

June 27, 2019

I. Introduction

Good afternoon. My name is Adrienne Collins, and I am Vice President of Power Delivery for Southern Company Services. I appreciate FERC's forward-looking focus on upcoming challenges facing the utility industry, and I want to thank you for the opportunity to participate in this Technical Conference.

As one of the nation's largest energy providers, Southern Company operates seven regulated utilities serving 9 million customers in nine states. In addition to its traditional regulated utilities, Southern Company owns a growing competitive generation business, a nationally recognized provider of customized energy solutions, natural gas storage facilities, and mobile communication and fiber optics businesses.

This infrastructure depends on secure, reliable communications, and Southern Company supports an "all of the above" approach to meet communications needs of the future. In addition to leveraging vendor-owned solutions, Southern Company believes there are benefits to utility-owned communication networks and has also invested in its own 4G LTE network through its affiliate Southern Linc. This purpose-built network structure, paired with its vertical integration, provides value to customers and uniquely positions Southern Company in this conversation.

II. Communication and Technology Growth

Southern Company believes advances in technology provide greater grid reliability and resiliency but also increase its complexity. Although Southern Company's broadband spectrum is sufficient to meet demands of today's applications, continued growth will increase the need for spectrum as new applications have greater bandwidth and lower latency requirements. For example, Southern Company is currently testing equipment such as Volt Var Control (VVC) devices to further optimize its electric system. Grid edge technology like VVC devices can improve power quality while reducing O&M expenses in addition to improving grid flexibility and visibility. The implementation of 5G infrastructure is one solution for new technologies of this kind.

III. Cybersecurity & SCM

However, cybersecurity continues to be a concern. Southern Linc created a comprehensive Cyber Security Program designed to reduce risk by ensuring security throughout the lifecycle of the network and its components to meet the specific operational needs.

When considering other vendors, Southern Company uses a competitive bid process to evaluate suppliers based on cybersecurity and supply chain risks, along with other factors. Southern Company will continue to comply with current and upcoming CIP standards.

IV. Redundancy in Operations

Given the critical nature of utility communications, there are many considerations to ensure the network allows for accurate situational awareness and system control. Both the electric and gas utilities require a redundant infrastructure to support their SCADA networks and real-time operations. The processes and personnel supporting these functions participate in local and regional simulation activities such as Tabletop exercises and other preparedness drills, which help ensure the systems continue to work as intended.

V. Demands on Electromagnetic Spectrum

There is an enormous need for spectrum that is free from interference to support utility operations and restoration activities. Although Southern Company has a 4G LTE network, more spectrum is needed to support higher bandwidth applications. Utilities need reliable spectrum in low-, mid-, and high-bands. The high-band spectrum specifically is required to unleash the full potential of 5G and to support technology advances.

Because of its critical systems, Southern Company does not agree the 6 GHz band is the right band to implement unproven sharing technologies. Given its extensive service territory in both urban and rural areas, the 6 GHz band is the only suitable band that can accommodate the bandwidth and performance objectives over very long microwave paths. Interference in this range could have negative consequences to grid operations and public safety.

VI. Conclusion

The ties between the electric and telecommunications industries are critical to enable utilities to become more resilient, efficient, cleaner, and more responsive to customer needs. The FCC's activities in this area provide a good example of why the Utilities Technology Council requested the FERC and FCC to meet on a regular basis. Southern Company encourages continued collaboration between these commissions to further a strong and viable dialogue as the energy and telecommunications industries continue to become more interdependent.

Thank you again for the opportunity to participate. I look forward to the rest of the conversation and any questions you may have.