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

In the Matter of	)	
	)	
	)	
Amendment of the AM and FM	)	Rulemaking Number RM-9242
Service Rules to authorize a	)	
Low Power FM Broadcasting Service	)	

To: The Commission

COMMENTS OF THOMAS DESMOND

I hereby respectfully submits the following additional comments in the above-captioned Notice of Proposed Rulemaking ("NPRM") relating to the creation of a low powered broadcasting service on the FM broadcast bands.

I. BACKGROUND

The FCC has solicited comments in regard to this NPRM, which was initiated in response to a petition proposing the amendment of the FM broadcast service rules to authorize a new radio service (hereinafter referred to as LPFM) ranging in power up to 3 kw. This proposal would require that the FCC eliminate or modify its technical rules pertaining to second and third adjacent spacing on the FM broadcast band.

I seek primarily to outline the reasons why he feels that a modification of the second and third adjacent spacing rules on the FM broadcast band is both viable and desirable. As a degreed Electrical Engineer (graduated cum laude fromWashington State University in 1984), I am qualified to discuss this issue.

In addition, I would also like to discuss some general issues involving the nature of the proposed LPFM service.

II. NEED FOR LPFM STATIONS ON 2ND & 3RD ADJACENT CHANNELS

I believe that the concept of LPFM is a good one, especially as proposed by the CRC (of whose petition I am a party), since it would allow access to the broadcast band to those who are currently shut out as a result of the cost of existing broadcast services or the lack of available spectrum. However, if the existing rules governing contour overlaps for second and third adjacent FM broadcast stations (interfering contour no more than 40 dB higher than protected contour of 54 to 60 dBu of the other station) is imposed on LPFM service, then LPFM stations will largely be limited to rural areas. Although an LPFM service in rural areas would still provide needed service, LPFM needs to be allowed into major metropolitan areas to achieve its full potential.

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III. CURRENT RULES REFLECT DATED TECHNOLOGY

Current spacing rules date back to a time when the state of the art for FM receivers was far inferior than it is today. An informal review of alternate channel selectivity specifications from the March 1998 buying guide issue of Stereo Review turned up the following results. 27 current moderate to mid-priced FM tuners and receivers ($200 to $500 for tuners, and $250 to $1,000 for receivers) had alternate channel selectivity specs that varied from 50 to 85 dB. The vast majority (24 of the 27) scored at or above 60 dB, with the median performance being 65 dB, and the average being 69.6 dB. It can be seen that the state of the art has moved well past the state of the art reflected by the FCC's current 2nd adjacent channel requirement, which assumes alternate channel selectivity performance of only 40 dB, significantly inferior to the performance of the worst of the tuners listed in the buying guide.

Now, an argument might be made that the FM spacing rules need to take into account the performance of the lowest performing tuners, and therefore no relaxation is appropriate. I reject this approach, and believes that the FCC has also rejected this approach in the past. For example, many low priced "Walkman" type radios and clock radios lack the sensitivity in their tuner sections to receive FM stations to the edge of their protected (54 to 60 dBu) contours. By this line of reasoning, the FCC should reduce the protected contours of FM stations to reflect the poor sensitivity of these low priced radios. Clearly, this would unrealistically limit the listening options of those possessing better radios and would be undesirable. Similarly, I note the existence of FM tuners that experience front end overload from signal levels far lower than what the FCC considers to be the level of "blanketing interference". (I can corroborate this from personal experience, having once driven a car whose FM tuner overloaded 25 km from the transmitter site of a class C FM station.) Again, the FCC has not modified its technical rules to reflect this lowest level of performance.

Similarly, I consider it realistic that the FCC revisit the guidelines for inteference from second and third adjacent channel separated FM stations, at least in the narrow context of the current LPFM rulemakings. I would contend that the current state of tuner technology suggests that 60 dB is a more realistic number than 40 dB. I further contend that for the power levels being considered for LPFM, the second and third adjacent channel contour overlaps provisions can be effectively omitted completely, with no more than neglible interference resulting. Using a 120 dBu contour (60 dB above the 60 dBu protected contour for Class C, C1, C2, C3, and A FM stations) for predicting the theoretical interfering contour of LPFM stations per the chart in 73.333, I obtain the following chart for power/HAAT versus distance to the theoretical interfering contour:

ERP	HAAT	DISTANCE
50 watts	100 meters	260 meters
100 watts	100 meters	310 meters
250 watts	100 meters	400 meters
500 watts	100 meters	470 meters
1.0 kw	100 meters	560 meters

Theoretical interfering contours this small are best ignored for any of the above power/HAAT combinations; the theoretical loss of service would be miniscule compared to loss of service caused by blanketing interference from even a class A FM station.

NOTE: Although I am aware that Rodger Skinner's petition has proposed LPFM stations operating with as much as 3.0 kw ERP at 100 meters HAAT, I have chosen not to include these power levels in the above chart for the simple reason that I am opposed to authorizing LPFM stations to operate with that much power, especially in urban areas.

IV. LACK OF INTERFERENCE FROM EXISTING 2ND/3RD ADJACENT SHORT SPACINGS

I am aware of a significant number of FM stations that do not meet the existing spacing and contour overlap requirements pertaining for second and third adjacent FM channels. One example that comes to my mind is that of KSJZ 93.3 Killeen, TX, and KLBJ 93.7 Austin, TX; these stations operate as omnidirectional Class C's with transmitter sites located only 50 km apart (well below the 105 km requirement that the FCC generally would impose for two Class C's) with little or no significant interference problems. The FCC acknowledged as much in last year's Report & Order on "Grandfathered Short-Spaced FM stations" (MM Docket No. 96-120, RM-7651, adapted on August 8, 1997) where it described second and third adjacent channel short spacing as posing only a "small risk of interference" when permitted for grandfathered short spaced FM stations. If the FCC acknowledges this as being a minor concern for stations operating with as much as 100 kw, then surely the risk of interference is effectively non-existent for LPFM stations operating with 1 kw or less.

V. GENERAL COMMENTS ON LPFM RULEMAKING

I believe that the petition by Rodger Skinner that is the trigger for RM-9242, although proposing a number of good ideas, is inadequate in several ways. Notably, the combination of relatively high power (3 kw ERP/100 meters HAAT is equal to many Class A FM stations) with a lack of programming requirements and guidelines to insure local content would result in a "me too" service which would end up being very similar to existing full powered stations, except for the ownership. In fact, I suspect that many of these stations would end up in LMAs with existing full powered stations. The end result would be a minimal increase in diversity of broadcast voices at best, with little unique or innovative programming coming out of these LPFM stations.

The CRC proposal to which I am a party is much superior in several respects, notably requirements for substantial amounts of local and public service programming. The CRC proposal also contains proposed maximum power levels that are much more realistic for an LPFM service. I have attached the text of the CRC petition to these comments as Appendix A, and would like to propose that the RM-9242 be amended to include these proposals for a realistic LPFM service designed to do more than just provide the petitioner with a new business opportunity.

I have previously commented on RM-9208, which proposes a micropower broadcast service, and merely wish here to reiterate my viewpoint that this micropower service, as modified per the comments, would make an excellent supplementary service to

LPFM, but should not be considered as a substitute. Therefore, I would strongly urge the commission to authorize both services.

VI. IN CONCLUSION

I would like to re-empathize his support of an LPFM service as a tool for providing access to radio broadcasting to those individuals and groups who are currently shut out by the high prices and concentration of ownership in full powered stations. The LPFM petition should be granted, albeit with significant modifications.

Respectfully submitted,

Thomas Desmond
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Appendix A

Following is the text of the CRC (Community Radio Coalition) LPFM petition, as received by the FCC on March 4, 1998.

PETITION FOR RULE MAKING

The Community Radio Coalition ("the petitioner") hereby respectfully requests that the rules for FM Broadcast Stations, Section 73, Subpart B, be amended to authorize a Low Power FM ("LPFM") Service on both the commercial and noncommercial portions of the FM broadcast spectrum. We feel that the LPFM service that we are proposing herein is a distinct and separate service from the microradio service proposed in RM-9208.

I. Background

1. As a result of the Telecommunications Reform Act of 1996, ownership of existing classes of AM and FM broadcast stations has been increasingly concentrated in a limited number of hands, with a resultant loss in the diversity of ownership, including a loss in the number of minority owners. Authorization of LPFM with strict ownership limits and limited operating power would provide a mechanism by which to accommodate ownership diversity without impacting the financial integrity of existing broadcast stations.

2. Furthermore, the escalating value of existing classes of broadcast stations has increasingly resulted in outlying stations shifting their focus toward nearby metropolitan areas, often at the expense of the communities these stations were originally intended to serve. Authorization of LPFM could return local broadcast service to many of these communities, furthering the goal of fair and equitable distribution of service outlined in Section 307(b) of the Communications Act.

3. The petitioner believes that a properly regulated LPFM service could address these concerns while limiting the potential for interference to existing broadcast services. The petitioner also

believes that offering such a service will provide a mechanism for controlling the spread of unlicensed radio stations, which are inherently unregulated. The outline for such a service is proposed as follows:

II. Technical Rules for LPFM Service

4. The petitioner advocates that LPFM stations be allocated on a first-come first serve "demand" basis (i.e., no requirement to petition to amend the FM Table of Allotments prior to filing an application for a construction permit).

5. LPFM stations should be permitted to operate with a maximum ERP of 250 watts at 100 meters maximum HAAT, or any equivalent combination of ERP and antenna HAAT. Minimum ERP should be 5.0 watts, with no minimum antenna HAAT. These power levels will provide coverage areas comparable to those currently achieved by FM translators and are intended to allow LPFM stations to fill a variety of niches (such as serving small towns, portions of a larger urban area, or even a neighborhood within a larger city) without competing directly against full powered FM stations.

6. Spacing requirements for LPFM stations shall be as specified in 73.215 for shortspaced class A , with the following exceptions:

a) Minimum spacing requirements of the table in paragraph 73.215(e) shall not apply, since these requirements are based on the minimum allowable ERP of 100 watts for class A stations, which would not be applicable for LPFM.

b) LPFM stations operating with less than 50 watts ERP at 100 meters HAAT, or any equivalent combination of ERP and antenna HAAT, shall not be required to meet second or third adjacent channel spacing requirements. We feel that this exception is warranted to insure that LPFM stations are allowed to operate in larger urban areas, especially in view of the fact that the FCC has previously determined that second and third adjacent channel short spacing poses a "small risk of interference" when permitted for grandfathered short-spaced FM stations (see paragraph 29 of Report & Order on "Grandfathered Short-Spaced FM stations" adapted August 8, 1997, MM Docket No. 96-120, RM-7651) operating at much higher power levels than proposed for the LPFM service.

c) Otherwise prohibited contour overlaps will be allowed where it can be demonstrated by the applicant that no actual interference will occur due to intervening terrain, the overlap occurring over a body of water, or such other factors as may be applicable.

d) Prohibited contour overlap would also be allowed where an agreement has been reached between the LPFM and the station(s) affected agreeing to the overlap, if the FCC determines that allowing the overlap is in the public interest.

e) LPFM stations operating in the noncommercial band should be subject to the prohibited contour overlap requirements of the non-commercial rules, 73.509(a),modified by subsections b, c, and d of this paragraph.

7. A proposed LPFM station and allotment would be considered acceptable if it complies with the spacing requirements specified above based on the proposed station's ERP and antenna HAAT. The use of directional antennas and power levels below the LPFM class maximum shall be acceptable to meet these requirements.

8. The petitioner proposes that LPFM stations be allowed to operate as either commercial or non-commercial stations, with commercial operation limited to channels 221 through 300 and non-commercial operation allowed on any open FM channel. No preference is proposed for non-commercial stations operating outside the reserved band (channels 201 through 220).

III. Proposed Ownership Restrictions

9. To insure that LPFM remain a service geared toward providing local community service and increasing the diversity of ownership voices, this petition proposes that ownership of LPFM stations be limited to one per entity, although ownership of LPFM stations in common with other broadcast stations

might be permitted under some circumstances (subject to the restrictions proposed in paragraphs 10 and 152 of this document).

10. The petitioner further proposes that applicants, permittees, and owners of LPFM stations be required to meet the Small Business Administration definition of a small business for radio stations, modified to impose $1,000,000 limit (baselined in the current year of 1998 and adjusted for inflation on an annual basis) on gross revenues from all broadcast related activities including existing AM and FM stations, LPTV, cable television, and the LPFM station. This limit is proposed for both commercial and noncommercial LPFM stations. The petitioner feels that the only appropriate exception to this rule should be if the preponderance of this revenue (90% or greater) comes from the LPFM station. In the event that the owner of a LPFM station ceases to meet this rule, a reasonable period (perhaps one year) should be allowed to either divest the LPFM station or make whatever changes are required to return to conformance for the ownership rules for a LPFM station.

11. The petitioner also proposes that the owner of a LPFM station or proposed LPFM station be required to maintain primary residence within 80 kilometers of the transmitter site of the proposed station (and to have lived in that location for a reasonable period of time prior to the application, such as one year minimum). If the owner is a partnership or corporation, we propose the local ownership rule apply to all cognizable owners, members of the board, and shareholders of record. In the event that the owner(s) of a LPFM station moves to a primary residence outside this 80 kilometer zone, a reasonable period (perhaps one year) should be allowed for the owner to divest the station.

12. The above proposed restrictions (paragraphs 9, 10, and 11) should limit the number of applications received by the FCC, reducing the likelihood of this service getting bogged down by an excessive number of applications, as happened in the early days of the LPTV service. Hopefully, this will allow for speedier implementation of the new LPFM service for the public.

13. The petitioner believes that it is important to discourage speculation and trafficking in LPFM construction permits. To avoid trafficking, this petition proposes that the sale or transfer of LPFM construction permits be prohibited.

14. However, the petitioner proposes that the sale of on-air LPFM stations be allowed, provided that the buyer meets all the requirements for owning such a station. To restrict speculation, the petitioner suggests that a rule similar to the previous anti-trafficking regulations (which prohibited the sale of a broadcast station at a profit if it had been operating under current ownership for less than three years) be imposed on LPFM transactions. Allowing sales will promote continuity of service in the event that the LPFM operator is no longer able (or chooses not) to continue with ownership of the station for any reason. The anti-trafficking guidelines would discourage station speculation and promote responsible operation of LPFM stations.

15. The petitioner proposes that to further insure that LPFM stations be locally oriented, they be prohibited from simulcasting or rebroadcasting the signal of another broadcast station of any service, including other LPFM stations, except in case of shared urgency, such as impending severe weather or other urgent, non-entertainment programming. Furthermore, it is proposed that ownership of LPFM stations be prohibited in common with any other broadcast station(s) whose protected contour would overlap the protected contour of the LPFM station.

IV. Rules for Granting LPFM Construction Permits

16. As previously indicated in this petition, the petitioner desires that LPFM stations be allocated on a "first come, first serve" basis without a requiring a prior petition to amend the FM Table of Allotments. Implementing such a "demand" allocation scheme would result in applicants being able to provide speedy implementation of new local services to their communities. It would also provide a simple and relatively inexpensive application system for applicants, many of whom may have limited financial

means. We feel that this system would be preferable to the use of a lottery for granting LPFM applications, as was used in the past for LPTV grants.

17. In the event that two or more mutually exclusive applications are received on the same day, the petitioner proposes that the permit be granted to the application received earliest in the day, if that application is otherwise valid.

V. Primary Status for LPFM Service

18. Unlike FM translators, LPFM stations will have a significant investment in equipment to originate local programming, which means that the secondary status currently conferred upon translators would be inappropriate for the proposed new service. The CRC believes that LPFM stations should be accorded primary status similar (but not identical) to that of existing full powered commercial and non-commercial FM stations. Specifically, this petition proposes that a LPFM station :

(a) Could be required to change frequency and/or modify facilities to accommodate a rule making request for a full powered station, but could not be required to leave the air to accommodate such a rulemaking.

(b) LPFM stations would be compensated by the proponents of such a rulemaking for all reasonable costs associated with the frequency and/or facilities change, including any engineering or other studies needed to implement such a change.

(c) Such changes would only be ordered if the changes to the facilities of the LPFM station would not result in a loss of coverage to more than 5% of the population within the LPFM station's previous protected contour.

(d) LPFM applications would not be granted in situations where such grant would require existing LPFM or full powered stations to change frequency, alter facilities, or incur interference from the proposed LPFM allocation.

(e) LPFM stations and applications will take precedence over existing or proposed translator stations. An LPFM station may displace an existing translator without compensation to the translator owner/operator, just as full powered stations are currently allowed to do. The petitioner believes that in most instances the public benefit of the new local service from a LPFM station would outweigh the loss of service from a translator importing a non-local signal.

19. The petitioner believes that one step upgrades from LPFM status to any full powered FM station class (A, B, B1, C, C1, C2, or C3) should not be permitted. Since the proposed rules for LPFM stations are significantly different from those currently in place for full powered stations, allowing one step upgrades between the two services could have the effect of encouraging some applicants to use LPFM stations as a back door to obtaining a full powered station.

VI. Public Service and Local Origination Requirements

20. Since spectrum auctions are not being proposed for LPFM applicants, the petitioner feels that it is reasonable that these stations be required to meet some public service requirements in return for their licenses. This petition proposes a requirement that a minimum of 10 hours of each LPFM station's weekly broadcast time between 6:00 AM and Midnight Monday through Friday and 9:00 AM and Midnight on Saturday and Sunday be dedicated to locally originated non-entertainment public service programming. Stations should, however, be granted the flexibility to meet this requirement through either long form or short form programming, or a combination of both.

21. One of the major goals of the proposed service is to provide locally oriented broadcast services. The petitioner therefore proposes that LPFM stations be required to operate a main studio within the protected contour of the station and to originate a minimum of 90% of their broadcast day between 6 AM and Midnight from this studio or other locations within the protected contour of the station. However, the petitioner believes that stations should be given flexibility in meeting this requirement with live, delayed, or automated programming, as long as this programming is locally originated. This flexibility would give the stations the ability to best serve the public interest of their local communities with locally responsive

programming while operating within the strict financial constraints that would likely exist at many of these stations. However, LPFM stations should not be allowed to circumvent their local origination requirements by airing long form programming which is originated, controlled, or produced elsewhere, but played back at a local studio. This includes programming delivered via satellite, recorded media, air, wire or cable, and/or the use of playlists, music logs or rotations provided by an outside entity or entities. This does not apply to the use of locally selected, pre-recorded musical selections. Exceptions to the local origination requirement should include the airing of urgent news and/or emergency programming including weather alerts, in any instance where public health or safety is at risk. Commercial LPFM stations should be restricted from airing advertising during these types of broadcasts. These restrictions are not designed to limit programming options. They are included as a mechanism to help ensure that the proposed service remains locally focused and is not converted into a non-local service by virtue of having programming supplied by outside entities. Additionally, this section does not attempt to limit the type of programming aired on an LPFM station, merely the source of said programming. There is already precedent for regulating programming source in the Commission's FM translator regulations, which prohibit any local origination beyond a thirty second announcement once per hour. Travelers Advisory Radio (TIS) is also restricted in the type and source of its programming. The petitioner is concerned that without strict ownership and program origination restrictions, the new service may usurped by non-local entities, thus defeating its intended purpose as a vehicle to provide local broadcast service.

VII. Fee Structure

22. The petitioner believes that it is important that a LPFM service be kept affordable to applicants, meaning that fees associated with the application process should be kept to a minimum. This petition proposes that the current fee structure for FM Translator stations provides a reasonable basis for setting the fees for the proposed LPFM service.

VII. Conclusion

23. For the above reasons, the petitioner requests that Section 73, Subpart B, be amended as required to authorize a LPFM Service as proposed within this petition.

Respectfully submitted,
The Community Radio Coalition