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Aug. 22, 2019

Kimberly D. Bose, Secretary
U.S. Federal Energy Regulatory Commission
888 First Street NE
Washington, D.C. 20426

Re: Docket No. AD19-13, Post-Technical Comments of the Utilities Technology Council

The Utilities Technology Council appreciates this opportunity to submit comments regarding the June 27, 2019, Commissioner-led Reliability Technical Conference. UTC is especially appreciative of the opportunity for UTC's President and CEO, Joy Ditto, to participate on Panel Four: Managing Changes in Communications Technologies on the New Grid. This panel enabled a critical discussion of the nexus between the electric utility and telecommunications industries, and this Commission displayed great leadership in putting this issue on its agenda. While we join and endorse the joint comments being filed by the Edison Electric Institute, the National Rural Electric Cooperative Association, and UTC, UTC submits these separate comments to further amplify aspects of those comments, the testimony given by Ms. Ditto, and the interaction between panelists and the Commissioners.

The Utilities Technology Council (UTC) is the international trade association for the telecommunications and information technology interests of electric, gas, and water utilities. UTC's membership includes approximately 390 utilities across the U.S. and Canada, including large investor-owned electric companies who serve millions of customers across multi-state service territories, as well as smaller rural electric cooperative and public power utilities, which may serve only a few thousand customers in isolated communities or remote areas. In addition, UTC has affiliate organizations in Europe, Africa, and Latin America. UTC's core utility members own, manage, and control extensive communications infrastructure that they use to support the safe, reliable, and secure delivery of essential services to the public at large.

The discussion on Panel Four focused on how electric utilities use private communications networks to manage and underpin the critical infrastructure used to safely and reliably deliver electricity. As UTC has described in previous filings with this Commission, utilities have developed, built, and operated their own communications networks in order to provide the highest levels of reliability; such high levels of reliability were either not available or not affordable from the traditional telecommunications carriers.

In her testimony¹, Ms. Ditto detailed how utilities build out their systems to be resilient against natural and man-made disasters and other low-frequency, high-impact occurrences. To do so, utilities rely on both wireless and wireline communications technologies to run their networks. Because of the size, location, terrain, and geography of a utility's service territory, along with the expense of laying fiber lines to these remote locations, utilities use wireless communications to ensure their information and

¹ See Statement of Joy Ditto, President and CEO, Utilities Technology Council, Before the Federal Energy Regulatory Commission Annual Reliability Conference, submitted in Docket No. AD19-13-000 (June 27, 2019), available at https://utc.org/wp-content/uploads/2019/08/FINAL_Statement-of-UTC-CEO-Joy-Ditto_Reliability_Conference_6.27.19.pdf. (hereinafter "Testimony of Joy Ditto")

communications technology (ICT) networks communicate reliably and securely over long distances. Like any wireless network, utility ICT systems need radiofrequency spectrum to operate, the reliability of which may be affected by radiofrequency interference. Therefore, access to adequate and interference-free spectrum is essential if these networks are to work as intended.

Ms. Ditto highlighted a pending rulemaking before the Federal Communications Commission (“FCC”) which, if finalized as proposed, would present a new threat to the reliability of utility communications networks. The FCC is currently determining whether it should expand access to a critical spectrum band to unlicensed, mobile use. As Ms. Ditto described, the band in question—the 6 GHz band—is heavily used by electric utilities and other critical-infrastructure industries (CII) for mission-critical communications functions. To date, the band has only been available for licensed use, which gives users strong protections against interference which could degrade or diminish vital communications transmissions. Because of its reliability, speed, and ability to quickly transmit data over long distances, the 6 GHz band is used by hundreds of utilities to perform such vital functions as SCADA and teleprotection.²

As Ms. Ditto discussed, in October 2018, the FCC initiated a Notice of Proposed Rulemaking (NPRM) to open the 6 GHz band to unlicensed operations.³ Because the band is already heavily used by CII including electric utilities, the FCC proposed a system to mitigate and reduce the likelihood of interference that new, unlicensed entrants into the band will likely cause. Unfortunately, as numerous commenters in the FCC’s proceeding note, the FCC’s proposed Automated Frequency Coordination (AFC) remains untested, unproven, and hypothetical.⁴

UTC applauds this Commission for holding this important discussion and providing a venue to highlight the critical interdependencies between the energy and telecommunications industries. The panel demonstrated that this Commission has a clear and direct interest in intervening with the FCC as it deliberates on its 6 GHz proposed rulemaking. Indeed, Commissioner Richard Glick asked panelists whether this Commission should intervene and ask the FCC to delay its proposal until its proposed mitigation measures are tested and proven effective.⁵

As Ms. Ditto stated in response, UTC believes this Commission should formally intervene in the FCC proceeding in the manner suggested by Commissioner Glick. Importantly, a representative from Qualcomm, one of the proponents of opening the 6 GHz band, did not object to this Commission taking such action.⁶ Moreover, and as indicated in the joint EEI, NRECA, and UTC comments, this Commission could address a number of issues with the FCC that were discussed during the technical

² Spectrum and Utility Communications Networks: How Interference Threatens Reliability; McGinnis, Doug <https://utc.org/wp-content/uploads/2019/02/Spectrum-and-Utility-Communications-Networks-2.pdf>

³ *In the Matter of Unlicensed Use of the 6 GHz Band, Expanding Flexible Use in the Mid-Band Spectrum Between 3.7 and 24 GHz*, Notice of Proposed Rulemaking, ET Docket No. 18-295 and GN Docket No. 17-183 (Released October 24, 2018).

⁴ Reply comments of the American Petroleum Institute, the American Public Power Association, the American Water Works Association, the Edison Electric Institute, the National Rural Electric Cooperative Association, and the Utilities Technology Council <https://utc.org/wp-content/uploads/2019/03/6-GHz-Reply-Comments-final.pdf>

⁵ See Transcript at pages 289-290

⁶ See Transcript at page 290

conference, including the threats the 6 GHz proposal poses to utility private networks and the criticality of interference-free spectrum to utility operations.⁷

Additionally, as Ms. Ditto stated during the technical conference, UTC has led outreach to proponents of opening the band to unlicensed use and remains hopeful that these conversations will allow for continued analysis of these issues.⁸ However, in spite of this outreach and our ongoing interaction with the FCC, we have not been convinced that interference from unlicensed operations can be successfully mitigated.⁹ Moreover, the concerns of electric utilities about the potential for interference are echoed by comments on the record by other parties in the FCC's proceeding. These comments underscore the significant potential for interference from unlicensed operations, which are heightened by the risk that this poses to electric reliability.

Precedent exists for this Commission to intervene in other agencies' proceedings. For example, in 2015, the Commission held technical conferences on the Environmental Protection Agency's proposed Clean Power Plan. In addition, this Commission sent a letter to the EPA as it took comments on the Clean Power Plan proposal.¹⁰ FERC also meets annually with the Nuclear Regulatory Commission and recently signed a memorandum of understanding with the Pipeline and Hazardous Materials Safety Administration.

Like the Clean Power Plan, the FCC's 6 GHz proposal has a direct impact on electricity operations. Given the importance of the data carried on utility 6 GHz communications networks, the likelihood of interference with these transmissions if the FCC proceeds as proposed is high. As described in detail in the joint EEI/NRECA/UTC comments, this message was underscored during the conference discussion when Commissioner McNamee expressed the need for the FCC and the proponents of opening the 6 GHz band to have a greater understanding of the electric utility industry's need for access to highly reliable, interference-free spectrum:

“[When] you're on your cell phone [and] it cuts out, it's not a big deal. On the electric side, you have a blip, it may disrupt a dispatch signal that's very critical. So that one mistake could be a very big problem that ... you can't tolerate. I'm not saying that's what it is, but it seems to me that there may be a fundamental problem that -- that [what the] FCC-speak about what is tolerable and [what the] FERC-speak about what is tolerable are two different standards. And we're not saying the same thing, and so we're not able to get a proper resolution to it.”¹¹

UTC believes that Commissioner McNamee's comments are illustrative of the differing perspective the electric and telecom sectors have about reliability as well as the growing interdependencies between the energy and telecommunications industries.¹² This is why a formal dialogue between the FCC and FERC

⁷ Joint Post-Technical Conference Comments submitted by the Edison Electric Institute, the National Rural Electric Cooperative Association, and the Utilities Technology Council, Docket No. AD19-13-000

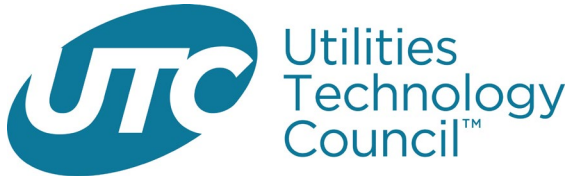
⁸ See Transcript at pages 284-285.

⁹ *Id.* at 284.

¹⁰ May 15, 2015, Letter to EPA Acting Assistant Administrator, Office of Air and Radiation Janet McCabe <https://www.ferc.gov/media/headlines/2015/ferc-letter-epa.pdf>

¹¹ See Transcript at page 326-327

¹² *Id.*



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is so critical, as the joint EEI/NRECA/UTC comments demonstrate. As Commissioner McNamee stated, what the FCC considers tolerable as it relates to interference and what this Commission and the electric industry consider tolerable appear to be two different things. UTC believes FERC should intervene and urge the FCC to delay final action until those differences can be bridged. Moreover, FERC is the expert agency on matters affecting electric reliability and it has a direct interest in the FCC's proceeding and its potential impact on electric reliability.

Given the criticality of the 6 GHz band to utility operations, as demonstrated throughout this panel, in comments and questions by FERC Commissioners, and as detailed in the joint EEI/NRECA/UTC comments, UTC believes this Commission should formally intervene in the FCC's 6 GHz proceeding and ask that the FCC delay its final action until its proposed mitigation measures have been thoroughly field-tested and proven to prevent interference from occurring to utility communications systems in the 6 GHz band that are essential for electric reliability.

Beyond the 6 GHz band proposal, the FCC is promulgating policies related to other spectrum bands, resilience, wireline service, and pole attachments that variously impact the electric sector on an ongoing basis. This Commission should have situational awareness about the basis for these policies and the analysis the FCC is undertaking related to electric reliability impacts.

UTC appreciates the opportunity to submit these comments and applauds this Commission for holding this session at its annual Reliability Technical Conference.