

UTC Northwest Territory/Utility Broadband Workshop

Spokane, Washington

November 3-5, 2021

Wednesday, November 3, 2021

12:45-1:00 Welcome Remarks
1:00-1:30 Opening Keynote

Commissioner Brandon Presley, Mississippi Public Service Commission

1:30-2:30 Integrating Smart Grid into a Holistic Utility Broadband Strategy

As utilities are deploying broadband networks, they are also enabling a variety of grid modernization applications, such as advanced SCADA, distribution and transmission automation, and infrastructure security. This session will explain how to integrate grid modernization into a holistic utility broadband strategy, and it will help to quantify the value-added benefits that smart grid can bring to the business case as well as improve the quality of electric service to utility customers.

Mauricio Subieta, Regional CTO, Nokia Lee Ayers, Vice President, Engineering, Mid-Carolina Electric Cooperative Curt Kirkeby, Engineer, Avista

2:30-2:45 **Break**

2:45-3:45 Real World Broadband Results, Metrics, and Best Practices – Results from a Comprehensive Electric Cooperative Benchmarking Study

The electric cooperative community now has a significant number of broadband deployments. What can we learn from their experience? Hear the results – and from some participants - of a comprehensive benchmarking study that sought to answer: What were the range of build costs, take rates, revenues and other metrics? What technologies have been used? What does it take from an operational perspective? What are some best practices in each of these areas that led to the best results?

Ted Solomon, Vice President, Strategy and Corporate Development, National Rural Telecommunications Cooperative

Rudy Tober, CMO, Broadband Solutions Division, National Rural Telecommunications Cooperative

3:45-4:45 **Private Fiber v. Leased Fiber**



Discussion on building out a private fiber network versus using leased services or leased fiber. What changes are we seeing in the methods and procedures for building the private fiber networks as the utilities build their networks closer to the customer.

Chris Walker, Senior Executive Director, NoaNet

5:00-7:00 Welcome Networking Reception

Thursday, November 4, 2021

8:00-9:00 Registration & Breakfast with exhibitors

9:00-10:00 Utility Broadband Use Cases: Issues and Lessons Learned

This session will include a panel of utilities providing their experiences deploying broadband, including lessons learned and solutions to challenges. It will feature different types of utilities, including large and small, who have deployed broadband in different types of environments, including urban and rural. It will also describe the different factors that led to their decision to deploy broadband and the results they have achieved. Finally, it will answer your questions and explore new ways that utilities can work together and share information going forward.

Todd Way, Manager, Douglas FastNet (Douglas Electric Cooperative)
Bob Greene, Manager of Communications and IT, Columbia Energy, LLC (Columbia iConnect)

Angela Bennink, Telecom Director, Kitsap Public Utility District

10:00-10:15 Break

10:15-11:15 Where the Route Begins: Legal and Regulatory Considerations for Rural Broadband Deployment Projects.

The need for rural broadband deployment is great, and the opportunities for collaboration on rural broadband projects are abundant. But where does a company start? This discussion will focus on the various legal and regulatory issues that any utility or ISP should consider - up front - in structuring a successful broadband deployment project. The issues covered will range from access to poles and underground conduit, to the acquisition of property rights, to risk management, to compensation. A definitive plan is roadmap for success!

Brett Heather Freedson, Attorney, Lerman Senter PLLC Tom Magee, Partner, Keller & Heckman LLP Dave Sabala, Douglas Electric Cooperative (Retired GM) Scott Richards, Founder and Principal, G. Scott Richards, LLC

11:15-12:15 **Broadband Funding**



This session will explore the various federal and state broadband funding programs that are available. It will feature a panel of experts who will describe the basic requirements, as well as the funds that are available. Then, it will engage in a dynamic discussion to develop strategies for successful applications.

John Holman, General Field Representative, USDA Rural Utilities Service – Telecommunications Programs
Karen Archer Perry, Senior Policy Analyst, BroadbandUSA, NTIA
Daniel Holbrook, Broadband Manager, Oregon Broadband Office

12:15-2:00 Networking Lunch (on the Exhibit Floor)

2:00-2:45 Clean Energy and Broadband

Solar, wind and other renewable energy sources all need communications to manage the two-way flow of electricity. As consumers adopt distributed energy resources (DERs), utilities must be able to control these DERs remotely, safely and effectively. This session will explore clean energy applications and how utilities can use broadband to manage them.

2:45--3:30 **Supply Chain Issues**

Broadband internet is becoming another necessary utility and living in a rural area should no longer limit your options. Many cooperatives are working to solve this digital divide by building a broadband business and infrastructure to provide connectivity for its community members. However, many deployments are experiencing delays due to poor inventory management and not getting material to the jobsite on time. A key component that is often overlooked in big deployments like this, is the supply chain to help manage multiple-manufacturers, with multiple lead times, to help stay on schedule and on budget. Having experienced supply chain resources whether outsourced or staffed when moving massive amounts of material is key to a successful deployment.

Scott Jackson, National Market Manager – Broadband, Graybar

3:30-4:15 Poles and Broadband

This session will focus on the issues for utilities when deploying broadband networks on poles and other infrastructure. It will explore new technologies to support mapping and inventorying attachments, and it will discuss pole loading and clearance issues when making broadband attachments. Finally, it will address both wireless and wireline broadband networks and the engineering and safety issues for access to utility infrastructure.

Ron Bilodeau, Director, Strategic Solutions, Osmose Eric Merten, Vice President & General Manager - Commercial Markets, NV5Geospatial

4:30-6:00 **Networking Reception with the Exhibitors**



Friday, November 5, 2021

9:00-10:00 Broadband networks equipment enclosure requirements -

This session will address unique issues related to equipment cabinets and other enclosures. Specifically, this session will answer these questions:

- o What types of cabinets or buildings are being installed for these networks?
- o Requirements for A/C, insulation, and/or additional environmentals. Are these requirements changing with climate change?
- o Backup power requirements

Tom Pope, Senior Solutions Engineer, Calix Lee Ayers, Vice President, Engineering, Mid-Carolina Electric Cooperative

10:00-11:00 Necessary considerations for deploying a successful GPON network

This discussion will provide a comprehensive look at the necessary components for building a successful GPON network. Areas of focus will be: determining what your network will look like, how you will build it, marketing, timeline, and how success will be measured.

Jonathan Nelson, Outside Plant Supervisor, Delta-Montrose Electric Cooperative

11:00-12:00 Utility Roundtable