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Utilities Technology Council Statement for the Record Senate Energy and Natural Resources Committee

Full Committee Oversight Hearing of the Federal Energy Regulatory Commission

The Utilities Technology Council (UTC) thanks Senate Energy and Natural Resources Committee Chairman Murkowski and Ranking Member Cantwell for the opportunity to submit these comments for the record in the above-referenced hearing. Established in 1948, UTC is the global trade association representing energy and water providers on their needs related to the deployment of reliable and resilient Information and Communications Technology (ICT) systems. Electric, natural gas, and water providers use ICT networks as the backbone for the infrastructure that delivers safe, reliable, and secure energy and water services. These networks are essential for the reliability, safety, resiliency, and security of utility services.

UTC commends the Committee for holding an oversight hearing of the Federal Energy Regulatory Commission (FERC), particularly in light of the Administration's focus on energy resilience issues. UTC's membership consists of energy and water entities of all sizes and ownership types, from large investor-owned utilities to small publicly and cooperatively-owned utilities often located in rural areas. Such diversity means each of our members face their own challenges in providing reliable electric, gas and water services.

More than likely the focus of today's hearing will be on the resilience of the nation's electric infrastructure, including the transmission and distribution systems which deliver electricity to all corners of the country, along with the generation resources providing such electricity. These are undoubtedly worthwhile issues to discuss. UTC would like to note that resilience is not new to the electric utility industry. Because electricity is the most essential commodity for powering our economic lifestyles and general wellbeing, our nation's utilities meet and exceed strict reliability standards in order to keep the lights on and the system resilient each and every day.

UTC takes no position on the question regarding onsite fuel resources and resilience. In comments filed this past May in FERC's ongoing resilience proceeding (Docket No. AD18-7), we indicated our recognition that our nation's utilities and regional transmission organizations (RTOs) are taking proper steps to support energy resilience.¹ As we detailed in our May 8 comments, however, we would like to highlight another aspect of energy resilience that requires this Committee's attention. Members of this Committee are well aware of the rapid transformation occurring in the energy sector. Key facilitators of this change are the ICT networks that utilities, RTOs, and ISOs deploy on their transmission and distribution systems. These networks underpin the towers, wires, and poles that deliver reliable, resilient, and affordable power safely to homes and businesses all over the U.S.

¹ UTC comments in Grid Resilience in Regional Transmission Organizations and Independent System Operators <u>https://utc.org/wp-content/uploads/2018/05/UTC_Comments_Grid_Resilience.pdf</u>



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Utilities use ICT networks for the following essential functions:

- Real-time monitoring of medium and high-voltage networks
- Protective relays
- Energy management
- Outage management
- Distribution management
- Smart metering
- Substation automation

These networks improve the reliability and resiliency of the grid by supplying real-time situational awareness to control-room operators. Additionally, these networks enable integration of distributed energy technologies such as battery storage, smart meters, rooftop solar, and the development of Smart Cities.

For the most part, utilities have built and maintained their own ICT networks, which operate on both wireless and wireline technologies. Depending on the size, location, terrain, and geography of a utility's service territory, along with the expense of laying fiber lines to these potentially remote locations, many utilities rely on wireless communications for substantial parts of their ICT networks.

Like any wireless network, utility ICT systems need radio frequency spectrum to function, and the reliability of the wireless communications can be affected by radio frequency interference. Interference, which occurs when there is too much wireless traffic in a particular spectrum band, can displace signals, potentially disabling the ability of a critical wireless transmission to reach its destination. Because of the critical nature of utility services, interference within their ICT networks is intolerable. Therefore, access to adequate and interference-free spectrum is required if these networks are to work as intended. Although spectrum policy resides at an agency outside of this Committee's jurisdiction—the Federal Communications Commission (FCC)—we encourage members of this Committee to consider the importance of interference-free spectrum to the continued reliable and resilient operation of the nation's energy systems.

Spectrum policy is managed by the FCC under the Communications Act of 1934². 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 country³. Despite this congressional requirement, the FCC continues to treat utilities as any other commercial entity when it comes to spectrum acquisition. As a result, utilities often find themselves unable to compete with other enterprises for interference-free spectrum. As this Committee knows—the nation's electric utilities to meet stringent reliability standards in order to provide the highest levels of reliable service as demanded by the government and, more importantly, the industry's customers. Although spectrum policy is managed by the FCC, we have asked both FERC and the FCC to consider establishing formal and

² See Communications Act of 1934, as amended, 47 U.S.C. § 151 et seq.

³ H. Rept. No. 105-217, Section 3002(a), (1997)



recurring meetings so as to acknowledge the interdependencies between the utility industry and the communications sector. Today, we ask that this Committee support this endeavor.

As the energy and telecommunications industries become more interdependent, policy issues impacting both sectors must be addressed comprehensively. This Committee understands the importance of electricity to our nation's wellbeing and could help advance good-governance policies by encouraging cross-jurisdictional discussions. If the transition to a smarter, more consumer-centric, distributed utility industry is going to be realized, a clear recognition of these cross-sector interdependencies must be understood and collaboration across government must occur regardless of jurisdictional boundaries.

FERC has held routine meetings with other federal agencies including the Nuclear Regulatory Commission, the Department of Energy, and the Environmental Protection Agency. On behalf of our members, we ask the Committee to encourage FERC to consider extending its outreach to the FCC as well.

Thank you for the opportunity to submit these comments. UTC is supportive of efforts to analyze grid resilience and appreciates your consideration of our concerns.