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

Full Committee Oversight Hearing of the National Telecommunications and Information Administration

The Utilities Technology Council (UTC) thanks Senate Commerce, Science, and Transportation Committee Chairman Thune and Ranking Member Nelson for the opportunity to submit this statement for the record in the above-referenced hearing. Established in 1948, UTC is the global association representing energy and water providers on their needs related to the deployment of reliable and resilient Information and Communications Technology (ICT) networks. Energy providers use ICT networks to support the safe, reliable, and secure delivery of their essential services.

UTC applauds the Committee for holding this important oversight hearing. NTIA has a number of responsibilities, including administering grant programs for broadband deployment, performing telecommunications and engineering research, and much more. For the energy providers UTC represents, our interaction with NTIA is focused on its responsibility to oversee spectrum allocation for the federal government.

For decades, utilities have owned, maintained and operated wireless communications systems to support mission-critical operations related to the day-to-day delivery of electricity, water, and natural gas services. These systems also are essential for storm response and restoration, grid modernization, and physical and cybersecurity. Spectrum is the lifeblood for utility wireless systems, and the need for spectrum access will only increase going forward. As the Committee oversees NTIA's spectrum policies, we urge NTIA to explore opportunities for utilities to share spectrum with federal entities.

Nearly every federal government agency—the Department of Homeland Security, the Department of Defense, the Department of Energy, to name a few—recognizes electric and natural gas utilities as among the most critical of all critical infrastructure industries. Our members meet, and often exceed, strict reliability requirements to keep the power on safely and reliably while at the same time planning for natural disasters and other hazards such as physical and cybersecurity attacks that could result in operational challenges. Spectrum is an essential element to our highly reliable energy infrastructure. Given the criticality of our industry—along with NTIA's mission of efficient spectrum use by the federal government—finding a mechanism to share federal spectrum with utilities is an important initiative.

Utilities around the world are undergoing transformative change as they modernize their grids, deploy distributed energy resources, and enable more connectivity with their consumers—all of this is part of the larger development of the Industrial Internet of Things. Utilities are also facing new risks such as physical and cybersecurity threats to critical infrastructure. This transformative change places increased demands on utilities' communications capacity, coverage and security. As a result, utilities need access to additional licensed spectrum for their wireless communications systems. This spectrum must be in frequency ranges that provide wide-area coverage to support the proliferation of sensors and other devices



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for machine-to-machine communications across energy transmission and distribution networks – including in remote areas where there are few if any commercial communications networks available. Utilities in Brazil, Canada, and more broadly in Europe are strategizing about accessing spectrum in the 400 MHz frequency range to meet the increasing communications needs to support grid modernization and protect cybersecurity. The U.S. could lead the way by demonstrating the possibilities of sharing spectrum in this frequency range, which would in turn promote economies of scale and create additional benefits, such as increased communications interoperability between utilities and equipment standardization.

Specifically, utilities in the United States are interested in sharing spectrum in the 406-420 MHz band with federal government operations. The government's own research has identified the 406-420 MHz band as being lightly used and potentially suitable for sharing ("Report to the President: Realizing the Full Potential of Government-Held Spectrum to Spur Economic Growth," Executive Office of the President, President's Council of Advisors on Science and Technology, July 2012). UTC is engaged in discussions with NTIA regarding sharing the band with utilities, which would make effective use of the spectrum by promoting the public interest in energy security and reliability. This would also provide opportunities for public-private partnerships to develop shared systems between utilities and federal government operations. We look forward to reaching agreement on concrete next steps in the coming months.

As this Committee knows, spectrum needs across the country are growing exponentially. Utilities are well aware of this and recognize the government's responsibility for allocating spectrum in ways that support the public interest. At the same time, the utility industry is transitioning to become more efficient, decentralized, and responsive to consumer demand. Utilities have always used their wireless communications networks to manage daily reliability tasks. These networks are now being used for grid modernization and the use of distributed energy resources such as rooftop solar. Additionally, utilities use their wireless networks for disaster response. During last year's hurricane season, these networks were essential to providing situational awareness and restoring utility service as quickly and safely as possible.

Spectrum is the key to all of these developments. Finding new and innovative ways to share and make more efficient use of spectrum is essential to enable the continued reliable and resilient delivery of utility services. UTC stands ready to assist in this effort. Our organization has resources and subject-matter experts willing to provide Committee members with any information or resources they need.

We thank the Committee for holding this hearing. We appreciate the opportunity to submit this statement and look forward to working with all of you going forward.