UTC Region 10 Meeting
October 10 – 11, 2019
Trump International Hotel
Las Vegas

Thursday, October 10, 2019

8:00 a.m. - 5:00 p.m.	**Registration**
8:00 - 9:00 a.m.	**Continental Breakfast**
9:00 - 9:15 a.m.	**Welcome Remarks**
9:15 - 10:15a.m.	**Session #1 - Evaluation of Utility Advanced Distribution Management System (ADMS) Test Bed Over Private LTE Communications Network** **NREL, the Department of Energy's primary national laboratory for renewable energy, energy efficiency and R&D have partnered with Anterix, to evaluate the performance of a private LTE network as the communications link for an Advanced Distribution Management System and accelerate the development and validation of innovative approaches to enhance the resilience of distribution systems, including microgrids, with high penetration of distributed energy resources.** **Speakers – Kevin Malloy, Director, Business Development – Anterix** **Jim Li, Manager - Engineering Solutions – Anterix** **Barry Mather, Group Manager - Integrated Devices and Systems National Renewable Energy Laboratory (NREL)**
10:15 - 10:45 a.m.	**Networking Break**
10:45 – 11:45 a.m.	**Session #2 – So You Want to Build a Tower. This session covers the requirements prior to, during and after tower construction. This includes FCC and FAA requirements, environmental concerns, tower standards, permits, etc.** **Speaker: Ron Bilodeau, Senior Solutions Consultant – Osmose Utilities Service**
11:45 a.m. - 1:15 p.m.	**Networking Lunch**
1:15 - 2:15 p.m.	**Session #3 – How Long Will Outdoor Fiber Last and What Kills It? This session covers the types of outdoor fiber cable, including OPGW, ADSS and underground. It includes longevity and things that affect cable life such as UV radiation, electrical stress (E-Stress), pollution, salt spray, aeolian vibration and other factors. The presentation also covers outdoor splice**

	enclosures along with methods of prolonging the life of outdoor fiber cable. **Speaker: Adam Harrison, Applications Engineering Manager - Energy Market - AFL**
2:15 – 2:45 p.m.	**Networking Break**
2:45 – 3:45 p.m.	**Session #4 - How Do I License My Two-way Radio and Microwave Radio Systems?** **This session covers the things needed prior to beginning the process. It continues through frequency coordination, FCC license application, FCC licensing, time to construct, notification of construction complete and other considerations. What support mechanisms are available to assist with the process?** **Speaker: Klaus Bender, VP, Engineering, Training & Standards – UTC**
3:45 – 4:45 p.m.	**Session #5 – Substation Communications IP Migration Model** **As utilities see the number of substation communications IP migration projects and adoption of packet-based technologies increase, many lessons have been learned from early adopters. Utilities must consider and address the IT/OT convergence gap by understanding the complete IP migration landscape and developing a model that addresses these various issues. This presentation provides an overview of the landscape of the IP migration model, addressing issues such as reliability, network security, management and operational support. This presentation also addresses the need to understand the major gaps that occur as a result of such migration and explores several ways utilities can overcome those challenges and take advantage of the many benefits that result in migrating to a packet-based infrastructure. Finally, the presentation offers successful case studies of substation communications IP migration** **Speaker: Manny Duvelson, Product Manager, RFL Products – Hubbell Power Systems**
5:30 – 7:30 p.m.	**Networking Reception**

Friday, October 11, 2019

7:30 - 10:30 a.m.	**Registration**
7:30 - 8:00 a.m.	**Continental Breakfast**
8:00 - 9:00 a.m.	**Session #6 – 6GHz Band Interference from the Proposed Citizens Broadband Radio Service (CBRS)**

	This session looks at the proposed 6GHz band sharing, how utilities us the 6GHz microwave band, noise floor degradation and which types of traffic could be affected. **Speaker: Klaus Bender, VP, Engineering, Training & Standards – UTC**
9:00 – 9:30 a.m.	**Networking Break**
9:30 - 10:30 a.m.	**Session #7 – Understanding Protective Relay Communication Channel Requirements for Successful Packet Migration** **This presentation examines the various protective-relaying schemes that rely on a communications channel for reliable operation. With the current challenges of migrating from time-division multiplexing (TDM) to Ethernet transport systems, this presentation is designed to educate communications engineers on the importance of these circuits for the protection of the power grid. It takes a close look at both directional comparison and current differential relaying schemes.** **The presentation will explore the impact of channel latency, asymmetry, and switch times as well as consider future communications requirements of protection schemes. This is an informative presentation that references protective-relaying standards to enlighten the communications engineer on the significance of these communications channels.** **Speaker: Pedro Choconta, Lead Application Engineer – SEL**
10:30 - 11:30 a.m.	**Session #8 – Shooting a Microwave Path Through a Wind Farm. This is a real-life presentation on how SMUD attempted to do it, all the way from concept to final product.** **Speaker: Marshall Bauguss, Associate Telecommunications Engineer – SMUD**
11:30 a.m. – 12:00 p.m.	**Wrap-up and Adjournment**