



UTC Region 1&2 Combined Meeting
September 26 – 28, 2023
Hilton Inner Harbor ~ Baltimore, MD

Preliminary Agenda

- UTC is looking forward to your attendance at the UTC Region 1&2 Meeting being held Sept 26-28 at the [Hilton Baltimore Inner Harbor](#).
- The registration desk, education sessions and exhibit hall are located on the 1st floor of the hotel.
- Additional information may be found on the Region 1&2 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, September 26th

11:00 AM	Meeting Registration
1:00 – 1:15 PM	Welcome Remarks
Speaker:	Shondel McPherson, Distribution Team Leader (Wireless & Fiber Optics) - Public Service Enterprise Group
1:15 – 2:15 PM	UTC Leadership Presentation & Advocacy Report
Speakers:	Ron Beck, Interim President & CEO – UTC Kirt Mayson, UTC Board Chair, NorthWestern Energy Brett Kilbourne, Senior Vice President of Policy & General Counsel – UTC
2:15 – 3:15 PM	Private LTE 101: What is it? How is it used? Why Utilities need it? How can Utilities capitalize it?
Speaker:	Saba Khalid, Manager, Energy & Utilities, West Monroe Chris Timberg, Senior Manager, Energy & Utilities, West Monroe Jim McClanahan, Senior Principal, Energy & Utilities

West Monroe has gone through various telecom strategy & roadmap projects to determine the best path forward to support grid modernization now and into the future. This presentation will cover West Monroe's work with JEA to develop their telecom strategic plan, the process applied, the areas studied and their next steps. The presentation will also dive into considerations when viewing PLTE as an option for the network, as well as how it can be capitalized.

3:15 – 3:45 PM	Networking Break
3:45 – 4:15 PM	AMI Network & IoT integrations

A confidential utility has approximately 1.6 million meters and another 600,000 other devices such as transformers, switches, charging stations, and streetlights. The cost of providing a leased wireless

connection can range from \$5 to more than \$10 per month per line in O&M spend. Building a P/LTE internal network allows those O&M costs to be replaced with capital expenditures. These remote devices make Private LTE an excellent choice for connecting them to the network.

Speakers: **Chrissy Carr, PE, Chief Engineering Officer, Milhouse Inc.**

4:15 – 4:45 PM **Challenges and Lessons Learned from Building a Private LTE Network**

Building a Private LTE network is a complex, challenging, and costly endeavor. It requires a lot of planning to be successful and effectively deployed. This presentation will focus on some of those challenges and lessons learned from a recently built network. It will focus on the components that are the most critical and how to navigate some of the pitfalls.

Speakers: **Joe Mellot, Sr. Project Manager Telecommunications Infrastructure, Essentia**

5:00 – 7:00 PM **Networking Reception with Exhibitors**

7:00 PM **Reception in Executive Lounge overlooking Camden Yards**

Wednesday, September 27th

7:00 AM **Registration & Breakfast**

8:00 – 9:00 AM **Regulatory Compliance: Contracting Private LTE for Utilities (Leasing vs. Licensing)**

Speaker: **Timothy Doughty, Associate, Keller and Heckman LLP**
Greg Kunkle, Associate, Keller and Heckman LLP

This session will be presented by Jeff Tisa, Manager of Wireless Engineering at Exelon, and Tim Doughty, an attorney with the firm Keller and Heckman LLP. The presentation will describe the spectrum bands Exelon has acquired on the secondary market and how those bands are incorporated into Exelon's field area networks. The session will then examine spectrum typically acquired by utilities focusing on current options for private LTE. The leasing vs. licensing process will be explained, including the benefits, drawbacks, and pitfalls associated with each. Both the regulatory process as well as key transactional terms in spectrum leases and spectrum purchase agreements will be highlighted. The presenters will also discuss the real-world uses of pLTE networks by electric utilities and how utilities can go about securing pLTE spectrum.

9:00 – 10:00 AM **Case Study: IoT application upgrades due to LTE & 5G network improvements Smart Meters, Types of Grid Infrastructures**

Speaker: **Matt Brown, Head of Strategy & Business Development, Noteworthy AI**

The electric distribution grid is facing increased threats from extreme weather and growing demand. Advancements in fleet vehicle-based image capture and AI offer essential real-time situational awareness to mitigate these risks, but transmitting large amounts of high-fidelity data quickly and securely is both challenging and costly. High-capacity private LTE networks can provide a secure, fast, and cost-effective solution to this challenge. These networks can help utilities to vastly improve

situational awareness on the grid, protect their networks, and ensure that they are reliable and resilient.

10:00 – 10:30 AM Networking Break

10:30 – 11:30 AM Unlicensed 6 GHz Regulatory and Real-World Update

Speaker: Randal Neck, Vice President, Sales & Marketing, Lockard & White, Inc.

Several 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 industry is at another crossroads as the unlicensed proponents are on the verge of getting FCC approval for the Automatic Frequency Coordination servers that will enable deployment of Standard Power access points outdoors and are pressing the FCC to increase power levels for Low Power Indoor access points and allow Very Low Power access points to operate anywhere. 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, 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.

11:30 AM – 1:00 PM Networking Lunch with Exhibitors

1:00 – 2:30 PM Grounding Session

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

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.

2:30 – 3:00 PM Networking Break

3:00 – 4:00 PM Expanding Licensed Spectrum Options for Private 4G & 5G Utility Networks

Speaker: Robert Finch, President, Select Spectrum

The availability of spectrum and technology options for private wireless networks has expanded rapidly over the last few years. This rapid expansion enables, for the first time, utilities the opportunity to assess several carrier-grade broadband spectrum solutions that can be deployed strategically alongside, or in lieu of, networks that rely exclusively on narrowband/wideband spectrum solutions. These innovative options allow utilities to reduce operating costs while increasing reliability, efficiency and security of operations.

This session will describe several bands that can meet utility private network needs – and are included in 4G and/or 5G standards. Relevant wireless use cases will be described along with the relationship between key applications and spectrum selection. This focus of this session will be on bands that are frequently offered in the secondary market, including:

- 600 MHz / Band 71
- 700 MHz / Band 103¹
- 800 MHz / Band 26
- 900 MHz / Band 106
- 1670-1675 MHz / Band 54
- 3.5 GHz (CBRS) / Band 48

Topics will include 3GPP standards status, MHz (capacity) available, duplexing technology, geographic availability, authorized power levels, propagation comparisons, and availability of base station and remote devices relevant to utilities.

4:00 – 4:30 PM Regional Meeting – Utilities Only

This meeting is closed to individuals who are not considered core members of UTC.

5:00 PM Reception in Executive Lounge overlooking Camden Yards

Thursday, September 28th

8:00 Registration & Breakfast

9:00 – 10:00 AM Futureproofing Dial up Access to Shared Resources

**Speaker: Harper Anderton, VP Business Development & Strategic Planning,
OnyxSpectrum Technology**

This presentation will look at how legacy technologies are continuing to provide easy, secure access to shared resources, such as metering between utilities. This has long been an issue under today's NERC/CIP regulations and is now being extended to managing shared metering information between utilities and Private Power Producers as renewable energy locations are connected to the grid. It will use two different use cases that use the dial-up line-sharing equipment TelTone SLSS which has been the preferred solution. However, as a legacy solution, it is becoming increasingly difficult to repair and obtain spare parts to maintain these systems.

Onyx Spectrum Technology acquired the rights to the TelTone product line in 2022 and is now addressing obsolescence concerns by developing a next-generation version of the TelTone products that will match the existing legacy capabilities and add next-generation IP and security features to address future requirements and network migration. We are listening to utilities and are integrating the capabilities utilities need to continue to move forward with secure line steering or line sharing activities while positioning you for IP network connections.

10:00 – 10:30 AM Networking Break

10:30 – 11:30 AM Case Study: Updating Master Agreements with the Wireless Carriers for

¹ 4G & 5G NB-IoT only, does not support broadband modulation

Wireless Co-Location Sites on Electric Transmission Towers

Speaker: Anthony Suppa, Project Manager, Public Service Enterprise Group

More than ever, electric utilities are leveraging their infrastructure for 3rd party use, whether through collocating macro wireless devices on their transmission infrastructure, the leasing of dark fiber, or providing middle-mile broadband. In likeness, a utility and a service provider or wireless carrier must have a Master Agreement to ensure safe and appropriate use of the utility's infrastructure. However, when updating these agreements, it's sometimes difficult to recognize each party's responsibilities and other key issues, including maintaining the safety and reliability of the site and the infrastructure. Moreover, as the US energy grid looks to expand, more utilities will need to come understand these Master Agreements, especially given the complex nature of these contracts.

This last part of the UtiliSite Division Summit will focus on the general structure of these Master Agreements and how they have changed given the current buildout of 5G infrastructure. This session will also look at some of the best practices that utilities use when updating any new Master Agreements to leverage their existing infrastructure, whether it be their transmission towers, distribution poles, or dark fiber.

11:30 AM – 12:00 PM Round Table Discussion & Wrap-up