

March 12, 2018

Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street SW
Washington, DC 20554

Re: Notice of Ex Parte Communication: Promoting Investment in the 3550-3700 MHz Band-
-GN Docket No. 17-258

Dear Ms. Dortch:

This is to notify you pursuant to Section 1.1206 of the Commission's Rules that on March 8, 2018, the undersigned along with Aryeh Fishman ("Edison Electric Institute") Michael Fitzpatrick ("GE"); Vijay Venkateswaran ("GE"); Brett Kilbourne ("Utilities Technology Council"), Kasey Chow ("Southern Linc"), David Rines (Lerman Senter—counsel for Southern Linc), Douglas McGinnis (Exelon), Blake Loper ("Union Pacific"), and Eve O'Toole (Holland & Knight—Counsel for Port of Los Angeles) met with Rachael Bender, Wireless and International Advisor to Chairman Pai in connection with the above-referenced proceeding.

The parties began by describing the interests of the various companies and associations which were present. In particular, representatives from Exelon, Southern Linc, Union Pacific, the Port of Los Angeles and the associations (the "CII entities") noted that they and their members were all critical infrastructure entities dependent on communications for efficiency, safety, reliability, security and operational reasons. They indicated that the need of CII entities—such as themselves—for additional high-speed communications access with interference protections, and with greater capacity to enable their use of new Industrial Internet of Things ("IIoT") applications is increasing at a marked rate. They stated that the 3.5 GHz Citizens Broadband Radio Service ("CBRS") band offers CII entities great opportunities to deploy these new communications-dependent IoT applications.

With particular regard to the electric industry, it was pointed out that the industry is investing approximately \$100 billion per year on building new infrastructure. Much of this investment is targeted at deployment of the Smart Grid/Energy IoT. Not only will this help improve grid safety, reliability and security, it will also facilitate the offering of new services related to Smart Communities, microgrids, electric vehicles and a host of other new consumer services. The current spectrum that electric utilities have is not sufficient to meet the growing capacity requirements of the Smart Grid/Energy IoT. This is why meaningful access to licensed, interference-protected spectrum in the 3.5 GHz band is so important to electric utilities.

More generally, the parties indicated that the IIoT was driving greater levels of efficiency, productivity, and safety in industries such as power generation and distribution, oil and gas,

manufacturing, health care, freight rail, and aviation. As a result, this proceeding does not represent the typical "spectrum war" between telecommunications companies. Instead the Commission's actions in this proceeding have huge implications for a major sector of the American economy – the industrial and CII sector.

The 3.5 GHz band – the "Innovation Band" – can serve as a unique catalyst for accelerated growth throughout the U.S. industrial/manufacturing/CII sector. Spectrum is a key input for IIoT applications for industrial/CII facilities. To optimize their use of this resource, the FCC should preserve meaningful census-tract licensing opportunities in the 3.5 GHz band across all regions, including urban, suburban, and rural areas. With census-tract licensing in the CBRS band, CII entities will be able to bid vigorously at auction for thousands of census tract licenses to gain localized spectrum access that aligns with their geographically targeted deployment plans. This is because with their own licensed, interference-protected 3.5 GHz spectrum, industrial/CII entities will be able to "self-provision" IIoT wireless connectivity over geographically targeted, private TDD-LTE networks. They will be able to design systems that match their grids, port areas, pipelines and railroad systems.

If the FCC adopts PEA or county licensing, in contrast, it will not be economically rational for industrial/CII entities to outbid wireless carriers for licenses covering territory extending far beyond their geographically targeted, localized facilities. This flawed decision will result in a delayed and diminished scale and scope for IIoT. Industrial/CII entities will be left out of PAL spectrum, meaning that they will have to rely on offerings from carriers/MVNOs or use GAA or other unlicensed spectrum.

The experience of the CII entities is that utilizing their own licensed spectrum is a better option for them than obtaining services from traditional telecommunications carriers or carrier MVNOs. Today, industrial/CII entities often cannot obtain needed wireless functionality from commercial mobile operators on a cost-effective basis. Many industrial/CII entities are located in remote areas beyond the reach of conventional commercial mobile networks. Carriers have focused on commercial services to consumers rather than developing data-intensive IIoT-related applications, services, and capabilities – so obtaining the necessary connectivity from the carriers is even problematic in urban areas. Even where available on the secondary market, spectrum would likely come at an exorbitant and economically untenable cost for industrial/CII entities.


Moreover, commercial wireless offerings generally do not meet federally-mandated FERC/NERC standards for grid reliability and security. Electric utilities that violate these standards are subject to significant fines. Self-provisioned private networks at 3.5 GHz will allow industrial/CII entities to promote innovation, minimize costs, control service quality, enhance safety and security, and optimize network and IIoT-system performance.

Industrial and CII interests recognize the value of a widely supported, industry-based solution to the key licensing issues in this proceeding, and industrial/CII parties are involved in ongoing discussions with other significant stakeholders in an effort to realize this goal. Certainly, as it considers different licensing approaches for CBRS, the FCC should not forego this unique opportunity for U.S. economic and spectrum policy to generate enormous economic

benefits in the industrial/CII sphere. The public interest will benefit greatly if industrial/CII entities are able to gain access to 3.5 GHz spectrum in both urban and rural areas in small geographic units through a competitive auction. If industrial and CII entities are denied this opportunity, the FCC's CBRS auction will be less robust and critical IIoT innovation will be discouraged.

Sincerely,

Stinson Leonard Street LLP

A handwritten signature in blue ink, appearing to read "H. Russell Frisby, Jr.", followed by a large, stylized flourish or checkmark-like stroke.

HF:SLS

cc: Rachael Bender