

Utility Technology Forum – Agenda Continued

An overview of some of the success stories & lessons learned from NPPD’s recent deployment of their 100 Gig DWDM solution.

Presented virtually by Chris Peyatt, Telecom Engineer - Nebraska Public Power District

11:45 – 1:00PM Networking Lunch

1:00 – 2:00PM The role of fiber Broadband Networks for 4G/5G Rollout

Faster wireless speeds are desired around the world for communications. As 4G LTE networks roll out in the utility space and the new 5G deployments begin in the carrier space, an engineer may ask where does my fiber optic cable fit in my network? Utilities have invested money in fiber for the last 30 years or more wanting the high-speed unlimited bandwidth capabilities it has to offer. This high-speed unlimited bandwidth capability is why fiber will stay relevant in the telecommunications industry. This presentation will highlight the role of fiber in the 4G LTE/5G deployments. From the backhaul to the fronthaul, fiber will provide service for wireless densification. Together the wireless and fiber combination will lead to further rural broadband deployment.

Presented virtually by Amy Bartak, Telecom Engineer – Burns & McDonnell

2:00 – 2:30PM Networking Break

2:30 – 3:30PM Antennas for Wireless Distribution Automation Systems

Wireless technology plays a major role in utility automation systems. A wide variety of antenna types are applicable to support the wireless automation devices, whether in a point-to-point, mesh or point-to-multipoint system and over a wide range of radio frequencies. This session reviews some basic antenna theory and then explores a variety of antenna types, including both their physical and electrical properties, and suggests appropriate applications. While emphasizing automation systems much of the content is applicable to land mobile and other wireless technology operating in the VHF to Wi-Fi spectrum.

Speaker: George Stoll, Vice President – Utility Telecom Consulting Group

3:30 – 4:30PM Lightning Mitigation

A careful look at what can be done to mitigate or manage the pre-strike, mid-strike and post-strike voltages and currents associated with lightning. This presentation will also look at the grounding and bonding associated with ideal communications site design and the real world compromises we choose to make in our communications site designs.

Speaker: E. Robin Smyth, PE, Owner and President - Gillespie, Prudhon & Associates, Inc.

5:00 – 7:00PM Exhibit Hall Grand Opening Reception

Utility Technology Forum – Agenda Continued

Wednesday, April 14th

7:00AM Registration & Breakfast

8:00 – 9:00AM Pole Attachments and Rural Broadband, Using Technology to Prepare your Plant to Maximize Opportunity and Minimize Risk – Part I

Billions of dollars of federal and state funding for broadband deployments, new technology like 5G wireless, and regulatory changes designed to facilitate easier and faster access to poles are putting increased pressure on pole owners. Pole owners may not have the resources to respond to the increased volume of requests to attach to poles. Failure to comply with attachment requests in a timely manner may lead to penalties and risks to your pole plant. This workshop will provide pole owners and broadband providers solutions to help understand the status of your pole plant, who is attached where, and develop platform based, streamlined processes to ensure, compliance with regulations, proper cost recovery, and a favorable public opinion.

Learning Outcomes

- Understand the current state of pole attachments and their impact on poles and organization resources.
- Understand the loading and capabilities of a wood pole.
- Easily identify the types of wires, cables and equipment currently attached to and forecast to be attached to poles.
- Understand from an operational perspective what a Joint Use program looks like
- Determine methodologies to streamline and make joint use processes more efficient.

Speaker: Ron Bilodeau, Director, Strategic Solutions - Osmose Utilities Services, Inc.

9:00 – 9:30AM Networking Break

9:30 – 10:30AM Pole Attachments and Rural Broadband, Using Technology to Prepare your Plant to Maximize Opportunity and Minimize Risk – Part II

10:45AM – 12:00PM Combined Regional Meeting – Open to Utilities Only

12:00 – 2:00PM Networking lunch & Exclusive Exhibit Time

2:00 – 2:30PM UTC Leadership Address & Advocacy Update

2:30 – 3:00PM Networking Break

3:00 – 4:00PM State of the Union Utility Presentations

Presented onsite by: Travis Phifer, Network System Engineer – Tri-State Generation & Transmission

**Presented virtually by: Casey Hutchinson, Telecom Engineer – Puget Sound Energy
Mitchell Crocker, Project Manager/Sr. Technical Analyst – CenterPoint Energy**

Utility Technology Forum – Agenda Continued

11:00AM – 12:00PM

Direct Transfer Trip (DTT) of Distributed Generation Utilizing Cellular Networks

Join us to explore an application that utilizes cellular networks to provide a low-cost solution for Distributed Energy Resource (DER) communications. Increase your knowledge and gain confidence in using cellular communications for teleprotection applications such as Direct Transfer Trip (DTT). We'll discuss the use case's performance results and cost comparison of cellular with T1 leased service.

Who Should Attend:

Individuals with a role in Teleprotection communications systems and integration of Distributed Energy Resources (DER) from either the system protection or communications side of the business.

**Presented virtually by Tom Schwartz, Technical Application Engineer – GE Industrial Communications
Ty Nelson, Regional Sales Engineer – RFL/Hubbell Power Systems**