Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
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
	)	

REPLY COMMENTS
OF THE
ENTERPRISE WIRELESS ALLIANCE

The Enterprise Wireless Alliance ("EWA") respectfully submits its Reply Comments in response to the Third Further Notice of Proposed Rulemaking ("3rd FNPRM") in the above-identified proceedings.[1] On behalf of its many members that rely on 6 GHz microwave systems in providing critical services to the American public, EWA has participated in these proceedings individually and in joint filings with other parties with similar constituencies. It has never opposed the introduction of unlicensed use in the 6 GHz band, but has focused consistently on rules that will allow licensed and unlicensed operations to co-exist without experiencing harmful interference as defined in Section 2.1.

The record in these proceedings is extensive. It includes multiple technical studies including the Monte Carlo simulations on which the Federal Communications Commission ("FCC") relied in adopting its rules. The numerous real-world analyses submitted by 6 GHz licensees and their representatives were discounted by the FCC as representing "corner cases" unlikely to be experienced in any but the most extreme situations.

[1] *Unlicensed Use of the 6 GHz Band; Expanding Flexible Use in Mid-Band Spectrum Between 3.7 and 24 GHz*, Fourth Report and Order and Third Further Notice of Proposed Rulemaking, ET Docket No. 18-295, GN Docket No. 17-183, 91 FR 8173 (2026).

EWA agrees that revisiting analyses already considered and rejected by the FCC would be unproductive. However, it assumes serious consideration will be given to the report released by the U.S. Department of Energy ("DOE"), Office of Cybersecurity, Energy Security, and Emergency Response that documented the results of a study conducted by DOE's Idaho National Laboratory ("INL") about potential interference to 6 GHz microwave facilities from outdoor unlicensed 6 GHz devices,[2] which results have been described in filings in these proceedings by the Utilities Technology Council ("UTC")[3] and by the Fixed Wireless Communications Coalition ("FWCC").[4]

The data in the DOE Report reveals two critical factors affecting interference protection for microwave systems. First, the propagation model used in the Automated Frequency Coordination ("AFC") process that is intended to protect those incumbent systems is severely under-protective when there is line-of-sight from the unlicensed device to the centerline of the microwave path. Second, contrary to findings relied upon by the FCC, the DOE Report concluded there is an additive interference effect in defined instances, which must be taken into account in the AFC model. The details of the tests underpinning the DOE Report, tests conducted jointly by INL, University of Notre Dame, Lockard & White, Electric Power Research Institute, Southern Company, and AT&T, are set out again in a recent *ex parte* filing from UTC.[5] These findings strongly suggest the current AFC propagation models must be re-evaluated and revised to provide the necessary interference protection to incumbent microwave links.

[2] DOE CESER Interference Study: Field Experiments Report, INL/RPT-2-83645 (Oct. 2025) ("DOE Report").
[3] *See* Letter from Brett Kilbourne, Senior Vice President Policy and General Counsel, UTC to Marlene H. Dortch, Secretary, FCC, ET Docket No. 18-295 and GN Docket No. 17-183 (Jan. 22, 2026); *see also* UTC Comments filed Mar. 23, 2026.
[4] *See* FWCC Comments filed Mar. 23, 2026.
[5] *See* Letter from Brett Kilbourne, Senior Vice President Policy and General Counsel, UTC to Marlene H. Dortch, Secretary, FCC, ET Docket No. 18-295, GN Docket No. 17-183 and other proceedings (Apr. 9, 2026).

The 3rd FNPRM also proposes to exempt cruise ships from its prohibition against shipborne LPI access points in response to a recommendation from Cisco Systems ("Cisco").[6] Cisco stated, "there is insufficient spectrum available in large congested indoor common areas of cruise ships, such as restaurants, casinos, theaters, and promenades[,] [which] can impact Wi-Fi performance,"[7] which it explained leads to increased co-channel and adjacent channel interference.

The FCC agreed, stating: "We appreciate the need for additional spectrum for unlicensed device operation on board cruise ships considering that many of these ships have thousands of passengers contained within a relatively small footprint."[8] Its proposed definition of cruise ships comes from Title 33 of the Code of Federal Regulation, Navigation and Navigable Waters, Subsection 101, Maritime Security General:

> Cruise Ship means any vessel over 100 gross register tons, carrying more than 12 passengers for hire which makes voyages lasting more than 24 hours, of which any part is on the high seas.[9]

However appropriate that definition is for regulations related to navigation and navigable waters, the FCC itself recognized it may be unnecessarily inclusive for purposes of unlicensed 6 GHz spectrum: "Would specifying a larger number of passengers in the cruise ship definition be appropriate because only larger cruise ships will have a need for increased Wi-Fi spectrum?"[10] A "cruise ship" carrying as few as twelve passengers would not experience the congestion cited by Cisco and likely would not have the structural protections such as thick metal walls the FCC credits with providing interference protection for Earth Exploration Satellite Service operations or for 6 GHz microwave links.

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[6] 3rd FNPRM at ¶ 176.
[7] Cisco Comments at 5.
[8] 3rd FNPRM at ¶ 176.
[9] 33 CFR § 101.105.
[10] 3rd FNPRM at ¶ 178.

The FWCC Comments highlight the reality of what most would classify as cruise ships, those more likely to have the Wi-Fi congestion Cisco believes would be addressed by allowing the use of 6 GHz LPI access points:

> The kinds of ships most people likely think of when they hear the term cruise ship can be 700 to more than 1,800 times larger than a 100 ton vessel. For example, Carnival's smallest cruise ship, Carnival Elation, comes in at 71,909 gross registered tons and can carry more than 2,600 passengers. Carnival's largest ships, the Excel class, clock in around 180,000 gross registered tons, and Carnival reportedly has plans for a new class of ships measuring 230,000 gross registered tons, more than 2,300 times the size of a 100-ton vessels.[11]

The minimum criterion should be the one proposed by FWCC of at least 500 or more passengers.[12]

The American Petroleum Institute ("API") has proposed an appropriate and important limitation on the use of 6 GHz LPI access points on cruise ships of any size within a defined section of the Gulf of America ("GOA"). In what it defines as the Gulf of America Energy Operations Area ("GOAEOA"), the U.S. oil and natural gas industries make intensive use of 6 GHz links to create broadband RF systems with the high reliability (99.9% or greater) essential for the safety of their crews and their highly technical production activities.[13] Among other concerns is the fact that shipboard access points may be deployed near doors and windows that do not have the structural protections assumed by Cisco and the FCC.

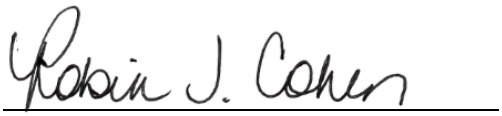
Cruise ships are familiar with myriad regulations that define where and under what conditions they are permitted to operate. Prohibiting the use of 6 GHz LPI access points in the GOAEOA, while allowing the use of other unlicensed bands, would be an appropriate balancing of the needs of the nation's energy providers and those of the cruising public.

[11] FWCC Comments at 10 (footnotes omitted).
[12] *Id*.
[13] API Comments at 3.

EWA urges the FCC to consider the DOE Report in the ongoing refinement of AFC propagation models and to modify its rules regarding 6 GHz LPI access points on cruise ships consistent with the recommendations of FWCC and API addressed herein.

Respectfully submitted,

ENTERPRISE WIRELESS ALLIANCE

By: 

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