UTC Region 5/10 Combined Meeting & MIC/MUG Annual Meeting 2020
All events are listed in Central time

Tuesday, November 17, 2020

10:00 – 10:15 am	**Official Welcome and Opening Remarks** **Michael Tate, Region 5 Chairman** **Lee Onsager, Region 10 Chairman** **Sheryl Riggs, UTC President & CEO**
10:15 am – 12 pm	**State of the Union Presentations**
Speakers:	**Jason Batke, Telecommunications Superintendent – Basin Electric** **Eric Bergman, Electrical Engineer - Minnkota** **Marty Berlinger, Telecommunications Engineer – Otter Tail Power** **Chris LeLeux, Manager, Infrastructure Services – Great River Energy** **Jeffrey Robertson, Regional Telecomm Engineer – WAPA** **Jon Wirtanen, Supervising Engineer, Operational Technology – Minnesota Power**
12:30 – 1:30 pm	**Is your remote alarm unit reaching end-of-life? Don't be ALARMED!**

Many electric utilities operate remote communications sites where centralized alarming and monitoring play a key role in maintenance and communications outage prevention. These sites contain assets like microwave or trunked mobile radios, tower lighting, battery chargers, generators, propane tanks, and HVAC units whose status needs to monitored at all times. This is accomplished through a remote terminal unit (RTU) that will collect the necessary information, be it a discrete or analog status point, and communicate with alarm management software using a chosen protocol. Since remote communications sites contain older communication transport hardware with analog alarm outputs, they tend to use legacy alarm servers. But what happens when your remote monitoring hardware and software reaches end-of-life/service? This presentation is a real-life case study of how Great River Energy went through the process of planning, selecting, and implementing their next generation of SNMP remote monitoring hardware and SNMP management software to be utilized at 150 of their remote communications sites across Minnesota.

Speakers:	**Wade Miller – Great River Energy** **Dennis Olson, Senior Telecommunications Engineer – Great River Energy** **Zach Brom, Networks, Integration & Automation \ Transmission & Distribution Services – Burns & McDonnell**
2:00 – 3:00 pm	**OPGW grounding SRP's practices for grounding OPGW**
Speakers:	**Mike Unser, OSP Engineer - SRP** **Val Pearson, Working Line Foreman - SRP**
3:30 – 4:30 pm	**OT/IT Convergence for Network Wide Synchronization**

Utilities have relied on numerous timing sources (GPS, 1588 PTP, IRIG) over the years to synchronize their networks. The challenge of employing multiple timing sources makes it difficult to maintain synchronization consistency across all utility sites. Legacy timing sources such as GPS can be subject to vulnerabilities such as security breaches, position location, comparing multiple sources and multi GNSS constellations. This presentation examines power system applications that rely on precise time, including the latest traveling wave-based protection methods, to understand the accuracy requirements that need to be met. Ciena and SEL will introduce a resilient approach to timing distribution which uses the Wide Area Network (WAN) for synchronization which is common in telecom and mobile networks. Additionally, we will address using time distribution protocols such as 1588v2 Telecom Profile in the WAN and Power Profile for the substation.

Speakers: **Paul Robertson, Senior Program Manager – Schweitzer Engineering Laboratories, Inc.**
Mitch Simcoe, Director of Industry Marketing - Ciena

Wednesday, November 18, 2020

10:00 – 11:00 am **How to maintain the criticality of teleprotection with licensed narrowband radios**

As leased lines become obsolete, utilities are looking for other communications networks over which to run teleprotection. Drawing on comprehensive test results from a leading consulting firm, this session will examine the RF characteristics which make licensed narrowband radios an ideal solution for the critical application of teleprotection. Presenting real world experiences of one utility's use of narrowband for teleprotection, this session will also demonstrate how utilities can optimize their spectrum investment by running grid protection and other non-critical applications over the same 50kHz channel.

Speaker: **Paul Reid, CEO - MiMOMax**

11:30 am – 12:30 pm **Master of Time - Time Management**

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.

Speaker: **Andy Singer, President – Singer Executive Development**

1:00 – 2:00 pm The burden of the societal needs on the electric utility

New requests of the utility telecom for Long-term Evolution (LTE), Gigabyte Passive Optical Network, (GPON), rural broadband, fiber to the home and smart cities are changing utility telecom. This panel will discuss these larger societal needs and how these utilities are facing the changes. From Investor owned utilities to cooperatives the changes are rapid. In a data driven business customers expect more from their utility. Customers have high expectation when it comes to reliable power and with broadband been widely deployed, customer expect this data to be readily available for the consumption. The utility is working to serve not only their needs by the society around them.

Speaker: **Lee Ayers, VP of Engineering – Mid-Carolina Electric Cooperative**

2:30 – 3:30 pm **Solutions Showcase with vendors**

Network after 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!

Thursday, November 19, 2020

10:00 – 11:00 am Teleprotection migration to IP/MPLS networks best practices

Utilities have successful transitioned critical TDM-based applications including SCADA and voice to IP/MPLS network for years. However, many are still cautious to migrate teleprotection circuits because teleprotection systems, such as current differential relays, requires not only constant low delay and jitter, but also delay symmetry between the go and return paths to avoid false trip. This session will share real field experiences in engineering IP/MPLS networks to address these challenges.

Speaker: Hansen Chan, Senior Marketing Manager - Nokia

11:30am – 12:30 pm NERC CIP Standards in Development

This session will be an informational overview of the CIP standards currently in development. There will be a brief introduction describing MRO's role in the reliability of the Bulk Power System, and will close the session with regulatory considerations for COVID-19, and a review of some of the COVID-19 related impacts that have been reported. Opportunity for Q&A will follow.

Speaker: Brian Kinstad, Risk Assessment & Mitigation Engineer – Midwest Reliability Organization

1pm – 4:30pm UTC Business Meeting (Members Only)
Utility Round Table (Members Only)
MIC MUG Business Meeting (Members Only)