

June 21, 2022

VIA ELECTRONIC FILING

Ms. Marlene H. Dortch Secretary Federal Communications Commission 45 L Street, N.E. Washington, D.C. 20554

Re: ET Docket 18-295, GN Docket 17-183

Ex Parte Letter

Dear Ms. Dortch:

The National Wireless Communications Council ("NWCC") offers this *ex parte* in support of the Joint Petition for Rulemaking and Request for Stay filed by representatives of public safety and utility licensees in the 6 GHz band.¹ NWCC is a non-profit association of organizations representing users of land mobile radio systems, providers of land mobile services, and manufacturers of land mobile equipment. Several of these organizations also facilitate frequency coordination activities of point-to-point microwave services, including in the 6 GHz band. Interference to these systems puts public safety and other licensees providing essential services to the American public at risk.

Together the joint filings request new rules for 6 GHz low-power indoor ("LPI") devices, further testing of standard-power devices, and an immediate temporary stay on any equipment certifications of these devices, including the marketing, sale, and

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¹ Petition for Rulemaking of APCO International, Utilities Technology Council, the Edison Electric Institute, the American Public Power Association, the National Rural Electric Cooperative Association, the American Gas Association, the American Water Works Association, the American Petroleum Institute, the Nuclear Energy Institute, the Association of American Railroads, the International Association of Fire Chiefs, and the National Public Safety Telecommunications Council, ET Docket 18-295, GN Docket No. 17-183 (filed Dec. 7, 2021) ("Joint Petition"); Request for Stay of APCO International, Utilities Technology Council, the Edison Electric Institute, the American Public Power Association, the Rural Electric Cooperative Association, the American Gas Association, the American Water Works Association, the American Petroleum Institute, the Nuclear Energy Institute, the Association of American Railroads, the International Association of Fire Chiefs, and the National Public Safety Telecommunications Council in ET Docket No. 18-295 (filed Dec. 7, 2021) ("Stay Request").

importation of 6 GHz LPI devices that have already been certified by the Commission.² The Joint Petition reflects new information on the record regarding the results of real-world testing of commercially available 6 GHz devices that calls into question assumptions in the 6 GHz Report and Order regarding the threat of interference to fixed incumbents, including public safety, utilities and numerous other entities, from both LPI and standard power devices.³

NWCC agrees that should harmful interference occur, "it will be impractical to trace and mitigate against, and it will interrupt mission critical communications, threatening the safety of life, health, and property, as well as the delivery of essential services to the public."⁴ As the Joint Petition points out, with essential services at stake, the Commission should not rely solely on models and Monte Carlo simulations.⁵ Accordingly, the Commission should conduct independent, real-world tests of devices to determine the extent to which new rules are needed to prevent unlicensed devices from causing harmful interference to incumbent licensees.

NWCC also agrees with the Joint Petition that clarification is needed regarding the obligation of AFC systems to protect incumbent systems and correct instances of interference.⁶ At the time the Joint Petition was filed, details of the AFC testing process had not yet been provided, including specific information regarding the parameters of AFC functionality.⁷ This lack of clarity remains, despite AFC system operators providing initial proposals and answering subsequent questions from the Office of Engineering and Technology. Therefore, clarification is needed from the Commission regarding the parameters and the process for AFC system authorization to ensure that AFC systems are effective at preventing interference to licensed microwave systems.

Additionally, incumbents will incur significant costs to monitor, detect, identify, and report instances of interference.⁸ Accordingly, the Commission should develop a mechanism by which incumbent licensees will be able to recover the costs of monitoring and reporting on interference resulting from unlicensed use of the 6 GHz band.⁹

Given that hundreds of millions of 6 GHz LPI devices are expected to be in use this year, and there will be no way to quickly shut down these devices if they do in fact cause harmful interference to these vital fixed communications links, it is

² *Id*.

³ See Letter from Larry Butts, Manager, Telecom Engineering, Southern Company Services, Inc. to Marlene H. Dortch, Secretary, Federal Communications Commission, ET Docket No. 18-295 and GN Docket No. 17-183 (filed June 23, 2021); Attachment A: Test Report on the Effects of 6 GHz Unlicensed RLAN Units on Fortson to Columbus Microwave Link June 21, 2021, available at https://www.fcc.gov/ecfs/filing/106231367519302.

⁴ Joint Petition at 8.

⁵ *Id.*at 9.

⁶ See id. at 15.

⁷ *Id*.

⁸ *Id*. at 11-12.

⁹ See id. at 12-13.

necessary for the Commission to revisit the 6 GHz rules to ensure unlicensed 6 GHz devices will not cause harmful interference to licensed microwave systems. ¹⁰ NWCC requests expedient action by the Commission on the pending Stay Request and Joint Petition.

Respectfully submitted,

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¹⁰ See Wi-Fi Alliance 2022 Wi-Fi Trends, WI-FI ALLIANCE (Jan. 20, 2022), https://www.wifi.org/news-events/newsroom/wi-fi-alliance-2022-wi-fi-trends (noting that "more than 350 million Wi-Fi 6E devices will enter the market in 2022" and "Wi-Fi 6 and Wi-Fi 6E solutions for PCs and notebooks and mesh systems have already been introduced, and we expect many more . . . to make their way into users' hands."); See also Letter from Christopher Szymanski, Director, Product Marketing, Broadcom Inc., to Marlene H. Dortch, Secretary, Federal Communications Commission, ET Docket No. 18-295, GN Docket No. 17-183 (filed May 26, 2022) (stating that Broadcom has already shipped more than 1 billion Wi-Fi 6/6E chips globally).