Utilities Technology Council™

2511 Jefferson Davis Highway | Suite 960|Arlington, VA 22202
202.872.0030 Phone | 202.872.1331 Fax
utc.org | networks.utc.org

May 31, 2019

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 - 12th Street, S.W.
Washington, D.C. 20554

Ex Parte

Re: Notice of Ex Parte Presentation, ET Docket No. 18-295, GN Docket No. 17-183.

Dear Ms. Dortch:

The Utilities Technology Council ("UTC") is providing the following ex parte notification in the above-referenced proceeding in accordance with Section 1.1206 of the Commission's Rules. On May 29, 2019, Christina Baworowsky from Alliant Energy, Ben Portis from Entergy, Aryeh Fishman from the Edison Electric Institute, Brian O'Hara from the National Rural Electric Cooperative Association, Arpan Sura from Hogan Lovells (on behalf of the Association of American Railroads), and Robert Thormeyer and the undersigned from the Utilities Technology Council met with Aaron Goldberger in the Office of Chairman Pai to discuss matters related to the above-referenced proceedings.

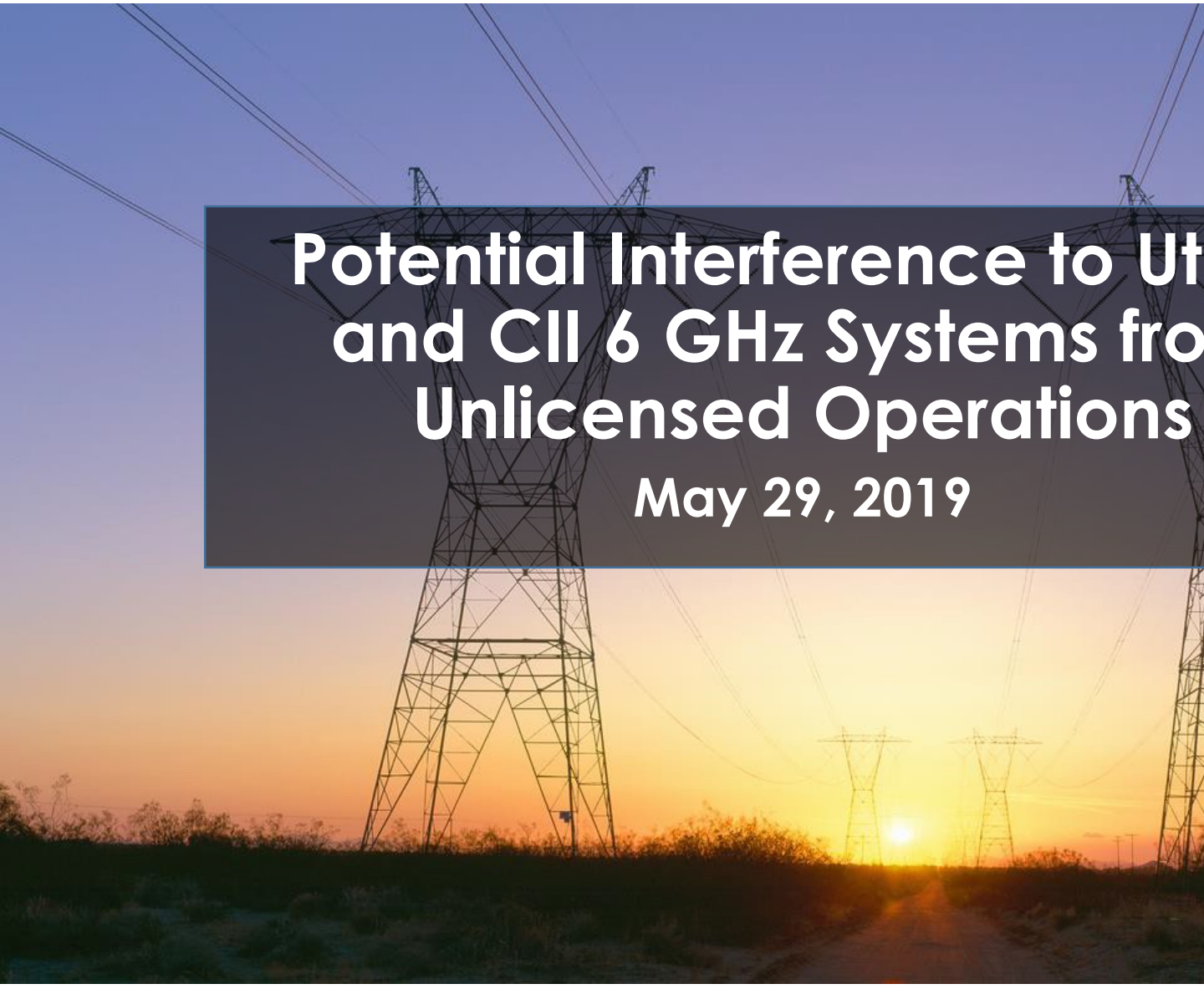
During the meeting, the parties provided the attached presentation and explained how utilities and other critical infrastructure industries operate extensive microwave communications systems in the 6 GHz band, which they use to support the safe, reliable and secure delivery of essential services. Owing to the criticality of these services, their microwave systems are designed, built, and maintained to operate at extremely high standards for reliability and low latency. Potential interference from unlicensed operations represents an unreasonable risk to the performance of these microwave systems in the 6 GHz band, and the parties explained that interference must be prevented rather than fixed after the fact. Specifically, the parties explained how both indoor and outdoor unlicensed operations pose an interference threat. In addition, the parties described various additional issues, including the need for enforcement mechanisms in the event that interference occurs, as well as the need to develop, test and certify automated frequency coordination (AFC) systems to meet performance and security requirements.

Thank you for your help in this matter. If there are any questions concerning this matter, please contact the undersigned.

Respectfully,

Brett Kilbourne

Cc: FCC Participants



Potential Interference to Ut and CII 6 GHz Systems fro Unlicensed Operations

May 29, 2019

- Utilities and other critical infrastruct industries (CII) rely on the 6 GHz ba variety of mission critical communic
- The 6 GHz band is uniquely suited t support utility and CII communicat needs and there is a lack of reason alternatives.
- Many utilities and CII relocated mic systems to the 6 GHz band after th band was reallocated.

- Utilities and CII require ultra-high re
  and exceptionally low latency for t
  communications systems.
- Potential interference from unlicen
  operations must be prevented fron
  occurring.
- Remedying interference after the f
  not be sufficient.
- The probability of interference and
  magnitude of the risk is unacceptc

- Concerns:
  - Interference from outdoor operations
    - AFC is untested and lacks transparency t utilities and CII to mitigate and resolve int that occurs.
    - AFC is predicated on modelling that may account for real-world environment or ac microwave operations.
  - Interference from indoor operations
    - Overestimated attenuation
    - Uncontrolled operations
    - Unknown locations
    - Improper installation

- Remaining issues:
  - Enforcement mechanisms in the ever interference
  - Security concerns about AFC
  - Inaccuracies in underlying data
  - Centralized or decentralized AFC
  - Performance requirements for AFC
  - Independent testing and certificatior
  - Adjacent channel interference
  - Incremental deployment of unlicense to limit the potential for interference

Discussion