

**BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554**

In the Matter of)	
)	
Improving Spectrum Use in the 800)	RM-11572
MHz Band Between 854-861/809-)	
816 MHz)	

To: The Federal Communications Commission

**REPLY COMMENTS
OF THE
AMERICAN PETROLEUM INSTITUTE**

The American Petroleum Institute (“API”), by its attorneys, is pleased to submit these Reply Comments regarding the Enterprise Wireless Association’s (“EWA”) Petition seeking to add interstitial 12.5 kHz channels in the 854-861/809-816 MHz (“800 MHz”) band.¹ Although API does not object to moving forward with a Notice of Proposed Rulemaking and soliciting public comment on EWA’s core proposal, there are a number of critical issues that the Commission must successfully address before EWA’s petition can be implemented safely in the 800 MHz band.

I. Preliminary Statement

API is a national trade association representing more than 400 companies involved in all phases of the petroleum and natural gas industries, including exploration, production, refining, marketing and transportation of petroleum, petroleum products and natural gas. Among its many activities, API acts on behalf of its members as spokesperson before federal and state regulatory

¹ See Improving Spectrum Use in the 800 MHz Band Between 854-861/809-816 MHz, *Public Notice*, DA 09-2183 (Rel. Oct. 8, 2009).

agencies. The Telecommunications Committee evaluates and develops responses to state and federal proposals affecting telecommunications facilities used in the oil and gas industries.

API's Telecommunications Committee is supported and sustained by companies that make use of a wide variety of wireline, wireless and satellite communications services on both a private and commercial basis. API member companies are authorized by the Commission to operate facilities in the Private Land Mobile Radio ("PLMR") service, including the 800 MHz band, among other telecommunications systems. API's members utilize PLMR systems, for example, to support the search for and production of oil and natural gas, to ensure the safe and efficient pipeline transmission of natural gas, crude oil and refined petroleum products, to process and refine these energy sources and to facilitate their ultimate delivery to industrial, commercial and residential customers.

The continued operation of PLMR communications systems employed by petroleum and natural gas companies is absolutely essential to protecting lives, health and property, both in connection with the day-to-day operations of these companies, as well as during responses to emergency incidents. These systems are integral to the production and delivery of our nation's energy resources to the public.

II. First and Foremost, in Evaluating EWA's Petition, the Commission Must Protect Current 800 MHz Band Operations.

The Land Mobile Communications Council states in its Comments "that frequency coordination and protection requirements [...] must be resolved to successfully implement the

EWA proposal while protecting incumbent licensees.”² UTC notes that “significant additional technical work is necessary” before EWA’s proposal can be properly evaluated.³

API wholeheartedly agrees with these cautionary statements. It is imperative that the Commission allow for further study of frequency coordination and interference protection requirements necessary to permit the use of 12.5 kHz channels in the 800 MHz band.

Any such study must include an industry developed/reviewed interference protection template that contemplates a broad mixture of analog and digital modulation techniques. The study must account for the effects of increasing noise floor levels, intermodulation generation from and among systems, and acceptable power for mobile/handset units. Issues associated with deploying 25 kHz and channels and 12.5 kHz offsets at the same location, such as hybrid combining and conventional cavity combining -- as witnessed in the 900 MHz band -- also should be explored.

Given that under EWA’s proposal analog and digital equipment, using both 12.5 kHz and 25 kHz channels, will be used in close proximity (both spectrally and geographically), the study also must account for all possible combinations of equipment and provide customized recommendations for each type of use.

The protection requirements must ensure a level of protection at least equal to the level currently afforded licensees under the current rules. There must also be unquestionable evidence that the addition of interstitial channels will not bring about a *déjà vu* scenario where chronic problems resulting from rebanding or similar scenarios produced by mixing incompatible technologies, are repeated.

² LMCC Comments at 1.

³ UTC Comments at 2.

In its Comments, UTC requests that these types of comprehensive studies be completed before the Commission issues a Notice of Proposed Rulemaking.⁴ Although API believes that a workable study could, as a practical matter, be conducted during the rulemaking proceeding, concluding such studies ahead of time and publishing the results in the NPRM may allow for more productive public comment. Whichever route the Commission ultimately chooses, the key is that study must be successfully completed before the Commission implements EWA's proposal.⁵

In addition to establishing appropriate interference protection/frequency coordination standards, the Commission must also build a record sufficient to ensure that any benefits from EWA's Petition outweigh the additional operational risk to incumbent operators. API believes that in heavily congested areas, adding interstitial 12.5 kHz channels will provide only minimal, if any, additional usable channels and may reduce channels available to incumbent licensees to add capacity to existing systems. Further, EWA's proposed channel splitting may be inconsistent with emerging higher bandwidth digital technologies being employed by many private radio users. The Commission also should keep in mind that current 800 MHz licensees are likely to see no benefit from EWA's proposal due to equipment compatibility issues, unless they invest in complete system replacement. If the Commission finds that these risks outweigh the benefits, the correct decision will be to deny EWA's Petition.

Any interstitial channel plan also must address the U.S. border areas, as well as the potential for frequency assignment conflicts. Without clarification of how interstitial channels

⁴ UTC Comments at 2.

⁵ API believes that the LMCC is uniquely situated to spearhead this study and supports the LMCC's Comments in this regard.

would be deployed in border areas or in the event of conflict, implementation of the plan would be incomplete.

API also is strongly opposed to any action that would reduce the amount of spectrum ultimately available to B/ILT entities, including expanding eligibility for 800 MHz B/ILT channels to all Part 90 eligible entities.⁶

III. CONCLUSION

EWA's Petition for interstitial channels in the 854-861/809-816 MHz band raises a number of potential issues that the Commission must satisfactorily resolve before implementation – not the least of which is frequency coordination and interference protection requirements. Although API does not object to the Commission issuing a Notice of Proposed Rulemaking to explore these issues, API urges the Commission to ensure that EWA's proposal adequately protects the operations of existing 800 MHz licensees.

Respectfully submitted,

**THE AMERICAN PETROLEUM
INSTITUTE**

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⁶ See UTC Comments at 3.