UTC Region 4 2020 Fall Meeting
September 24-25, 2020
Program Agenda
All times listed below are EDT

Thursday, September 24th

11:50am **Welcome Message – David Petrut, Consumers Energy - Region 4 Chairman**

12pm – 1pm **Utility Applications on NB-IoT Networks Over Upper 700 MHz A Block**

Utilities are exploring options for use case applications to utilize Private NB-IoT networks to provide reduced capital and operating costs, carrier-grade security, increased range and improved propagation for deep indoor coverage. A real-world example comes in the 700 MHz spectrum as many heard JEA present at the 2020 UTC Telecom and Technology Virtual Conference. In this session speakers will share the JEA decision process and their successful experience confirming multiple use cases for NB-IoT in the Upper 700 MHz A Block. Speakers will also discuss how NB-IoT fits into the 3GPP roadmap, deployment architecture, developing use cases, status of the device/module/endpoint ecosystem development and available narrowband spectrum.

Presenters: **Robert Finch, President - Select Spectrum**
Kethees Ketheesan, CEO – Puloli
Kymberly Traylor, Director, Network & Telecommunications - JEA

1:30pm – 2:30pm **Bundling Cable and Closure to Speed Fiber Deployments**

Network downtime, product incompatibility and improperly planned network builds can cost your operation both time and money. Join TVC Communications and Corning for an overview discussion on how to select the correct fiber and splice closures, speeding the deployment of your new build, and maintenance project or repairs needed to your network after outages or disasters. Details will cover how to select the proper fiber type and count for your current network build, while being mindful for future broadband expansion demands; pairing with the proper splice closure for your fiber selection will greatly ease your deployment and speed turn-up and repair; and add into the mix the proper supply chain partner to ensure products are in stock and ready to ship when you need them, TVC and Corning will take any guesswork out of your next fiber buy.

Presenters: **Chris Bailey, Alliance Operations – TVC Communication/WESCO**
Jason Morris, North American Marketing Manager, MSO – Corning Optical Communications

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3pm – 4pm **Master of Time: Time Management Training**

Time waits for no one, but with Master of Time℠ time management training from Professor Andy Singer you will learn to master your universe and greatly enhance your time management skills. Busy engineers, managers, and executives need to work as productively and

efficiently as possible. Master of Time – time management training will teach you how to better organized and productive each day. Areas covered include the power of time management, understanding the "time matrix," setting & achieving goals, getting organized, and managing priorities.

Presenter: **Andy Singer, President - Singer Executive Development**

4:30pm – 5:30pm **5g and Utility Right Of Way Up a Pole without RF Safety**

5G is happening and Utilities must know what do to when this technology is on their poles. What are the legal responsibilities due to RF Radiation? The utility has the responsibility of RF Training for the Workers and for the safety of the public. Workers have a right to know about the hazard of radiofrequency radiation and how to determine if RF is present (IF you have cell service IT IS) before they are working around possible RF. A Safety Program must be in place BEFORE people are working in or around RF. Workers must have monitors, and the monitors must be 5G capable. ALL workers must be trained on specific RF monitors they use and the monitor has to be calibrated according to manufacturer recommendations.

Presenter: **Miranda Allen, CEO - Radiofrequency Safety International**

Friday, September 25th

9:30am – 10:30am **Region 4 Member Meeting. Core members Only**

11am – 12pm **Fiber Optic Link Testing Best Practices**

Learn industry best practices for testing installed fiber optic links. Topics covered include cleaning and inspection of your connections, optical loss testing, and OTDR testing and troubleshooting. In addition, we'll review the recommended procedures to assure reliable and repeatable results for testing multimode and single-mode links.

Presenter: **Steve Wolszczak, Learning & Development Manager – Light Brigade**

12:30pm – 1:30pm **Solutions Showcase with Technology Partners**

Network between the sessions! How it works: Technology Partners hosts individual rooms and you rotate through the rooms every six minutes. Discuss new innovations and products, solve challenges, play games, learn, and speed network. Arrive early - it's only an hour!

2pm – 3pm **Network Synchronization: Timing is Everything**

It's no secret that timing is critical to the reliability of the power grid. GPS and other GNSS signals are both critical to the electric grid but vulnerable to attack from jamming, denial of service, and spoofing. Using alternate satellite constellations like GLONASS is one method of mitigation. It is possible with a private network run completely independent of GPS. Burns & McDonnell has implemented Precision Time Protocol (PTP) coupled with Synchronous Ethernet (SyncE) allowing the loss of GPS entirely while maintaining synchronization for substation IRIG-B and network applications. This infrastructure also paves the way for private LTE deployments in the future. Please join our session to learn about an implementation that protects the utility network from end to end in the event that GPS becomes unreliable or unavailable.

Presenter: **Daniel Bayouth, PE - Project Manager, Networks, Integration & Automation - Burns & McDonnell**

3:30pm – 4:30pm **Surge Protection Optimized for HEMP (High Altitude Electromagnetic Pulse) Threats**

An Electromagnetic pulse or EMP is a burst of radiation created by a high-altitude nuclear explosion. The range and extent of damage this type of destructive event would cause to commercial networks including utilities, 911 responders and transportation hubs is being evaluate globally by government leaders, military agencies, and scientists. As experts in highly specialized EMP/HEMP filter technology, top defense contractors have relied on Transtector's design experience and patented technology to meet the requirements set by military standards for EMP-EMI mitigation. In this presentation, we will discuss various forms of EMP, why these events are devastating to commercial infrastructure, and proactive steps to take in evaluating network threat assessments.

Presenter: **Jason Mies, Director of Sales – INFINITE ELECTRONICS**
