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**Utilities Technology Council
Statement for the Record
Senate Commerce, Science and Transportation Committee**

Full Committee Oversight Hearing of the Federal Communications Commission

The Utilities Technology Council appreciates the opportunity to submit this statement for the record in the above-referenced hearing. Established in 1948, UTC is the global trade association representing more than 200 energy and water providers on their needs related to the deployment of reliable and resilient Information and Communications Technology (ICT) networks. Energy utilities use ICT networks to support the safe, reliable, and secure delivery of their essential services. UTC's members include not-for-profit public power and rural cooperative utilities as well as investor-owned electric, gas and water companies.

UTC applauds the Committee for holding this important oversight hearing. The Federal Communications Commission (FCC), whether it acknowledges it or not, plays a key role in the reliability of our nation's energy infrastructure. While the FCC is mostly known for its oversight of telecommunications, satellite, and cable companies, it also oversees the allocation of commercial radio spectrum—an essential piece of any wireless ICT network.

Although our interaction at the FCC involves numerous issues, including pole-attachment policies and broadband deployment, this statement is primarily focused on spectrum and intergovernmental coordination. Utilities enable broadband through affordable and timely access to their poles and, where allowed, by deploying high-speed broadband in areas unserved by telecommunications providers. Chairman Thune and Senator Schatz have recently introduced the “Streamlining the Rapid Evolution and Modernization of Leading-edge Infrastructure Necessary to Enhance Small Cell Deployment Act” (STREAMLINE ACT). Many of our members have concerns with certain aspects of this legislation; we encourage the Committee as it continues working on this bill to protect the integrity of utility infrastructure while also promoting broadband deployment.

Utility Spectrum Needs

For decades, utilities have owned, maintained and operated wireless ICT systems to support mission-critical operations related to the day-to-day delivery of electricity, water, and natural gas. These networks give utilities real-time visibility into the status of their infrastructure, allowing them to take corrective action to prevent cascading outages while also making more efficient use of their resources. Additionally, utility ICT networks are essential for storm response and restoration, grid modernization, and physical and cybersecurity. Like any wireless network, interference-free spectrum is the lifeblood for utility ICT systems that underpin these mission critical functions. Utilities are well aware that our nation's growing reliance on wireless devices means that we must make efficient use of our finite spectrum resources. But because utilities provide the services which power and sustain our lifestyles, their spectrum needs should be adequately weighted to ensure their ability to provide this service.

Nearly every federal government agency—including the Department of Homeland Security, the Department of Defense, and the Department of Energy—recognizes electric and natural gas utilities as among the most critical of all Critical Infrastructure Industries (CII). In the case of electricity, our members meet, and often exceed, strict reliability requirements enforced by the Federal Energy Regulatory Commission (FERC) to keep the power on safely and reliably while planning for natural disasters and other hazards such as physical and cybersecurity attacks that could result in operational challenges.

Unfortunately, the FCC has historically been an outlier in terms of how it views the energy industry, at least regarding its spectrum-allocation policies. Under law, the FCC is required to manage spectrum in the public interest. In the Balanced Budget Act of 1997, Congress authorized the FCC to award spectrum through auction, although it also exempted utilities from competitive bidding of spectrum, given the importance of utility services to the country¹. Despite this congressional requirement, the FCC continues to treat utilities as any other commercial entity when it comes to spectrum acquisition. As a result, rate-regulated utilities often find themselves unable to compete with other enterprises for interference-free spectrum.

6 GHz

One of the most egregious examples of FCC decisions impacting utility operations was an order by three agency bureaus in January 2017 to permit a startup company called Higher Ground LLC to begin mobile operations in the 6 GHz spectrum band. The bureaus' decision was heavily opposed by nearly all stakeholders in the proceeding, including electric utilities. Many utilities use the 6 GHz band as the backbone for a variety of utility applications, such as Supervisory Control and Data Acquisition (SCADA) systems that monitor and control substations and valves. Additionally, utilities use the band for security and transfer-trip protection circuits which guard against external threats and isolate faults on the grid to prevent power disruptions. Ironically, utilities migrated to the 6 GHz band after the FCC in the 1990s forced them to relocate out of the 2 GHz band in order to make way for commercial mobile radio services.

Chairman Thune has encouraged the FCC to conduct a full rulemaking into expanding the 6 GHz band more broadly. Chairman Pai has indicated a rulemaking process will likely be initiated this fall. We agree with the need for regular order related to 6 GHz operations. However, while we understand the need to make efficient use of spectrum, we strongly encourage this Committee to ensure that the FCC's final actions protect the incumbent licensees in the 6 GHz band from interference. Unlike many commercial wireless operations, utilities simply cannot tolerate the threat of interference because of the operational impacts this interference could cause. If the FCC opens up the band, just the threat of such interference could force utilities to relocate, possibly disrupting existing systems and imposing additional costs on their customers.

4.9 GHz

As described above, the communications networks utilities have built using their 6 GHz licenses are critical to grid resilience. Not only is it imperative to ensure the integrity of these incumbent networks, but it is also important to consider utilities' growing capacity needs as they modernize and harden their

¹ H. Rept. No. 105-217, Section 3002(a), (1997)



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infrastructure to protect against increasing hazards and threats. To that end, we ask that this Committee encourage the FCC to move forward with its proceeding on expanding access to the utilities and other CII in the 4.9 GHz band. The FCC is currently reviewing comments on its Sixth Notice of Proposed Rulemaking into expanding eligibility in the 4.9 GHz band to utilities and other CII. Currently, the 4.9 GHz band is reserved for public-safety entities, although government studies indicate this band is underused. Utilities could use this band, in partnership and cooperation with public safety entities, for many mission-critical services and needs, which will only grow with the development of smart cities and smart grids. Importantly, nearly all stakeholders in the proceeding support the concept of sharing the band with utilities.

Joint FCC-FERC Meetings

These two examples demonstrate how interdependent the energy and telecommunications industries have become. For decades, utilities have built, owned, and operated ICT networks for mission-critical electric, gas and water services. With technologies such as smart meters, sensors, and distributed energy resources evolving quickly, these networks have become even more ingrained in utility infrastructure. At the same time, telecommunications providers need access to all kinds of infrastructure, including utility poles, to deploy broadband services to their customers. Additionally, both industries remain active and vigilant against cybersecurity and other threats.

As the energy and telecommunications sectors become more interdependent, we ask that this Committee encourage the FCC to hold regular meetings with its counterparts at FERC. Doing so will build stronger awareness between the two industries and regulatory bodies, improve policy development, and strengthen emergency response. This is a “good-government” solution that will help both agencies and industries work together.

Conclusion

UTC thanks this Committee for holding this important oversight hearing. The utility and telecommunications industries are converging at a rapid pace. We believe good-government solutions exist which can assist and enable both industries to succeed.

