

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

In the Matter of)	
)	
Creation of a)	MM Docket No. 99-25
Low Power Radio Service)	RM-9208
)	RM-9242

To: The Commission

**OPPOSITION TO
PETITIONS FOR RECONSIDERATION**

Introduction

National Public Radio, Inc. ("NPR") hereby opposes the Petitions for Reconsideration filed in response to the Report and Order in the above-captioned matter¹ seeking to eliminate the second adjacency interference protection and to establish 1000 watt low power FM stations.²

Best known for producing such noncommercial programming as *All Things Considered*, *Morning Edition*, *Talk of the Nation*, and *Performance Today*, NPR is a non-profit membership organization of more than 600 full-service public radio stations licensed to community licensees,

¹ Creation of Low Power Radio Service, Report and Order, MM Docket 99-25, RM-9208, RM-9242, 65 Fed. Reg. 7616 (Feb. 15, 2000) [hereinafter "Report and Order"].

² Petition for Reconsideration of United Church of Christ, Office of Communication, Inc; National Council of Churches of Christ in the USA, Communication Commission; General Board of Global Ministries of the United Methodist Church; Department for Communication of the Evangelical Lutheran Church in America; Civil Rights Forum; Libraries for the Future; and Consumers Union, MM Docket No. 99-25 (filed Mar. 16, 2000) [hereinafter "MAP Petition"]; Petition for Reconsideration of J. Rodger Skinner, MM Docket No. 99-25 (filed Feb. 19, 2000) [hereinafter "Skinner Petition"].

local school boards and other local institutions, and private and public colleges and universities. Specifically, 78 of NPR's member licensees are local communities, including several Indian tribes, 8 are school boards, 11 are state entities, 27 are private universities, and 146 are state universities. NPR member stations are significant producers of local news, informational, and cultural programming, typically devoting a majority of their broadcast days to local programming.

NPR has consistently supported the creation of new opportunities for additional noncommercial educational voices and programming, including through low power broadcasting.³ Last August, we filed detailed Comments, including comprehensive engineering data, in response to the Notice of Proposed Rulemaking in this proceeding because it would have needlessly jeopardized noncommercial educational services.⁴ We recognize the Commission's effort in the Report and Order to minimize the harm associated with its initial proposal. We filed a Petition for Reconsideration seeking appropriate mechanisms to address and avoid instances of harmful interference that result from the relaxation of longstanding interference protections. Establishing the low power FM service in a manner that permits the amelioration of interference is simply responsible spectrum stewardship.

To that end, we again urge the Commission to expeditiously implement the measures proposed in NPR's Petition for Reconsideration in advance of commencing the process of

³ See Comments of National Public Radio, Inc., MM Docket No. 99-25, at 4-9 (filed Aug. 2, 1999) [hereinafter "NPR Comments "]. See also Comments of National Public Radio, Amendment of the Commission's Rules With Regard to the Establishment and Regulation of New Digital Audio Radio Services, GEN Docket No. 90-357, at 38 (filed Nov. 13, 1990) ("Many more Americans, including the elderly, ethnic minorities, children, and the handicapped can be better served if we can increase the number and diversity of public radio stations.")

⁴ Creation of Low Power Radio Service, Notice of Proposed Rulemaking, MM Docket 99-25, RM-9208, RM-9242, 14 FCC Rcd 2471 (1999) [hereinafter "LPFM NPRM"].

licensing LPFM stations.⁵ Moreover, there is no justification for further weakening the integrity of the FM band by now authorizing 1000 watt stations and low power FM stations generally on second adjacent channels to full power stations, and the Commission should reject the Petitions for Reconsideration to the extent they seek such changes to the Report and Order.

**The Commission Should Reject Proposals
To Eliminate Additional Interference Protections
And To Authorize Higher Powered LPFM Stations**

The MAP and Skinner petitions both seek the elimination of the long-standing second adjacency protection as a means of increasing the number of new low power stations that may be licensed. In attempting to justify this end, the MAP Petition focuses nominally on technical issues, while the Skinner Petition posits a novel legal theory based on the Regulatory Flexibility Act.⁶

The Skinner Petition faults the Report and Order for negatively affecting "small businesses" by failing to allow low power stations to operate at 1000 watts. It is forced to admit, however, that "most existing radio stations, as well as newly proposed LPFM stations," fall under the definition of "small business" in the Regulatory Flexibility Act.⁷ That fact was apparently enough to dissuade the Office of Advocacy of the Small Business Administration from pursuing the matter.⁸ Not so Mr. Skinner. Nonetheless, he is unable to explain why the Act requires the Commission to authorize significantly more low power stations, at higher power, all at the

⁵ See Motion for Stay, MM Docket No. 99-25 (filed Mar. 16, 2000).

⁶ 5 U.S.C. § 601.

⁷ Skinner Petition at 3.

⁸ Id.

expense of existing small businesses.

The MAP Petition is similarly without merit. In declaring that LPFM can "safely" be licensed on second adjacent channels, the Map Petition touts the conclusion of its paid consultant and a laboratory test commissioned by MAP and several other organizations that contained numerous methodological flaws.⁹ The MAP Petition then offers to highlight the "evidence" it

⁹ MAP Petition at 6. The consultant's supposed "objective", "technical" analysis is remarkable for its failure in both regards. See *Wireless Valley Communications, Technical Analysis of the Low Power FM Service* (Aug. 26, 1999). For instance, while the consultant's analysis purports to "referee" the four receiver studies, id. at 1, it addresses the representativeness of the NPR receiver sample, but not that of the FCC or the Broadcast Signal Labs ("BSL") samples. Id. at 25-29. Moreover, because the NPR receiver sample is said to have over-weighted certain categories of receivers, including automobile and other receivers generally thought to perform well, the entire study, including the data associated with individual receivers and receiver types, "should be taken with a grain of salt." Id. at 29. The failure of the FCC or BSL to describe their radios in sufficient detail to categorize them, on the other hand, apparently does nothing to undermine the data or findings in those studies and is simply noted in a footnote. Id. at 27 n.26.

Likewise, the "analysis" is anything but technical. Putting aside the fact that the consultant apparently conducted no laboratory analysis of its own, the central conclusion appears to be that consumers are satisfied with degraded reception currently so the FCC, through the establishment of low power stations, can safely introduce some additional measure of interference. See id. at 16 ("[T]he FCC propagation models for FM station licensing . . . do a remarkably good job as there has not been a public outcry with regards to interference in today's FM band. . ."). The consultant's disregard for sound quality is not surprising because its apparent expertise is in two-way wireless communications, which is concerned with the basic intelligibility of the communications. See www.wvcomm.com/us.htm. Broadcast engineering, on the other hand, considers the sound quality of the communications, including issues of frequency response, stereophonic reproduction, and dynamic range.

The BSL testing, as NPR has previously noted, failed to establish any reference point of acceptable radio quality, rendering meaningless the conclusion that radio quality would not suffer as a result of low power operations on second and third adjacent channels. Reply Comments of National Public Radio, MM Docket No. 99-25, at 9 (filed Sept. 17, 1999) [hereinafter "NPR Reply Comments"]. In addition to questions about the test bed, the calibration of test equipment, and the test methodology, the BSL tests demonstrated that even the best receivers showed measurable increases in distortion in the presence of low levels of undesired signals. Id. at 10. Significantly, the BSL testing did confirm the particular susceptibility of "lightly processed" signals to interference. Id. at 11.

claims favors eliminating the second adjacency protection.

First, MAP asserts that most of the objections to eliminating the second and third adjacency protections were concerned with the proposed 1000 watt stations and that stations of 100 watts or less "are simply incapable of adding signals harmful to current broadcasts."¹⁰ The characterization of the record in this proceeding is demonstrably untrue. NPR's concerns throughout this proceeding have been about the interference harm of all of the proposed services to full power stations, particularly on the reserved spectrum and including radio reading services for the print-impaired, to translator service, and to the development of an effective digital radio transmission standard.¹¹ Moreover, NPR's Reply Comments detailed the breadth of concerns expressed by a wide number and variety of commenters.¹²

The assertion that a broadcast station is "simply incapable" of causing harmful interference is untrue as an elemental matter of physics. As noted by a former Commissioner, "it is axiomatic that for each new service introduced, interference to existing service is also introduced."¹³ Indeed, even the Report and Order admits that 10 watt and 100 watt stations will cause interference; the Commission simply asserts that affected listeners will benefit by the substitution of a new low power service for an existing, higher powered one.¹⁴

¹⁰ MAP Petition at 6-7.

¹¹ See NPR Comments at 9-27; NPR Reply Comments at 5-17.

¹² NPR Reply Comments at 23-24.

¹³ Modification of FM Broadcast Station Rules to Increase the Availability of Commercial FM Broadcast Assignments, BC Docket No. 80-90, 48 FR 29486, 29512 (1983) (Dissenting Statement of Commissioner James H. Quello).

¹⁴ Report and Order at ¶ 93.

Second, the MAP Petition complains that "by failing to lift second adjacent protection, the Commission drastically undercut the number of low power stations that will be authorized."¹⁵ While we appreciate MAP's bias in favor of "access," jeopardizing existing services through the wholesale elimination of interference protections in order to "find" enough spectrum for new services is irreconcilable with responsible management of the radio-frequency spectrum.

Third, the MAP Petition proclaims that its consultant's analysis of the various lab tests must be accepted at face value because "[t]he parties opposed to low power radio could find nothing substantively wrong with [it]." While NPR cannot credibly be characterized as an "opponent of low power radio," nor is it appropriate to characterize our silence, particularly after the pleading cycle had concluded, as an affirmative endorsement of the MAP Reply Comments.

Fourth, the MAP Petition asserts that "[t]he opponents of low power radio produced nothing undermining the technical feasibility of low power radio or of relaxing second adjacent protection."¹⁶ Putting aside the issue of who constitutes an "opponent of low power radio," it is true that low power radio is technically "feasible," as is the elimination of the second adjacency protection. NPR's objections, at least, are directed to the interference that low power stations are likely to pose to existing services and listeners, especially if both the second and third adjacency protections are removed. In that regard, the comprehensive laboratory testing commissioned by NPR, the Corporation for Public Broadcasting, and the Consumer Electronics Association provided substantial evidence that harmful interference will result.

Fifth, the MAP Petition asserts that LPFM poses no threat to the transition to digital

¹⁵ MAP Petition at 7.

¹⁶ Id. at 9.

radio.¹⁷ It bases this conclusion on a misstatement of the comments of one of the proponents of In-band, On-channel ("IBOC") digital audio broadcasting. Thus, USA Digital Radio is said to have expressed concern about interference only outside a station's protected service contour.¹⁸ Even a cursory examination of the USA Digital Radio pleading reveals a concern generally about interference associated with LPFM stations operating on second adjacent channels, immense concern about a "worst case scenario of LPFM stations located at the edge of coverage of the full power FM station," and a plea to defer establishing any LPFM service until more information about IBOC systems, including through field testing, is known.¹⁹ The other IBOC proponent, Lucent Digital Radio, voiced similar concerns.²⁰

Finally, the MAP Petition contends that the existence of grand-fathered short-spaced full powered stations provides "real world" proof that interference concerns are unfounded.²¹

As an initial matter, none of the short spaced stations operate in the reserved portion of

¹⁷ Id.

¹⁸ See id.

¹⁹ See Comments of USA Digital Radio, MM Docket No. 99-25, at 4-7 (filed Aug. 2, 1999). See also Reply Comments of USA Digital Radio, MM Docket No. 99-25 at 2 (filed Nov. 15, 1999) ("[U]rg[ing] the Commission to refrain from adopting any final rules for LPFM until it has completed the record in the DAB rulemaking proceeding" because "[t]he Commission needs information on the real world operation of IBOC systems in order to determine whether implementation of LPFM would effectively preclude an in-band solution for upgrading existing FM broadcasting.")

²⁰ See Comments of Lucent Technologies, Inc., MM Docket No. 99-25, at 10-11 (filed Aug. 2, 1999). See also Reply Comments of Lucent Technologies, Inc., MM Docket No. 99-25. at 6 (filed Nov. 16, 1999) (finding that "[c]hanges to the 2nd adjacent protection . . . would have important interference implications" and urging the Commission that "any changes to the interference protections permit only secondary [LPFM] operations").

²¹ MAP Petition at 9 (citing Report and Order at ¶ 74).

the FM band where public radio stations are both more tightly "packed" together and transmit lightly processed, and therefore more interference prone, signals.²² In television channel 6 markets, moreover, reserved FM band stations typically must operate with compromised, and therefore interference prone, facilities in order to avoid interference to the television channel 6 stations.

More generally, however, many of the short-spaced stations employ directional antennas and are otherwise engineered to minimize interference. Significantly, the Report and Order expressly forbids the use of directional antennas as an accommodation of the Commission's desire to license LPFM facilities to those generally without engineering or other technical expertise.²³

Finally, we are compelled to note the Commission's concession that, as a result of its management of the AM spectrum, that spectrum now suffers from "significant interference and degraded reception," precluding the licensing of any AM band LPFM stations.²⁴ If nothing else, the "real world" experience of AM band congestion and degraded audio fidelity justifies the Commission's decision not to further weaken its FM band interference protection standards.

²² See Petition for Reconsideration of National Public Radio, Inc., MM Docket No. 99-25, at 9-10 (filed Mar. 16, 2000).

²³ See Report and Order at ¶ 108.

²⁴ See LPFM NPRM at ¶¶ 15, 17; Report and Order at ¶ 56.

Conclusion

Based on the foregoing, the Commission should reject the Petitions for Reconsideration to the extent they seek the further elimination of existing interference protections and the establishment of 1000 watt low power FM stations.

Respectfully submitted,

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April 24, 2000

CERTIFICATE OF SERVICE

I, Gregory A. Lewis, hereby certify that a copy of the foregoing Opposition of National Public Radio, Inc. to Petitions for Reconsideration, was sent this 24th day of April, 2000, by first class mail, postage prepaid to the following:

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