

**Before the
Federal Communications Commission
WASHINGTON, DC 20554**

In the Matter of)	
)	
Amendment of Part 90 of the Commission’s Rules and Policies for Applications and Licensing of Low Power Operations in the Private Land Mobile Radio 450-470 MHz Band)	WT Docket No. 01-146 RM-9966

**REPLY COMMENTS
OF THE
AMERICAN PETROLEUM INSTITUTE**

The American Petroleum Institute, by its attorneys and pursuant to Section 1.415 of the Rules and Regulations of the Federal Communications Commission (“Commission” or “FCC”), hereby respectfully submits the following Reply Comments regarding Comments filed by other participants in response to the Commission’s *Notice of Proposed Rulemaking* (“NPRM”) released on July 24, 2001 in the above-referenced proceeding.¹

¹ 66 Fed. Reg. 47435 (2001).

I. REPLY COMMENTS

1. The American Petroleum Institute (“API”), in its Comments submitted in this proceeding, emphasized the substantial need of petroleum and natural gas companies for a sufficient number of UHF channel pairs to accommodate low power communications systems. As proposed, only ten channel pairs in Group A would be available for nationwide use. Because a significant proportion of low power systems operated by oil and gas companies in the 450-470 MHz band are in areas outside the top urban areas (*e.g.*, petroleum refineries and chemical processing plants, oil drilling and production sites, and pipeline rights-of-way), API expressed concern that the ten nationwide channel pairs allocation would be inadequate to meet the often mission-critical communications requirements of these companies.

2. API argued in its Comments, among other things, that an across-the-board power limitation of 2 watts Transmitter Power Output (“TPO”), 20 watts Effective Radiated Power (“ERP”), and a maximum antenna height of 20 feet should be established for the Group A channel pairs; the existing 2 watts TPO limitation, which has been the low power limitation for decades, is sufficient to meet the needs of licensees and promotes greater frequency reuse. With respect to secondary operations on the Groups A and B channel pairs, API supported permitting non-voice operations on a secondary, non-interference basis on the Group A channels, as well as secondary voice applications on the Group B channel pairs.

A. API Concurs That There Is a Growing Need for Channels to Accommodate Data Systems

3. One argument set forth by many commenters in this proceeding was the growing

need for channels to accommodate licensees operating data systems.² API agrees with these commenters that data use has been expanding in recent years. As discussed in its Comments, oil and gas companies utilize fixed data applications in the UHF band that provide critical remote supervisory and control capabilities. API concurs that it is important to have a sufficient allocation to accommodate data systems, as well as voice communications.

B. The Allocation for Voice Operations on a Primary Basis on the Group A Channel Pairs Should Be Maintained

4. Although API agrees that there is a strong demand for additional channels to accommodate data applications, it wishes to strongly emphasize that oil and gas industry companies, as well as other licensees, still have a significant requirement for voice systems. API supports non-voice operations on the Group A channel pairs, however, only on a secondary, non-interference basis. While recognizing the importance of data systems – and as users of data systems themselves – oil and gas company licensees maintain that it is still essential to preserve an adequate allocation for voice operations.

5. API also underscores that the Group A channels should be reserved for voice operations only on a primary basis as proposed. Some commenters discussed permitting data operations on a primary basis on the Group A channels.³ Users of both voice and data systems have stressed the potential interference from data systems to critical voice operations, and vice versa - that is presumably the reason that the Group B channels were designated for non-voice use on a primary basis. While there may be some licensees that currently utilize channels

² See Comments of: the United Telecom Council; the Association of American Railroads; the Toro Company; Dataradio COR Ltd.; Motorola.

³ See Comments of: Dataradio COR Ltd. at pg. 6; Land Mobile Communications Council at pg. 8.

principally for data applications on a frequency designated for voice operations on a primary basis, that is not to say that data systems should be afforded primary status on the Group A channels. API, therefore, seeks to reiterate that it supports the use of Group A channels for data operations only on a secondary, non-interference basis to voice systems.

C. API Proposes an Allocation for Additional Data-Primary Channels in the 460-470 MHz Band

6. In its “refarming” proceeding, the Commission placed a freeze on applications for high power operations in the 460-470 MHz band pending resolution of issues affecting the Wireless Medical Telemetry Service.⁴ The Commission has stated that it will lift the application freeze on these channels by September 1, 2003.⁵ When this application freeze is lifted, existing low power systems operating on these channels will likely be displaced due to interference from new high power licensees. There are more than one hundred and fifty 12.5 kHz offset channel pairs in the 460-470 MHz band; API, therefore, suggests serious consideration be given to dedicating a portion of these channels for data-primary use.

7. API recognizes that such an allocation for data-primary channels in the 460-470 MHz segment of the UHF band is beyond the scope of matters that are being specifically addressed here. Moreover, such an allocation for data-primary channels in this segment will require consideration of whether there should be a designation for additional low power data channels, or whether the allocation should be targeted for high power operations only. API believes, however, that the growing need for data-primary channels does merit consideration, and it suggests exploring the 460-470 MHz band as a possible opportunity to accommodate the

⁴ See Amendment of Parts 2 and 95 of the Commission’s Rules to Create a Wireless Medical Telemetry Service, ET Docket No. 99-255, *Report and Order* (rel. June 12, 2000).

expanding number of users with data systems requirements. These issues could be explored in a Further Notice of Proposed Rulemaking in this proceeding.

D. Protected Contours for Data Systems

8. Some commenters proposed revisions to Section 90.187 of the Commission's Rules and Regulations to include protection for spectrally efficient data systems, similar to those applicable to trunked voice operations.⁶ In its Comments, API did not oppose continuous data transmission on the Group B channels; however, API agrees that these systems do not have the monitoring capabilities of voice systems and can cause significant harmful interference to the operations of other licensees. API, therefore, supports the use of protected contours for continuous transmission data systems similar, if not identical to, the protection provided trunked voice systems. In the Fifth Memorandum Opinion and Order released in the "refarming" proceeding, the Commission directed the frequency coordinators to develop and submit a common analytical method for determining contour overlap for adjacent channel systems on the formerly exclusive Power, Petroleum, Railroad and Automobile Emergency Radio Services channels.⁷ This type of methodology, as adopted, should apply to both trunked voice and continuous transmission data systems.

9. API notes that the revisions to Section 90.187 proposed by commenters suggest that continuous carrier data and digital operations are spectrally-efficient per se; API points out that these systems are not necessarily spectrally efficient. As clarification, a trunked voice

⁵ See Public Notice, DA 00-1360 (rel. June 29, 2000).

⁶ See Comments of: the United Telecom Council; Motorola. 47 C.F.R. § 90.187.

⁷ See Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Radio Services and Modify the Policies Governing Them, PR Docket No. 92-235, *Fifth Memorandum Opinion and Order*, at ¶¶ 6-8 (rel. Dec. 29, 2000). The values for determining contour overlap of co-channel

system is considered spectrally efficient compared with a conventional system because it permits channel reuse by multiple users on the system to avoid idle time when a channel is not being fully utilized. Although a channel utilized for continuous data transmission also avoids idle time on a channel, it is not necessarily more efficient; unlike trunked voice operations, in the context of continuous transmission data operations there is only one user making use of the channel. Therefore, while API agrees with the use of protected contours for both voice and continuous transmission data systems, it also wishes to clarify that there should not be a blanket description of continuous transmission or protected digital data systems as spectrally efficient.

E. Miscellaneous Issues

10. In addition, API reiterates that the high power systems erroneously licensed on the designated low power offset channels should be removed from those frequencies.⁸ While some commenters advocated grandfathering these licensees, API emphasizes that permitting continued operation of these systems could significantly reduce the number of low power channels available throughout many geographic areas. As these Reply Comments reflect, commenters believe there is a need for additional low power channels for both voice and data applications; grandfathering high power licensees on these frequencies would only serve to further reduce the already scarce number of highly-sought-after low power channel pairs.

II. CONCLUSION

11. API agrees that there is a growing demand for data applications; however, this growth should not overshadow the existing reality that there is also a continuing need for voice

operations are those set forth in Section 90.187 of the Commission's Rules and Regulations. Id. ¶ 7.

systems. Consistent with its “refarming” proceeding, the FCC should seek to promote spectrum efficiency to effectively accommodate the needs of users of low power systems. In that regard, the Commission is tasked with balancing the need for both voice and non-voice applications on the low power UHF channel pairs.

WHEREFORE, THE PREMISES CONSIDERED, the American Petroleum Institute respectfully submits the foregoing Reply Comments and urges the Federal Communications Commission to act in a manner consistent with the views expressed herein.

Respectfully Submitted,

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⁸ See also Comments of: the Toro Company.