



Region 3 Fall Meeting
DoubleTree by Hilton • Williamsburg, VA
October 3-5, 2018

Preliminary Agenda

Wednesday, October 3, 2018

7:00 AM	REGISTRATION AND BREAKFAST FOR ALL ATTENDEES
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8:00 AM	CALL TO ORDER, OPENING REMARKS & INTRODUCTIONS
Speaker:	Tim Parsons, Region 3 Chair
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8:30 AM	WELCOME MESSAGE & HOST UTILITY HIGHLIGHT
Speaker:	Rappahannock Electric Cooperative Rep TBD
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10:15 AM	Federal Advocacy Update
Speaker:	Bobbi Harris, Vice President of Market Strategy & Development, UTC
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11:15 AM	UtiliSite Update
Speaker:	Sheila Wells, UtiliSite Chair, Nashville Electric Service
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11:30 AM	LUNCH (On Your Own)
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1:00 PM	CALL TO ORDER & INTRODUCTIONS
Speaker:	Tim Parsons, Region 3 Chair
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1:15 PM	UTC COMMITTEE REPORTS
Speakers:	Present Committee Chairs or Delegates
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1:45 PM	BREAK
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***** THE REMAINDER OF THE MEETING IS FOR UTC UTILITY MEMBERS ONLY *****

2:00 PM REGION 3 BUSINESS

Treasurer's Report: Daniel Harrison, Region 3 Secretary/Treasurer

Old Business: Minutes from Region 3 Spring 2018 Meeting

New Business:

Call for Host Utilities for Future Meetings

Call for Interest in Presenting at Future Meetings

Review Training Requests for Future Meetings

Review Agenda format

Announcements

3:30 PM ADJOURN TO EXHIBIT HALL

Please visit the Exhibit Hall hosted by our vendors between 3:30 PM and 6:30 PM. This is an outstanding opportunity to see the latest technology in our industry, plus network with peers and vendor partners.

[Thursday, October 4, 2018](#)

8:00 AM REGISTRATION AND BREAKFAST FOR ALL ATTENDEES

8:30 AM INTRODUCTION OF TECHNICAL PRESENTATIONS

Speaker: David Adams, Region 3 Vice Chair

8:45 AM Session 1– Understanding Vehicle Area Networks and Telematics

Speakers: Rick Oehlhof, Duke Energy
Laura Lindholm – Duke Energy
Logan Nesseth – Burns & McDonnell

Description: Vehicle Area Networks are allowing utilities to keep their field personnel more connected than ever. By providing wireless internet through field vehicles, this technology has allowed real time access to utility support systems and other information. Along with the Vehicle Area Networks, many utilities are utilizing vehicle Telematics, a way to monitor the performance of the drivers and vehicles. In this presentation, we hope to cover a summary of the technology and expectations that utilities should have for these systems. This includes understanding the hardware limitations, security liability, and processes which can found in VAN and Telematics and must be accounted for when deploying to a utilities fleet.

9:30 AM **Session 2 – Securing the Digital Utility Transformation: Opportunities and the way Forward**

Speaker: Souheil Sabbagh, Commercial Director, SNC-Lavalin

Description: The digitalization of utilities promises to optimize the supply and demand of electricity, manage the increasing number of renewable sources of energy and micro grids while offering efficiency improvements for consumers. Furthermore, the large volumes of data generated, combined with predictive analytics allows utilities to transition to a proactive mode of asset management. Such a far-reaching digital transformation comes with many challenges for critical infrastructures, with cybersecurity near the top of the list. The widespread connection of distributed energy resources will drastically increase the attack surfaces, which will expose utilities to new threats. Other issues such as the deployment of intelligent networks, interoperability between legacy systems and IoT devices, IT/OT convergence, equipment standardization and compliance all need to be addressed before the real benefits of the digital transformation can be achieved.

Recognizing these industry trends certain energy service companies comprised of different power utilities, decided to embark on a major digital transformation project to deliver a state-of-the-art smart grid with cyber and physical critical infrastructure protection. To achieve this goal, certain companies retained the services of SNC-Lavalin to engineer a robust IP/MPLS fiber-optic network topped with an effective security design that rigorously protect assets well beyond standard regulatory requirements.

10:15 AM **BREAK**

10:30 AM **Session 3 – Augmented Reality: Ready Now**

Speaker: John Arczynski, Index AR Solutions

Description: Augmented Reality when applied correctly can have positive impacts with safety, reduction of errors/rework, knowledge transfer, cost and schedule. Index will describe some examples at a high level and drill down to an individual use case for Ameren Corporation involving AMI where Ameren saw a 48% reduction in the time for a new person to complete the installation. EPRI measured these results as an objective 3rd party.

11:15 AM Session 4 – Case Study on NERC CIP Low Impact Substation and Generation Facilities for Cyber Security

Speaker: Matt Schnell, Title, Nebraska Public Power District

Description This presentation will cover a case study on the engineering design, installation, and procedures developed for the NERC Low Impact requirements and the lessons learned in the design, installation, and procedure phases.

12:00 PM LUNCH (On Your Own)

1:30 PM Session 5 – How to Prioritize Teleprotection Traffic Over a Multi- Service Substation WAN

Speaker: Mitchell Somcoe, Title, Ciena

Description: This presentation will cover the test results of running multiple services (voice, Video and teleprotection) over a Carrier Ethernet substation WAN. It will demonstrate that by establishing VLANs of different service classes including a high priority class for teleprotection; even in situations of severe network congestion and/or failure that the service characteristics required for teleprotection traffic (e.g. ultra low latency and asymmetry) continues to be delivered over other lower priority traffic such as

- Substation WAN traffic is growing rapidly due to applications such as video surveillance, synchrophasers and smart meter data → driving substation WAN capacities to 10G and optical core capacities to 100G
 - Traffic such as teleprotection is relatively low bandwidth but critical to maintain grid reliability and requires ultra-low latency < 5ms
 - If network congestion or failure occurs, how does the utility ensure that high priority teleprotection traffic performance is maintained?
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2:15 PM BREAK

2:30 PM Session 6 – Fiber to Distribution Line Devices

Speakers: Suxanne Hoffman, Southern Company, Telecom Services
Justin Harrison, Alabama Power Distribution
Jesse Simpson, Alabama Power Distribution SCADA
Judy LeStrange, General Electric

Region 3 Fall Meeting Preliminary Agenda Cont.

Using fiber optics between line devices, Alabama Power is doing high density coordination and backhaul of DSCADA and AMI data over fiber in a metro area. The pilot project was done using LTE wireless routers in a wired configuration and GPON technology.

3:15 PM Session 7 – Industrial Control Cyber Threats

Speaker: Avista Corporation Rep TBD

4:00 PM ROUND TABLE, CLOSING STATEMENTS & ADJOURN

Speaker: Tim Parsons, Region 3 Chair

5:30 PM NETWORKING EVENT - Cocktail reception

Friday, October 5, 2018

8:00 AM BREAKFAST FOR ALL ATTENDEES

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8:30 AM UTC Region 3 Members Meeting
UTC Region 3 Meeting in Review
Discussion Regarding Next Meeting
Special Topic: TBD
Lessons Learned / "Pens Down" Roundtable