

Resolution Supporting Department of Defense Spectrum Sharing: PG&E

WHEREAS, the U.S. Department of Defense in September 2020 issued a Request for Information on dynamic spectrum sharing, seeking insight into innovative solutions and technologies for dynamic sharing of the department's current spectrum allocation to accelerate spectrum sharing and 5G deployment¹; and,

WHEREAS, utility companies of all types and sizes use a mix of wireline and wireless private communications networks to support the reliable operation of the nation's utility system, ranging from electricity transmission lines to natural gas and water pipelines; and

WHEREAS, energy and water utilities use these networks to monitor day-to-day reliability of their systems, restore service after emergencies, add digital and "smart" technology services for their customers, modernize their infrastructure, allow for intermittent generation resources to be added to the grid, and much more; and;

WHEREAS, These private utility networks consist of both wireline and wireless components, and therefore require radiofrequency spectrum to function, and;

WHEREAS, the electric, water, and natural gas utility industry are facing growing demands for spectrum access, as grid modernization technologies rely on wireless communications to provide greater reliability, resilience, and deployment of new energy resources, such as solar, wind, energy storage, and more; and,

WHEREAS, as UTC has noted in several resolutions, spectrum is a finite commodity that is overseen largely by two federal entities—the Federal Communications Commission for commercial spectrum and the National Telecommunications and Information Administration for federal spectrum²; and,

WHEREAS, utilities as much as possible rely on licensed spectrum overseen by the FCC; licensed spectrum provides protections against harmful interference, which can degrade and diminish wireless communications; and,

WHEREAS, Since the mid-1990s, hundreds of utilities migrated to the 6 GHz spectrum band for mission-critical communications, including teleprotection, SCADA, and other services that provide critical situational awareness and remote-control functions essential to the reliability of the electric grid; and,

WHEREAS, the Federal Communications Commission in April 2020 permitted unlicensed users access to the 6 GHz band, thereby calling into question the viability of the band going forward for the utility industry; and,

WHEREAS, with the likelihood of diminished reliability in the 6 GHz band for the utility industry, other options, including spectrum sharing, must be explored in order to provide utilities with the needed, licensed spectrum for mission-critical operations; and

¹ <https://www.defense.gov/Newsroom/Releases/Release/Article/2353932/dod-seeks-industry-input-into-dynamic-spectrum-sharing/>

² https://utc.org/wp-content/uploads/2020/08/Spectrum_Policy_FINAL.pdf

WHEREAS, sharing spectrum with the Department of Defense offers a unique, natural partnership with the federal government to provide utilities with needed spectrum while also providing synergies for both industries; and,

WHEREAS, UTC and several of its core-utility members have been in informal discussions with the Department of Defense to pursue spectrum-sharing options; and,

WHEREAS, utilities understand how to share federal spectrum without causing interference and without reallocation and relocation of government operations, thus avoiding the disruption of incumbent federal government communications systems and operations.

NOW, THEREFORE, LET IT BE RESOLVED, that the Utilities Technology Council formally supports spectrum-sharing arrangements with the Department of Defense in order to provide both entities with reliable spectrum to support future growth.