reception with Exhibitors**

Imperial 1/2/3/4/6/8

**Thursday, February 27th, 2020**

9:00 am - 1:00 pm

**Exhibitor Tear Down**

Imperial 1/2/3/4/6/8

8:00 am - 12:00 pm

**Registration**

Grand Foyer 2/3

8:00 am - 9:00 am

**Breakfast**

Grand Foyer 2/3

9:00 am - 9:45 am

**Operations/Maintenance - Gas Workforce Management System**

Bannerman

Speaker: Bryan Neufeld, Operations Manager, FortisBC Energy Inc.

This is a new generation of operations dispatching software which will be implemented throughout FortisBC in the Spring of 2020. Developed by a Canadian company, this program integrates GIS mapping, real time workforce location, and job task efficiency, resulting in improved dispatching capabilities, route efficiency improvements, and decreased emergency response time. A live demonstration of the software will be included.

9:00 am - 9:45 am

**Engineering/Technology and Innovation - RNG Gas Quality Monitoring and Action Matrix - A Guide to Practical Implementation**

Herald

Speaker: Luke Berkmortel, EIT Stations Standards Engineering, Enbridge Gas Inc.

In light of producing a Green Footprint, Enbridge has started to accept RNG gas into the distribution stream. This session provides a practical approach to monitoring the gas quality.

9:00 am - 9:45 am

**Integrity/Damage Prevention - Asset Management – Building an Effective Integrated Approach To Manage Your Assets**

Doll

Speaker: Catherine McCowan, Manager Risk, Strategy & Planning, Enbridge Gas Inc.

Speaker: Mike Hildebrand, Manager Asset Management, Enbridge Gas Inc.

Asset Management is what we all do, but do we do it effectively? Do you have an appropriate approach to ensure the asset risks are addressed at the right time at the both the individual project and total portfolio levels? Enbridge Gas Inc. will share its approach to Asset Management through its integrated management program and working across all functions to a common goal.

9:00 am - 9:45 am

**Construction/Safety - Hydrotesting Certification**

Walker

Speaker: Scott Blackburn, Supervisor, Welding Quality, ATCO

ATCO is currently looking at entering a partnership to offer the first recognized Hydrotest Certification in Canada. In addition to several specific safety requirements, CSA Z662 requires that, "The company shall ensure that pressure tests are conducted under the direction of competent personnel". Front-line supervisor are responsible to assess worker competence (experience, training, and qualification to perform the required duties) for the hydrostatic testing of shop fabricated piping. It was difficult to find training that was specific to CSA Z662 hydrostatic testing requirements, so ATCO set out to find a partner to create a certification course for all personnel involved in the planning, execution and inspection of hydrostatic testing, ensuring that all involved would have the same baseline training.

9:45 am - 10:00 am

**Transition to Concurrents**

10:00 am - 10:45 am

**Operations/Maintenance - Mobile Natural Gas Leak Detection**

Bannerman

Speaker: Bryan Shular, Operations Engineer, ATCO

Speaker: Maren Martin, Supervisor, Operational Technology Support, ATCO

Advanced Leak Detection: Using Mobile Technology and Analytics to Control Fugitive Methane Emissions. ATCO Gas Distribution is using leak detection software installed in company vehicles to reduce the number of manual leak surveys completed in urban areas.

10:00 am - 10:45 am

**Engineering/Technology and Innovation - Leveraging Artificial Intelligence to Enhance Damage Prevention Programs**

Herald

Speaker: Benjamin Berry, Head of Product, URBINT

In this case study, a major gas distribution company leverages AI-powered software to predict which of daily excavation tickets are at the highest risk of having damages including methane leaks; proactively intervening to prevent third party damages and reduce leaks. In this data-driven approach to damage prevention, AI identified damages caused by excavator error, locator error, and instances of no one-calls (cases in which there were no 811 tickets). Furthermore, the AI was able to identify opportunities to optimize the effectiveness of 811 outreach to areas susceptible to no-call ins.

10:00 am - 10:45 am

**Integrity/Damage Prevention - Preventive Maintenance Program Optimization**

Doll

Speaker: Adrian Paunescu, Project Engineer, Integrity Management, Énergir

Speaker: Phillip Nidd, Vice-president, Technical Operations, Dynamic Risk Assessment Systems

Énergir conducted a review of frequency for some specific maintenance activities on its transmission lines (Vegetation control, Leak detection, Close interval survey (CIS), ...). As CSA Z662-15 is not prescriptive in requirement of specific frequencies, Énergir performed these activities on a recurring three-year cycle, based on historical considerations. A risk based approach was developed to establish new frequencies using a 3-level analysis: index based Risk assessment with an implemented software, benchmarking with other gas pipeline utilities, and experience of SME.

10:00 am - 10:45 am

**Construction/Safety - NPS30 Don River Microtunnel Replacement Project**

Walker

Speaker: Melany Afara, Sr. Advisor Capital Development, Enbridge Gas Inc.

Speaker: Kaitlyn Woermke, Advisor Construction & Project Management, Enbridge Gas Inc.

Enbridge Gas Inc. is executing a project to relocate an existing NPS 30 natural gas pipeline crossing the Don River via a utility bridge. The new natural gas main will be installed beneath the Don River by means of microtunneling. This presentation will review: the challenges of permitting a complex engineering design in an environmentally sensitive area, the process to develop the microtunnel design in a highly constrained environment, collaboration efforts to benefit external stakeholders also located on the utility bridge, and the execution plans required to realize the benefits of installing a pipeline within a microtunnel.

10:45 am - 11:00 am

**Refreshment Break/Transition to Plenary**

Grand Foyer 2/3

11:00 am - 11:45 am

**Panel Discussion on Innovation in the Industry**



Imperial 5/7/9

Moderator: Jared Hyland, Operations Supervisor, FortisBC Energy Inc.

Speaker: Saad Sarfraz, NGIF

Speaker: Gregory Caldwell, Director, Energy Systems Innovation, ATCO

Speaker: Dan Higginson, Innovation Specialist, Business Innovation, FortisBC Energy Inc.

The panel is to discuss the necessity of innovation in the Industry, and how growing environmental guidelines are impacting how we do business. Each panelist will have time to speak on the role innovation plays at their organization. They will then be given time to discuss a specific example, explaining the process from idea, through R&D and into implementation.

**Closing Remarks and Prize Draws**

Imperial 5/7/9

11:45 am - 12:00 pm