



POWER GRID 4.0
DIGITALIZATION
FORUM

MONTRÉAL,
QUÉBEC
CANADA

OCTOBER
16, 17, & 18,
2019

PRELIMINARY PROGRAM

UTC Cross-Border Power Grid 4.0 Digitalization Forum

Day 1: DIGITALIZATION BUSINESS DRIVERS

Wednesday, October 16, 2019

7:00 a.m. - 5:00 p.m.

Registration

7:30 – 9:00 a.m.

Executive Breakfast

Presenters:

Éric Martel, President & CEO - Hydro Québec
Joy Ditto, President & CEO – Utilities Technology Council
Sandy Taylor, President, Nuclear – SNC-Lavalin

9:00 – 10:00 a.m.

Keynote Session: Hydro Québec's Business Strategy for Developing Digitalization Solutions: New model transition digitalization. What it means and the interaction with customers.

Presenter:

David Murray, Chief Operating Officer and President of Production - Hydro Québec

10:00 – 10:15 a.m.

Networking Break

10:15 – 11:15 a.m.

Digitalization Journey in Electric Utilities

Presenters:

Rudy Wynter, Chief Operating Officer - National Grid
Roger Kranenburg, VP Energy Strategy & Policy – Eversource
James Douglas, President – Util-Assist Subsidiary of Alectra Utilities

- Defining the Utility Digitalization Transformation
- The Impact of Digitalization
- Key Business Drivers
- Financial Considerations
- Utility Digitalization and the Community – Smart Homes, Smart Cities & Smart Communities

11:15 a.m. - 12:15 p.m.

Effective Convergence Is Essential to Digitalization Success

Presenters:

Chris Campbell, Senior Director, Grid Modernization Services - Salt River Project

Andreas Breuer, Vice President New Technologies/Projects - Innogy

- Digitalization Challenges
- Planning and Convergence
- IT/OT Convergence Challenges

12:30 - 1:45 p.m.

Networking Luncheon & Presentation: Hydro Québec IT Group's Contribution to the Evolution of the Digital Grid



POWER GRID 4.0
DIGITALIZATION
FORUM

MONTRÉAL,
QUÉBEC
CANADA

OCTOBER
16, 17, & 18,
2019

PRELIMINARY PROGRAM

- Presenter: **Johanne Duhaime, Vice-Président, Information and Communications Technologies (CIO) - Hydro Québec**
- 1:45 - 2:45 p.m. **Is the 21st Century Utility a Technology Company?**
- Presenter: **Stephen Koch, Director of Emerging Issues – Canadian Electricity Association**
- What Elements and Factors to Consider?
 - What It Will Take to Transition to a Technology Entity?
 - Utility Case Study: Utility That Has Already Made the Jump and Why
- 2:45 – 3:45 p.m. **Digitalization Business Drivers & Financial Considerations**
- Presenters: **Tres Petmecky, Chief Financial Officer - Southern California Edison**
Pablo Humereas Flores, Head of Digital Supervision and Substation Automation Sector – Eletrobras - Eletrosull
- What Are the Digitalization Benefits?
 - How to Build the Business Case
 - Priorities: Reliability, Affordability, Customer Service & Safety Issues
 - Investment in Network Resiliency
- 3:45 – 4:00 p.m. **Networking Break**
- 4:00 – 5:00 p.m. **Data Is King in a Digital Utility**
- Presenters: **Fernando Saavedra, Manager Smart Grid Analyst – NYPA**
Tomasz Jamroz, Director of Emerging Technologies Strategy - CGI
- Data Governance
 - Big Data, Analytics & Artificial Intelligence
 - Why Is Analytics Important & Who Needs the Information?
 - Data Sharing
 - Breaking Down Silos – Managing the Data
 - Data to Drive Predictive Actions
 - BIM – Digital Tools to eliminate potential risks
- 5:30 – 7:00 p.m. **Networking Reception – Windsor Ballroom**
- Welcome Remarks: **Pierre Fitzgibbon, Minister of Innovation and Economy of Québec**
Frederic Trefois, Chief Executive Officer - Linxon



POWER GRID 4.0
DIGITALIZATION
FORUM

MONTRÉAL,
QUÉBEC
CANADA

OCTOBER
16, 17, & 18,
2019

PRELIMINARY PROGRAM

UTC Cross-Border Power Grid 4.0 Digitalization Forum

Day 2: *Ways to Digitizing the 21st Century Utility*

Thursday, October 17, 2019

7:30 – 8:30 a.m.

Breakfast

7:30 – 5:00 p.m.

Registration

8:00 - 8:15 a.m.

Welcome Remarks

8:15 - 9:00 a.m.

Keynote Address: *Building Digital Transmission Networks*

Presenter:

Marc Boucher, President - Hydro Québec TransEnergie

9:00 - 10:00 a.m.

Utility Case Study: Hydro-Quebec TransEnergie Substations and RAS Digitalization Project

Presenter:

Sylvain Clermont, Director Operational Technologies Convergence – Hydro Quebec

- Modernizing Infrastructure
- IT, OT & Technology Providers Changing Dynamics
- Operation & Planning
- Organizing the Building Blocks for the Digital Utility
- Organizing Your Digital Strategy
- Management Team to Oversee and Implement Your Digitalization Strategy
- Skill Development: Reorganizing; Skill Development; and Maintenance of Digital Substations

10:00 – 10:15 a.m.

Networking Break

10:15 am - 11:15 p.m.

What is Digital Innovation?

Presenters:

Kevin Sheehan, CTO of North America – Ciena
Jean-Pierre Girard President Hexacode Solutions
Bassem Zakhary, Subject Matter Expert for IoT & Industry 4.0 – SNC-Lavalin

- Training Considerations
- Getting Buy-In and Executive Team Support
- Implementing a Culture Change
- Technology Enablers



POWER GRID 4.0
DIGITALIZATION
FORUM

MONTRÉAL,
QUÉBEC
CANADA

OCTOBER
16, 17, & 18,
2019

PRELIMINARY PROGRAM

- Analytics, Artificial Intelligence, Virtual Reality, Mixed Reality and Augmented Reality for the Digital Worker

11:15 am - 12:45 p.m.

Networking Luncheon

12:45 – 1:45 p.m.

Digitalization Technology for Substations

Presenter:

Alexandre Nicolas, VP & Managing Director, North America – Linxon

- Use technology to eliminate cables
 - Less LV cabling
 - Lower costs
 - Shorter installation
 - Lower risks
- Data to allow predictive maintenance instead of preventive
- Data to allow quicker communication
- Data to improve HSE and security

1:45 – 2:45 p.m.

The Importance of Having the Proper Foundation for a Digital Utility

Presenters:

Paul Huttenhoff, Director IT Security (CISO) - CenterPoint Energy
Matthew Peacore, Principal Manager, Technology & Information Architecture
– Southern California Edison

- Backbone & Network
- Maximizing Monitoring and Control Accuracy and Efficiency While Minimizing Operations/Maintenance Complexity

2:45 – 3:00 p.m.

Networking Break

3:00 – 4:00 p.m.

Funding the Utility Digitalization Transformation

4:00 – 5:00 p.m.

Digital Technology Lifespan – What Is a Realistic Expectation?

Presenter:

Chrissy Carr, Networks, Integration & Automation Director of Sales & Marketing – Burns & McDonnell
Rashaad Sader, Vice President Digital Transformation – SNC-Lavalin

5:30 – 7:00 p.m.

Networking Reception



POWER GRID 4.0
DIGITALIZATION
FORUM

MONTRÉAL,
QUÉBEC
CANADA

OCTOBER
16, 17, & 18,
2019

PRELIMINARY PROGRAM

UTC Cross-Border Power Grid 4.0 Digitalization Forum

Day 3: Cyber Security Workshop

Friday, October 18, 2019

- 7:30 – 8:30 a.m. **Breakfast**
- 7:30 – 5:00 p.m. **Registration**
- 7:45 - 8:00 a.m. **Welcome Remarks**
- 8:00 – 8:45 a.m. **Keynote Address: The Future of Critical Infrastructure: Drivers of Change in a Digital Era**
- Presenter: **Craig Oldham, Director General, Critical Infrastructure - Public Safety Canada**
- 8:45 - 9:45 a.m. **Can We Put the Genie Back in The Bottle?**
- Managing the Cyber Risk of Digitalization
 - Enhanced Benefits of Digitalization
 - Planning for Black Sky Events
 - Analog Communications
 - Status of R&D to Mitigate Risk
- 9:45 – 10:00 a.m. **Networking Break**
- 10:00 – 11:00 a.m. **Cybersecurity – What Happens When You Decide Digitalization Is Your Next Step?**
- Presenters: **Dr. Mourad Debbabi, Associate Dean Research & Graduate Studies & CIISE Professor – Concordia University**
Kip Gering, Sr. Director Business Development – Xage Security
Martine Chlela, Ingénieur Cyber Security - SNC-Lavalin
- 11:00 a.m. - 12:00 p.m. **What Is the Role of Cybersecurity Governance?**
- Presenters: **Robert Gordon, Executive Director - Canadian Cyber Threat Exchange**
Steve Brown, VP, Enterprise Security & Services & CSO – Xcel Energy
- 12:00 - 1:00 p.m. **Do I Need A Partner to Develop a Strong Cybersecurity Strategy in a Digital Utility?**
- Presenter: **Ray Boisvert, Associate Partner – Security - IBM**



POWER GRID 4.0
DIGITALIZATION
FORUM

MONTRÉAL,
QUÉBEC
CANADA

OCTOBER
16, 17, & 18,
2019

PRELIMINARY PROGRAM

1:00 p.m.

Closing Remarks