The Honorable Ajit V. Pai, Chairman Federal Communications Commission 445 12th Street S.W. Washington, DC 20554

Re: Unlicensed Use of the 6 GHz Band, ET Docket No. 18-295; Expanding Flexible Use in Mid-Band Spectrum Between 3.7 and 24 GHz, GN Docket No. 17-183

## Dear Chairman Pai:

We represent the public safety and critical infrastructure industries. This includes railroads, communications providers, electric, gas, water and wastewater utilities, along with power and offshore oil and gas producers. These industries collectively rely on approximately 100,000 fixed service links in the 6 GHz Band. Additionally, we are joined by the organization that represents state officials from every US jurisdiction charged with overseeing the reliable provision of power, water, and telecommunications services to all Americans. Our submissions have made clear that access to the 6 GHz band is vital not only for properly monitoring our facilities and maintaining service, but also for emergency communications. We have worked diligently with the Federal Communications Commission (Commission) and various stakeholders in good faith to develop a technology focused framework that accommodates unlicensed use while fully protecting our operations from debilitating interference.

We appreciate aspects of the Commission's approach to opening this band to unlicensed use while seeking to protect incumbent licensees from interference, such as recognizing that further study is required before very low power devices can enter the band and that Automated Frequency Coordination (AFC) is necessary for standard power outdoor and indoor devices.

Robust AFC is a key tool to protecting our networks. However, the record developed by the unlicensed stakeholders in the proceeding does not support a conclusion that unlicensed operations can be introduced in the band – either indoors or outdoors – without causing harmful interference to incumbents, unless subject to a robust AFC. The record shows that millions of devices operating according to the parameters proposed in the Draft Order would inevitably cause harmful interference to licensed use of the band supporting public safety, critical infrastructure, and core communications networks, including 911 calls.

The Commission cannot protect public safety and critical incumbent operations from harmful interference by simply reducing power limits from the level initially proposed by the unlicensed community – an AFC that can direct unlicensed devices to operate only on particular 6 GHz frequencies, depending on a device's particular location, is imperative.

To that end, a robust AFC system should identify the frequencies on which unlicensed devices will not interfere with licensed operations and provide a means of recourse and enforcement with respect to interference protection.

An AFC system for indoor operations could be simple, virtually invisible to consumers, and could be

readily implemented. Indeed, work to develop an AFC for indoor operations is already underway in the WInnForum, an existing multi-stakeholder group that has worked successfully on similar issues in the past. To protect fixed service operations, the AFC would identify the frequencies available for unlicensed operations in the device's reported location, based on publicly available information in the Commission's existing licensing database. Further, if implemented properly, an AFC system would provide an effective enforcement mechanism to eliminate any interference that does occur.

Without an AFC system, the Commission would lack a mechanism to direct unlicensed devices to non-interfering channels and would have no way to shut down such devices that interfere with incumbent operations. Without this backstop, the Commission would make critical, and often life-saving, services vulnerable to harmful interference. Commission action to permit unlicensed operations that would harmfully interfere with licensed uses is barred by Section 301 of the Communications Act, as implemented by the Commission's Part 15 rules. That fact remains true, regardless of whether the probability of such interference is low.

We therefore urge the Commission to chart a different course in the Final Order and require an AFC system to govern the indoor and outdoor operation of unlicensed devices in the 6 GHz Band at all power levels. In addition, the Commission must ensure that the AFC and associated device-based requirements have the actual and proven ability both to prevent harmful interference before it occurs and to immediately respond to and eliminate harmful interference that does occur.

While we support the Draft Order's recommendation of a multi-stakeholder group to work out technological issues with deployment, we encourage the Commission to strengthen the language in its Final Order and direct its Office of Engineering and Technology to participate in the group in a more proactive manner than currently is suggested by the text of the Draft Order to ensure development of a truly effective AFC that prevents harmful interference to incumbent operations. With specific direction from the Commission, and with all interested incumbents and other stakeholders adequately represented, the multi-stakeholder effort can focus on developing technical solutions that will permit use of unlicensed devices in the 6 GHz Band while also protecting mission-critical operations.

Sincerely,



/s/ Ian Jefferies
President and Chief Executive Officer,
American Association of Railroads



/s/ Matthew J. Agen
Assistant General Counsel,
American Gas Association



/s/Suzanne Lemieux
Manager, Operations Security &
Emergency Response Policy |
Corporate Policy,
American Petroleum Institute







/s/ Desmarie Waterhouse
Vice President of Government
Relations and Counsel,
American Public Power Association

/s/ Alexi Maltas
Senior Vice President & General
Counsel,
Competitive Carriers Association

/s/ Scott K. Bergmann Senior Vice President, Regulatory Affairs, CTIA



/s/ Emily S. Fisher
General Counsel,
Edison Electric Institute



/s/ Todd A. Snitchler President & CEO, Electric Power Supply Association



/s/ Chief Gary Ludwig
President and Chairman of the Board,
International Association of Fire
Chiefs



/s/ J. Bradford Ramsay
General Counsel,
National Association of Regulatory
Utility Commissioners



/s/ Maria Korsnick
President and CEO,
Nuclear Energy Institute



/s/ Ralph A. Haller
Chairman,
National Public Safety
Telecommunications Council



/s/ Brian M. O'Hara
Senior Director Regulatory Issues —
Telecom & Broadband,
National Rural Electric Cooperative
Associations (NRECA)



/s/ Brett Kilbourne
Vice President Policy and General
Counsel,
Utilities Technology Council