UTC Canadian Technology Conference
April 14 - 16 – event dates
April 15 - 16 – exhibit dates
Toronto, Ontario

Vision to Power Canadian Critical Infrastructure Success

Preliminary Meeting Agenda

Monday, April 14

4:00 pm	**Registration**
4:30 – 6:30 pm	**Welcome Reception**

Tuesday, April 15

7:00 am	**Breakfast**
8:00 – 8:15 am	**Welcome Remarks**
Speakers:	**Tim MacKay, Senior Manager, Telecom Engineering, Hydro One Networks, Inc.** **Gary Vondrasek, JEA, UTC Board Chair** **Rusty Williams, President & CEO, UTC**
8:15 – 9:15 am	**Keynote Address: Hydro One Executive**
9:15 – 10:15 am	**Executive Panel Discussion: State of the Canadian Utilities**

The State of the Canadian Utilities executive panel is designed to explore and dive deeply into critical issues impacting the Canadian Utility ICT industry. The panelists are industry thought leaders assembled to share their views and their organizations' approach to addressing the top-of-mind industry topics.

10:15 – 10:45 am	**Break**
10:45 – 11:45 am	**Regulatory Panel Discussion: Canadian Utility Developments in the 1.8 GHz & Other Bands**

This panel presentation will explore recent advancements in Canadian utility operations within the 1.8 GHz spectrum band, focusing on both the evolving device ecosystem and relevant 3GPP standards. A panel of Canadian utility representatives will discuss their experiences, challenges, and future plans for leveraging this spectrum to enhance grid modernization efforts. The session will cover key topics including:

1. Current state of the 1.8 GHz device ecosystem for utility applications
2. Implementation of 3GPP standards in the context of Canadian utility networks
3. Case studies of successful deployments and lessons learned
4. Regulatory considerations and spectrum management strategies

5. Future outlook and potential innovations in the 1.8 GHz band for utilities
6. Other Spectrum, 450, Band N77, B106, B114

This presentation aims to provide attendees with a comprehensive overview of how Canadian utilities are utilizing the broadband to improve their operations and services, as well as insights into the standards and technologies shaping this rapidly evolving landscape.

11:45 am – 1:15 pm **Attendee Lunch**

1:15 – 2:15 pm **PLTE: funding and governance model and jurisdiction (Developing business and financial strategies for transitioning from existing comm systems to PLTE/5G)**

Transitioning from one communications technology to another is never easy. It involves a lot of strategy, planning, engineering, and design to be able to move from existing communications systems to a new communications system like private LTE/5G. The first steps of an initiative of this magnitude are to develop the business and financial strategies that show the reasons and benefits of taking on such technological transitions. Knowing how to approach developing these strategies and work with the various stakeholders is key to being successful. Stakeholders include those who are responsible for making the decisions on transitioning from existing communications systems to the proposed new communication system like private LTE/5G. Stakeholders who are responsible for the planning, architecture, engineering, and operations of existing grid communications systems and the new grid communication system. And stakeholders from engineers to managers, directors, vice presidents, CTOs, CFOs, COOs, and CEOs. Developing the right business and financial strategies for all stakeholders requires working with each and developing the right set of information for each group: information that is necessary for them to make their decisions.

2:15 – 3:15 pm **PLTE: Technical Panel Session**

This session offers crucial insights for PLTE deployments. It covers PLTE-specific features, the "Reuse 1" concept, and adaptive modulation techniques. The presentation explores the intricate relationship between interference and traffic, addressing considerations for both fixed and mobile use cases. It concludes with strategies for planning based on anticipated applications, providing attendees with a comprehensive understanding of key LTE deployment factors.

3:15 – 4:15 pm **Hydro Quebec PVNO Utility Case Study**

The advent of Private Virtual Network Operator (PVNO) solutions has opened up new avenues for utilities seeking enhanced network capabilities using commercial networks. Capitalizing on the standardization efforts in 4G and 5G technologies, as well as established market practices, PVNOs offer the potential to construct multi-network systems. This approach promises improved service quality, resilience, and competition, while fostering cooperation and paving the way for seamless integration of private and commercial networks.

This session delves into the strategic considerations surrounding PVNO adoption. Drawing from EDP's firsthand experience in establishing its own PVNO, attendees will gain insights into the evolving landscape of private networks, 5G, and beyond. Additionally, the discussion will encompass regulatory and market dynamics, as well as valuable lessons learned during the initial months of PVNO implementation.

Through this comprehensive overview, participants will acquire a deeper understanding of the opportunities and challenges associated with PVNO solutions, empowering them to make informed decisions for their respective organizations.

4:30 – 6:30 pm **Networking Reception w/ Exhibitors**

Wednesday, April 16

7:00 am **Breakfast & Registration**

8:00 – 9:00 am **UTC President & CEO Address**

Join UTC President and CEO Rusty Williams as he discusses the latest events across the UTC association. He plans to discuss the development of the latest UTC Strategic Plan, the latest advocacy issues, and many other relevant industry topics.

9:00 – 10:00 am **NERC MRS: Strengthening Reliability through Standards and Compliance**

The NERC-Mandated Reliability Standards (MRS) are essential to maintaining the reliability and security of the North American bulk power system. This session will dive into the importance of NERC MRS, examining how these standards provide a framework for preventing system disruptions and ensuring operational consistency across utilities in the U.S. and Canada. Attendees will explore the compliance requirements, enforcement processes, and the role of Regional Entities in monitoring and enforcing standards. Gain actionable insights into how utilities can enhance their adherence to NERC MRS, address common challenges, and contribute to a more resilient power grid.

10:00 am **Break**

10:30 – 11:30 am **Premier Sponsor - TBD**

11:30 am – 1:30 pm **Vendor Hall and Lunch**

1:30 – 2:30 pm **Private Radio Networks: Enabling Secure, Reliable Communications for the Utilities and Mining Sector**

Utility companies and mining operations require secure, reliable wireless networks to support mission-critical communications. This presentation will explore how a combination of licensed spectrum, specialized RF hardware, and AI-powered observability can be leveraged to create private radio

networks optimized for these industries.

2:30 – 3:30 pm **Leveraging Low Earth Orbit Satellite Networks for Utility Applications**

The satellite industry has undergone rapid transformation driven by the growth of Low Earth Orbit satellite network operators. Providers such as Starlink and OneWeb are already delivering high bandwidth internet, low latency communications, and expanded data services virtually anywhere. What do these new services mean for Utilities, and what opportunities are they presenting?

3:30 – 4:30 pm **An Updated Network Blueprint for AMI 2.0 Smart Meter Deployments**

The presentation will go through some of the new applications that have been developed for the second generation of Smart Meters (Advanced Metering Infrastructure) in the North American utility market. These AMI 2.0 applications go well beyond the original meter-to-cash functions of AMI 1.0 leading to Smart Meters in AMI 2.0 which act as Grid Edge Intelligence nodes in a two-way distribution grid that is capable of hosting a changing distribution consumer; with an increase in photovoltaic (PV) generation, EV chargers, battery storage and demand response use cases at the customer household. We'll show the new network requirements coming from some of these applications (e.g. transformer load management and closed loop EV charging) and how these are optimally mapped to the network capabilities available to utilities. An updated blueprint for AMI 2.0 deployments leveraging both private cellular network infrastructure and multiple last mile technologies is shown providing low latency for headend to device control communications as well as sufficient capacity for frequent data exchange at the edge to monitor the instantaneous load on each transformer.

4:30 – 5:30 pm **Round Table Recap**

This open discussion with the faculty and conference delegates to synthesize the wealth of intelligence shared during the event and the round table discussion results will serve as the foundation for the 2026 UTC Canadian Technology Conference.