2024 Region 6 Meeting Agenda
March 19 – 21, 2024
DoubleTree Kansas City, Overland Park, KS

Meeting Agenda

- **All times listed are in Central Time Zone**
- **All of the meeting space for exhibits, education sessions, and meals will be held at the DoubleTree by Hilton Overland Park located at 10100 College Blvd, Overland Park, KS 66210 on the 1st floor off the lobby.**
- **Additional information may be found on the Region 6 Community on UTC's NetWorks site at this link and on the event website at this link.**
    - **The NetWorks community is only open to registered attendees of the meeting. Click here to register now.**

Tuesday, March 19th

7:00 – 9:00 AM	**Exhibit Setup-Ballroom**
8:00 AM – 4:00 PM	**Registration-Ballroom Foyer**
8:00 – 9:00 AM	**Breakfast**

Member and Vendor Introductions at Breakfast

9:00 AM – 12:00 PM	**Exhibits Open-Ballroom**
12:00 – 1:00 PM	**Lunch sponsored by GE Verona**
1:00 – 5:00 PM	**Exhibits Open-Ballroom**
2:30 PM	**Ice Cream Break**
3:30 PM	**Putting Challenge**
3:30 – 5:00 PM	**Cash Bar in Exhibit Area**
6:15 – 8:30 PM	**Networking Event at Pinstripes Sponsored by Burns & McDonnell**

- **Transportation will be provided from the Doubletree. Buses will depart at 6pm**
- **RSVP is required to attend. Space is limited please RSVP by Friday, March 11th. Click here to reserve your spot.**

Wednesday, March 20th

7:00 AM – 4:00 PM	**Registration-Ballroom Foyer**
7:00 AM	**Breakfast**

7:45 AM	**Welcome Remarks**
8:00 – 8:45 AM	**UTC National Leadership Address**
Speaker:	**Rusty Williams, President and CEO - UTC** **Kirt Mason, UTC Board Chair – NorthWestern Energy** **Dan Weis, Region 6 Chair – Omaha Public Power District**
8:45 – 9:30 AM	**6 GHz Status Update**

Three years ago, the FCC approved the highly controversial rule changes that enable the operation of automatic frequency-controlled (AFC) outdoor devices and unlicensed indoor devices in the 6 GHz band. Real-world testing of these unlicensed Wi-Fi 6E devices has confirmed them to be a source of harmful interference to licensed microwave systems commonly used by utilities.

The first round of testing of AFC servers just completed and the results are both promising and worrisome – and likely lead to another round of real-world testing and regulatory/standards body discussions and lobbying to protect our microwave networks. We will update you in this discussion.

The FCC approved a new Report & Order on October 19th, 2023, that allows Very Low Power (VLP) device operation anywhere (indoors or outdoors) with no AFC and EIRP up to +14 dBm. Industry representatives plan to include these units in the real-world testing in 2024 and our discussions with FCC and Standards bodies. The unlicensed proponents have also asked for the Federal Government microwave allocation at 7 GHz to be opened to unlicensed use in the same manner as 6 GHz.

Lockard & White has been on the forefront of this issue since the first Notice of Proposed Rulemaking in 2018, contributing to dozens of filings with the FCC as well as performing paper analysis, real-world testing, AFC testing, and supporting industry incumbents and trade associations in their work and testing. This presentation will provide an overview of these issues, an update on current FCC activities, the increasing risk of interference, and recommended Industry efforts to influence the process to minimize interference and avoid our other microwave allocations (i.e., 11 GHz) being opened to unlicensed use.

Speakers:	**David L. Hattey, Senior Associate Consultant - Lockard & White**
9:30 – 9:45 AM	**Break**
9:45 – 10:45 AM	**Building an OT Network**

NPPD Telecommunications Engineers and Nokia will discuss their plans to design a robust and flexible system to provide disparate services at “OT" Facilities (Transmission/Distribution Substations, Communication Infrastructure Sites). Their goals included leveraging both private and public transport services, reducing equipment footprints, eliminating technical debt, providing redundant uplink connections, and scalability. Topics and technology that will be touched in this discussion include MPLS, traffic encryption (Nokia NGE), OT Interfaces (DNP3oE SCADA, RS232, VOIP), and security/compliance. We look forward to discussing these and other OT Network challenges with other utilities and associate members.

Speakers: **Matt Weston, Telecom Engineering Supervisor, Nebraska Public Power District**
Garrett Barnes, Sales Engineer, Nokia – Gold Sponsor

10:50 – 11:50 AM **Venturing into the World of Underground Fiber**

During our presentation, we will venture into the depths of underground fiber, including a baseline assessment of your fiber, cable structure, deployment, types of fiber/vaults/spice cases, fiber use and practices, and fiber issues/failures. We will discuss trends, lessons learned, and some present issues like fiber locating and fiber cable supply.

Speakers: **Mike Unser, OSP Engineer, Salt River Project**
Matt Schnell, ITT Telecommunications Manager, Nebraska Public Power District

12:00 – 1:00 PM **Lunch sponsored by L3Harris**

1:00 – 2:10 PM **Recruiting & Retention of Technical Talent Roundtable**

The demand and pace of technology implementation is not going down. It's even accelerating in some cases which creates opportunities for us to grow our teams, which is great! That creates more competition for hiring employees and stresses an already growing gap in the skills that are necessary in our industry. This brings into question: Are schools keeping up with curriculum? Are our job listings out of date? Are our salaries/benefits adequate? Issues working/training remote? The panel will discuss these and other questions as we have an open discussion about the trials and tribulations of trying to hire Telecom & Technology talent into our organizations today.

Speakers: **Matt Holthe, Telecommunications Manager, Nebraska Public Power District**
Neal McGrath, Telecommunication Crew Leader, Lincoln Electric System
Nate Bird, Manager, Communications Infrastructure, Lincoln Electric System
Mike Honaker, Lead Network Engineer, Omaha Public Power District

2:10 – 3:00 PM **Cyber Threat Response Exercise - Tatanka**

Being prepared to respond to a cyber-attack has never been more important as threats continue to rise. This discussion will provide a summary of the State of Nebraska's efforts to work together with government, military, and critical infrastructure from all sectors to prepare cyber workers to defend against the inevitable attack that is coming through an effort titled Cyber Tatanka through training and live-fire range defense.

Speaker: **Timothy Pospisil, Director of Security Technology Outreach and Chief Security Officer (CSO), Nebraska Public Power District**

3:00 – 3:15 PM **Break**

3:15 – 3:45 PM **Digital Twin: Pursuit of Truth**

Technology is changing so fast, and the demand for data is increasing along with it. Due to this demand, it was time for Lincoln Electric System (LES) to evolve and find new ways to leverage technology. LES has been busy the last few years implementing new software, 3D modeling, LIDAR scanning and changing workflows to maximize productivity. This presentation will discuss those changes and their "Pursuit of Truth."

Speakers: **Ryan Kohn, Supervisor, GIS/CAD, Lincoln Electric System**

3:45 – 4:45 PM **Navigating AI in Utilities: Identifying and Mitigating Key Risks**

The integration of Artificial Intelligence (AI) into utilities has the potential to revolutionize operations, enhance efficiency, and improve decision-making. However, with these advancements come inherent cybersecurity risks that demand careful consideration. This presentation aims to illuminate the key risks associated with the adoption of AI in the utilities sector, offering insights into potential vulnerabilities and outlining strategies to mitigate these threats effectively, such as:

- Automated Attacks: AI can automate the execution of attacks, such as phishing campaigns, brute-force attacks, or malware propagation. This allows attackers to scale their operations and target a larger number of individuals or systems.
- **Adversarial Machine Learning:** Hackers may use AI to generate adversarial examples that can bypass machine learning-based security mechanisms. This involves manipulating input data to deceive AI systems, making them less effective in detecting malicious activities.
- **Enhanced Social Engineering:** AI can be used to analyze large datasets and social media profiles to create more convincing and targeted social engineering attacks. This could involve creating more realistic phishing emails or impersonating individuals with greater accuracy.
- **Automated Exploitation of Vulnerabilities:** AI-driven tools can scan and identify vulnerabilities in systems more quickly than traditional methods. Hackers can use AI to automate the discovery and exploitation of vulnerabilities, leading to faster and more efficient attacks.

This presentation aims to provide utilities professionals with a comprehensive understanding of the risks associated with AI adoption and empower them with practical strategies to enhance cybersecurity resilience. By fostering awareness and facilitating proactive risk mitigation measures, utilities can harness the benefits of AI while safeguarding critical infrastructure against emerging threats.

Speaker: **Simon Hill, Head of Legal and Compliance, Certes Networks - Premier Sponsor**

4:45 – 5:45 PM **What does PLTE solve for utilities, and why is it necessary now?**

In this session, we will discuss how PLTE is moving into the utility space, why it is happening, and why it is urgent to move now. With utilities changing in so many ways, carbon neutral/renewable generation, Distribution Grid modernization, reliability goals consistent with changing weather patterns, electric vehicles, reduction in gas appliances for heating, hot water, cooking, etc., the utilities are having to adapt many new devices to monitor the changes these things create. Never has there been more

demand for an industry to change so quickly, yet the "how to accomplish this" is still being developed. The one sure thing is that all these changes will require monitoring and control, which will require a comprehensive communications strategy.

While LTE does not represent the entire strategy, it is the best technology to provide many services. While it does not replace the fiber strategy, it complements it by giving a "last mile" solution that is far less expensive than fiber to the endpoints. It can replace nearly all wireless communications the utility uses today, including LMR, which is being replaced by MC-PTT.
The "why now" discussion will include the pressures that are being felt to achieve not only these things today but spectrum availability challenges, time to deployment and many other factors that will be covered.

Top 3 Take Aways:

1. Why is LTE technology moving into the utility space
2. How does it solve the more significant problems utilities face
3. Why now?

Speaker: **Bruce Albright, PLTE Business Segment Manager, Burns & McDonnell – Platinum Sponsor**

6:30 – 8:30 PM **Networking Dinner at the 180 Room at KC Joe's BBQ**

- **Transportation will be provided from the Doubletree. Bus will depart at 6pm**
- **RSVP is required to attend. Space is limited please RSVP by Friday, March 11th. Click here to reserve your spot.**

Thursday, March 21st

7:00 – 8:00 AM **Breakfast**

8:00 – 10:00 AM **Closed Session - Utility Only Business Meeting**

- Secretary Report
- Treasurer Report
- Old Business
- New Business
- Nomination Committee
- Round table discussion of various company projects
- Drawing of Door Prizes
- Adjournment

10:15-12:00 AM **Grounding & Lightning Protection**

What is "ground" anyway? There are several types of ground, each with unique uses. Many will be discussed, along with their pros and cons. Emphasis will be placed on how various grounds

might be used, in different applications, to protect either people, property, or equipment, or all three.

Speaker: **Jerry Hogan, Director of Engineering & Marketing, Solara Technical**

12:00 – 12:45 PM **Lunch**

12:45 – 2:00 PM **Grounding & Lightning Protection - continued**

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