

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554**

In the Matter of)	
)	
Reassessment of Federal Communications Commission Radiofrequency Exposure Limits and Policies)	ET Docket No. 13-84
)	
Proposed Changes in the Commission’s Rules Regarding Human Exposure to Radiofrequency Electromagnetic Fields)	ET Docket No. 03-137
)	

**COMMENTS OF
THE NATIONAL ASSOCIATION OF BROADCASTERS**

I. Introduction

Through these comments, the National Association of Broadcasters (NAB)¹ responds to the Federal Communication Commission’s (Commission or FCC) First Report and Order (Order), Further Notice of Proposed Rulemaking (Further Notice) and Notice of Inquiry (NOI) (collectively, “Notices”) regarding human exposure to radiofrequency (RF) electromagnetic fields.² NAB has been an active participant in FCC proceedings on this issue for several decades. For even longer, TV and radio

¹ NAB is a nonprofit trade association that advocates on behalf of local radio and television stations and broadcast networks before Congress, the FCC and other federal agencies, and the courts.

² First Report and Order, Further Notice of Proposed Rulemaking, and Notice of Inquiry, *Reassessment of Federal Communications Commission Radiofrequency Exposure Limits; Proposed Changes in the Commission’s Rules Regarding Human Exposure to Radiofrequency Electromagnetic Fields*, ET Docket Nos. 13-84 and 03-137 (rel. March 29, 2013).

broadcasters have taken necessary safety precautions to ensure that both their employees and the public are protected against harmful RF emissions.

At the outset, NAB notes that very little has changed with regard to RF emissions in the broadcast services since the Commission's last major examination of RF exposure issues in the 1990s. We are not aware, for example, of any increased RF exposure issues due to the transition to digital television. Absent new evidence of a rise in RF exposure issues related to broadcast facilities, there is no basis to make radical changes to RF exposure rules for a broadcast industry with a strong safety record.

In these comments, we explain why proposed changes to the exposure limits for "transient persons" in controlled environments are unwarranted. Specifically, NAB believes that the Commission's existing rules for transient persons provide practicable and clear standards for licensees and protection for members of the public. The Further Notice's proposed rules, on the other hand, will create confusion and implementation problems for broadcasters and could severely limit public access near RF sources for no apparent reason.

II. The Record Does Not Support Proposed Changes to Exposure Limits for Transient Persons

Existing RF guidelines incorporate two levels of exposure limits – one for general population/uncontrolled exposure and one for occupational/controlled exposure.³ These limits are effectively a combination of joint guidelines from the American National Standards Institute and the Institute of Electrical and Electronic Engineers (ANSI/IEEE) and recommendations from a 1986 report issued by the National Council on Radiation

³ See 47 C.F.R. § 1.1310.

Protection and Measurements (NCRP).⁴ The less restrictive occupational/controlled exposure limit – which is still “set well below the threshold considered by experts to be potentially harmful”⁵ – applies generally where employees have knowledge of their potential exposure and the means to control their exposure. Under the Order recently adopted, for example, workers in controlled environments must be made aware of their possible exposure by verbal or written communication and must receive training on how they can control their exposure.⁶ The stricter general population/uncontrolled exposure limits typically apply to situations where members of the public or employees have no or little knowledge of potential exposure and little means to mitigate their exposure.

Since 1996, Commission rules also apply occupational/controlled exposure limits to “transient” exposure, which includes “incidental passage through a location where exposure levels may be above the general population/uncontrolled limits.”⁷ Transient individuals could include employees who are untrained regarding RF exposure or members of the public. These individuals must be informed, either verbally or via written communications such as signs, that they may be exposed to RF emissions and their exposure must be brief and non-repetitive.⁸ The transient exception only applies to

⁴ See Report and Order, *Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation*, 11 FCC Rcd 15123 (rel. Aug. 1, 1996) at ¶ 42 (“1996 Order”).

⁵ Notice of Proposed Rulemaking, *Proposed Changes in the Commission's Rules Regarding Human Exposure to Radiofrequency Electromagnetic Fields*, 18 FCC Rcd 13187 (rel. June 26, 2003) at ¶ 36 (“2003 NPRM”).

⁶ See Notices at ¶¶ 75-76.

⁷ 1996 Order at ¶ 43.

⁸ See Notices at Appendix A, § 1.1310(e)(1).

“controlled” environments, such as “fenced areas near tower sites or antennas on rooftops with locked access.”⁹

For more than 15 years, these categories of exposure limits have provided appropriate and understandable guidance for broadcast stations. As the NCRP Report explains, the transient exposure exception recognizes “special circumstances” whereby brief and non-repetitive exposure to an RF source is allowed so as not to “unnecessarily inhibit activities.”¹⁰ This balance makes sense. Brief, non-repetitive exposure to RF emissions at occupational limits does not raise public health concerns. There is no reason this type of exposure should inhibit activities ranging from air conditioning repair near an antenna to tourists standing on an observation deck of a tall building, particularly assuming those transient persons are made aware of possible exposure.

Although broadcasters consider current FCC rules on transient exposure to be clear and carefully balanced, the Further Notice suggests the need to “clarify the applicability of transient exposure and how to apply [the] exposure limits in controlled environments.”¹¹ This asserted need for clarification is, itself, confusing. The Further Notice claims, without attribution, that during “the course of the proceeding, it became apparent that the [rules for transient exposure limits] could be subject to differing interpretations.”¹² We respectfully disagree. We believe the transient exposure rules, as currently drafted, provide understandable and practicable guidance to broadcasters and

⁹ Notices at ¶ 179.

¹⁰ National Council on Radiation Protection and Measurements (NCRP), *Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields*, NCRP Report No. 86, Section 17.4.4. (1986) (“NCRP Report”).

¹¹ Notices at ¶ 178.

¹² *Id.*

other licensees. Nothing in the record suggests widespread confusion on transient exposure levels.

Moreover, while clarifying a rule, or definitions within a rule,¹³ is usually positive, in this case the net result of the proposed “clarification” is a far more confusing and decidedly more onerous rule on exposure limits for transient persons. Rather than clarify or revise existing rules, the Further Notice essentially proposes a complete reversal of current standards. Instead of applying the occupational/controlled limits to transient persons, as the Commission has done for nearly two decades consistent with NCRP recommendations,¹⁴ the proposal would instead apply a newly created, and effectively undefined, “general population/controlled” limit.¹⁵ Without an evidentiary basis, the proposed new rules would sharply reduce the allowable RF exposure limits for transient persons – likely requiring significant and costly changes to the way licensees comply with RF exposure rules.

The purported confusion that the Further Notice seeks to address is the difference between “time-averaging” for occupational versus general population exposure limits. Occupational/controlled exposure limits are measured using six-minute time-averaging criteria, while general population/uncontrolled exposure limits are measured using 30-minute time-averaging criteria. Under existing FCC rules, when a

¹³ Section D. 1. of the Further Notice starts with the statement that the Commission’s definition of “transient persons” in section 1.1310 of its rules may be “subject to varying interpretations.” ¶ 177. In fact, there is no definition of “transient persons” in section 1.1310.

¹⁴ See NCRP Report at 17.4.4. (“Because only small groups of the population would be exposed under [transient] conditions, and almost certainly not on a repeated basis, the occupational exposure limits are permitted for such cases.”)

¹⁵ Notices at ¶ 181.

person is “transient” near an RF emitting source in a controlled environment, “[l]imits for occupational/controlled exposure also apply.”¹⁶ The most logical reading of Section 1.1310 would apply all aspects of the occupational/controlled exposure limits to transient exposure, including the six-minute time-averaging criterion for measuring those limits.¹⁷ Certainly, NAB and broadcasters have assumed since 1996 that the FCC’s rules apply the six-minute time averaging criterion with occupational/exposure limits to transient situations.¹⁸

In any event, if the Commission now feels its long-standing rules need to be clarified, then it should revise those regulations to explicitly state that the six-minute time-averaging criterion applies for measuring transient exposure.¹⁹ This minor change is by far the simplest and most direct way to address the Further Notice’s concerns about possible lack of clarity with time-averaging.

Instead of this straightforward approach, however, the Further Notice’s proposal goes in an entirely different direction – ultimately creating a complicated new standard

¹⁶ 47 C.F.R. § 1.1310, Table 1, Note 1.

¹⁷ Part (A) of Table One sets forth the “Limits for Occupational/Controlled Exposures” and specifies the “Averaging time (minutes)” as “6.” 47 C.F.R. § 1.1310, Table 1.

¹⁸ NAB is puzzled by the Further Notice’s focus on the differing possible interpretations of the time-averaging issue in the 1986 NCRP Report. See Notices at ¶¶ 179-180. While that report, particularly Section 17.4.3, is not a model of clarity, we believe the Further Notice’s reading of this Report fails to give proper effect to the intent of Section 17.4.4. (“Special Circumstances for Population Exposure”), which provides that the recommended limit for “brief and non-repetitive” (i.e., transient) exposure is the occupational exposure limit; other sections set forth those occupational exposure limits and state that they are to be measured using the six-minute time-averaging criterion. See NCRP Report at §§ 17.4.1.1.; 17.4.3. But regardless of the clarity of the provisions of the 1986 NCRP Report, broadcasters have considered the FCC’s 1996 rules to be clear on this point.

¹⁹ We agree, of course, that 30-minute time-averaging at occupational limits for transient persons is too long, potentially exposing members of the general public to a dosage of RF emissions higher than that of trained employees.

for transient situations that in totality is more restrictive than even the current standard for general population/uncontrolled situations.²⁰ The very low general population/uncontrolled exposure limits are based, in part, on the assumption that exposed individuals may be continuously exposed to RF emissions of which they have little or no knowledge and/or may not be able to control their exposure.²¹ This is not the case for transient persons. Indeed, under existing rules and by definition, transient persons cannot be exposed continuously and must be made aware of their potential exposure.²² With these safeguards in place, it makes sense to place transient persons in the same category as occupational personnel, as the rules currently do.

The Commission has previously acknowledged that occupational/controlled RF exposure limits are “set well below the threshold considered by experts to be potentially harmful.”²³ Nothing in the record suggests that transient exposure to RF emissions at occupational levels in controlled environments is harmful to humans. The Further Notice does not cite and NAB is not aware of any studies since 1996 suggesting such harms. Thus, there is no compelling reason to significantly change existing rules on transient exposure, as the Further Notice proposes.

Finally, the Further Notice proposes that transient persons should be supervised “by trained occupational personnel within the controlled area where the general

²⁰ See Notices at ¶ 181 (“[W]e propose the definition of transient exposure with respect to averaging time to mean general population/“controlled,” that is, transient exposure should not exceed the general population limit considering 30-minute time averaging in a controlled environment. Additionally, we propose that transient exposure should not exceed the continuous occupational limit at any time, accounting for source-based time averaging.”).

²¹ See 2003 NPRM at ¶¶ 36-38.

²² See 47 C.F.R. § 1.1310, Table 1, Note 1.

²³ 2003 NPRM at ¶ 36.

population limit is exceeded.”²⁴ NAB opposes this proposal. While the Further Notice suggests this rule could provide “compliance certainty” for licensees, it is both unnecessary and burdensome. In many cases, it would be impractical to ensure trained employees “supervise” a transient person, or group. Any compliance certainty this proposal might provide is undercut by a host of open questions, including what qualifies as “supervision.” The proposal goes far beyond recommendations in the NCRP Report or the ANSI/IEEE guidelines, without any new evidence of potential harm to transient persons. Thus, the Commission should reject this proposal.

²⁴ Notices at ¶ 182.

III. Conclusion

There is no compelling reason – either regulatory or scientific – to substantially change existing exposure limits or rules for “transient persons.” NAB recommends that the Commission maintain existing rules and reject the new proposals to significantly alter current standards, which will create unnecessary compliance confusion and greatly limit public access near RF sources.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Scott Goodwin". The signature is stylized and cursive.

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