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July 28, 1999

Magalie R. Salas Esq.
Office of the Secretary
Federal Communications Commission
The Portals II Building, TW-A325
445 12th Street, S.W.
Washington, D.C. 20554
Tel: 202/418-0300

Regarding: LPFM NPRM Docket No. MM 99-25

Attention: FCC - Office of the Secretary

Enclosed, please find 1-original and 9-copies of my formal comments for the record on LPFM NPRM Docket No. MM 99-25.

I have also submitted my comments on a 3.5 inch IBM diskette to Paul Gordon, FCC, 445 12th Street, S.W., Room 2C223, Washington, DC 20554.

I have also submitted my comments on a 3.5 inch IBM diskette to the Commission's copy contractor, International Transcription Service, Inc., 1231 20th Street, N.W. Washington, D.C. 20036.

Best regards,

Mike Hoyer - President
Deforest Broadcasting Company, Inc.

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Before the
Federal Communications Commission
Washington, D.C. 20554

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In the Matter of
Proposal for Creation of the Low Power FM (LPFM) Broadcast Service
Docket No. MM 99-25

July 27th, 1999

To: Federal Communications Commission

Comments of MIKE HOYER - Deforest Broadcasting Co Inc

TABLE OF CONTENTS

I. INTRODUCTION/SUMMARY

II. COMMENTS ON FCC LPFM NPRM DOCKET NO. MM 99-25
- A. NEED FOR LOW POWER RADIO SERVICE
- B. SPECTRUM CONSIDERATIONS
- C. TECHNICAL OVERVIEW OF LPFM SERVICES
- D. INTERFERENCE PROTECTION CRITERIA
- E. LPFM EMISSIONS AND BANDWIDTH
- F. OWNERSHIP AND ELIGIBILITY
- G. SERVICE CHARACTERISTICS
- H. APPLICATIONS

III. CONCLUSION

IV MIKE HOYER'S RESUME AND HISTORY OF RADIO EXPERIENCE

I. INTRODUCTION/SUMMARY

I, Mike Hoyer, greatly appreciate this opportunity to comment on the FCC[1] LPFM[2] NPRM[3] MM Docket No. 99-25. I've been in broadcasting for over 20 years from electrical engineering to programming and sales and have greatly admired the radio industry until recently. I've heard claims that "radio program diversity has never been greater!"[4] I find that very difficult to swallow living in a town with a population of approximately 200,000 yet having five FM rock stations. I've heard claims that "there are still many channels available."[5] My town has exactly zero channels available today. Even if my town had every channel available, on the FM band, it still wouldn't allow the church community to start a radio station. For over 15 years my town's church community has been trying several times to create a contemporary Christian radio station. However, the church community has continually been forced to sell out to large corporations with extensively more money, even though it was always the church community that performed the original frequency allocation.[6] That's why I congratulate the FCC for wanting to change this methodology via LPFM. LPFM offers my community some renewed hope for diversity.

Regarding the technical issues of LPFM...there are claims that LPFM will cause interference. There have been 460 full-power FM stations (grandfathered short-spaced stations) operating on 2nd and 3rd adjacent channels for many years, nationwide, with no interference complaints. If these more powerful full-power FM stations don't cause

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[1] Federal Communication Commission
[2] Low Power FM (Frequency Modulation)
[3] Notice of Proposed Rulemaking
[4] NAB Radio World March 31, 1999 public forum article "Low Power Is Dangerous"
[5] NAB 'Talking Points For Members of Congress' listed at http://www.beatworld.com/
[6] Two recent cases include; **(a)** 105.5 FM was allocated to Verona, Wisconsin (a few miles southwest of Madison) in the late 1980's by a group of Christian individuals in response to the Madison church community. However, after spending up to $50,000 to allocate the frequency and attempt to win at a comparative hearing, the station was lost due to the "30 day Form 301 window" process which invited additional applicants to file in competition to the original allocator, hence the "winner" of the construction permit was a late applicant with a significant amount of money to guarantee a win at a comparative hearing. **(b)** 93.1 FM was allocated to Deforest, Wisconsin (a few miles northeast of Madison) in the early 1990's by another group of Christian individuals in continued response to the Madison church community. However, after spending up to $20,000 to allocate the frequency and attempt to win at a comparative hearing, yet another station was lost due to the "30 day Form 301 window" process which invited additional applicants to file in competition to the original allocator, hence the "winner" (of the soon to be awarded construction permit) had a significant amount of money indirectly available from their large radio conglomerate to guarantee a win at an auction.

interference using the 2nd or 3rd adjacent channels, then LPFM stations certainly will not cause interference either. Likewise no interference will result in the future use of In-Band-On-Channel (IBOC) digital broadcasting. In the FCC Report and Order FCC 97-276, released August 8, 1997, the FCC agreed that the use of the 2nd and 3rd adjacent channels by grandfathered short-spaced full-power FM stations would not cause interference.

The most important issues for LPFM once enacted are ownership restrictions and first-come, first-serve regulations. These two vitally important aspects of LPFM must be included in order to truly provide new entrants the ability to add their voices to the existing mix of political, social and entertainment programming and address special interests shared by residents of geographically compact areas.

This low power radio service as described within the FCC's NPRM and commented in detail within this document establishes a more efficient use of the spectrum hence it would further the Commission's goals in providing stable, efficient and diverse radio service to the public.

The purpose of this document is to make comments on the NPRM LPFM Docket No. 99-25 as requested by the FCC, regarding a new class of broadcast stations to be called Low Power FM (LPFM), which will allow, for the first time, people of limited financial means to have a voice in broadcasting in America.

I am confident that the FCC will insure FM's quality while providing diversity on the FM band via LPFM as outlined in my comments. God Bless America.

II. COMMENTS ON FCC LPFM NPRM DOCKET NO. MM 99-25

The following comments are numbered in the same order as outlined in the LPFM NPRM Docket No. MM 99-25 FCC Document, so comments can easily be correlated.

A. NEED FOR LOW POWER RADIO SERVICE

LPFM NPRM DOCKET NO. MM 99-25 **COMMENTS ON ITEM # 12:**

LPFM must have strict local and cross-ownership restrictions[7] plus first-come, first-serve regulations[8] in order to truly provide new entrants the ability to economically and more

[7] Comments on ownership restrictions can be found in section F, item numbers 57-67.

[8] Comments on first-come, first-serve regulations can be found in section H, item numbers 91-111.

simplistically add their voices to the existing mix of political, social and entertainment programming and address special interests shared by residents of geographically compact areas. If strict local and cross-ownership restrictions and first-come, first-serve regulations aren't part of LPFM, then LPFM will not be able to achieve it's intended goals. For example; Madison, Wisconsin has for many years vitally needed a contemporary Christian music radio station for the young families and teenagers of Madison and it's surrounding communities. This need has been voiced by many of the churches and community organizations throughout the Madison area for many years. However, the many efforts to start a Class A radio station to fulfill this need were taken away by commercial entities with millions of dollars due to missing first-come-first-serve regulations, and the favoring of entities having the most money instead of favoring the entity (the church community) that actually spent the extensive time and money to allocate the frequency which was the applicant that truly had the desire to start a radio station for the community and not for monetary gain.[9] The most important aspect of LPFM is having the strict local and cross-ownership plus first-come, first-serve regulations in order to truly meet the desires of the local community, otherwise LPFM need not be created. In addition, I totally agree with the FCC statement that 'LPFM offers opportunities to potential broadcasters and listeners for which there are currently no comparable alternatives'. I disagree however with the need for a very low power LPFM station with secondary frequency use status since the 'primary', higher power LPFM class, is designed to offer the same intentions with very similar operating costs.[10]

B. SPECTRUM CONSIDERATIONS

LPFM NPRM DOCKET NO. MM 99-25 **COMMENTS ON ITEM # 16:**

I agree that it does not appear possible to designate a particular FM frequency or

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[9]Two recent cases include; **(a)** 105.5 FM was allocated to Verona, Wisconsin (a few miles southwest of Madison) in the late 1980's by a group of Christian individuals in response to the Madison church community. However, after spending up to $50,000 to allocate the frequency and attempt to win at a comparative hearing, the station was lost due to the "30 day Form 301 window" process which invited additional applicants to file in competition to the original allocator, hence the "winner" of the construction permit was a late applicant with a significant amount of money to guarantee a win at a comparative hearing. **(b)** 93.1 FM was allocated to Deforest, Wisconsin (a few miles northeast of Madison) in the early 1990's by another group of Christian individuals in continued response to the Madison church community. However, after spending up to $20,000 to allocate the frequency and attempt to win at a comparative hearing, yet another station was lost due to the "30 day Form 301 window" process which invited additional applicants to file in competition to the original allocator, hence the "winner" (of the soon to be awarded construction permit) had a significant amount of money indirectly available from their large radio conglomerate to guarantee a win at an auction.

[10] Comments on the secondary LPFM service can be found in section C, item number 22.

frequencies for one or more low power services. Used and possible LPFM unused frequencies are randomly scattered across the FM band, hence the entire FM band needs to be available for LPFM in order to make it a viable service.

LPFM NPRM DOCKET NO. MM 99-25 **COMMENTS ON ITEM # 17:**
I agree that introducing low power stations into any part of the AM spectrum would have a serious negative impact on the efforts to improve the quality of reception in this band.

LPFM NPRM DOCKET NO. MM 99-25 **COMMENTS ON ITEM # 19:**
LPFM should continue to follow similar rules as outlined for the existing FM band regarding the non-commercial Section 73.501 of FCC rules and commercial band, with one exception. The only exception should be if a non-profit entity wishes to allocate a frequency in the commercial band due to the lack of non-commercial frequencies or if a better frequency opportunity exists in the commercial band, then that entity should be allowed to allocate a frequency as non-commercial in the commercial band. Hence, the entire FM band should be open to non-profit organizations for allocating non-commercial frequencies, and commercial entities should be allowed to allocate commercial frequencies at 92.1 FM and higher. I do not see the need to make the entire FM band classified as non-commercial only, hence this with would avoid confusion of having completely different rules for full power FM and LPFM and at the same time open doors for both commercial and non-commercial entities to utilize the airwaves.

LPFM NPRM DOCKET NO. MM 99-25 **COMMENTS ON ITEM # 20:**
LP1000 stations are to be considered as 'primary' stations and are suggested to follow the FCC rules and regulations as outlined for full power FM stations, therefore, LP1000 stations should have the same privileges of utilizing auxiliary broadcast frequencies such as studio-to-transmitter links in order to allow the flexibility of locating a permanent studio and transmitter site. If the FCC decides to allow the creation of secondary and/or very low power stations they will not require auxiliary broadcast frequencies since they are considered as a temporary radio station. The auxiliary broadcast frequencies should be left to the more serious and permanent broadcaster.

C. TECHNICAL OVERVIEW OF LPFM SERVICES

LPFM NPRM DOCKET NO. MM 99-25 **COMMENTS ON ITEM # 22:**
I agree with the creation of the LP1000 class at 1000 watts ERP however, I recommend that the maximum height (HAAT) be increased to 100 meters (328 feet), which is the same as for Class-A full-power FM stations. This would provide for an additional 2-3/4 miles of coverage without requiring any additional power. Distance to 60 dBu contour would increase from 8.8 miles to 11.76 miles, which could help LPFM stations reach

significantly more people and thus enhance their ability to survive. While I can understand keeping 'secondary status' station antenna heights under 200 feet so as to not require FAA clearance, there is no reason to limit "primary status" LP-1000 stations to such an arbitrary height, since they will have to abide by the majority of FCC rules that apply to full-power stations. LP-1000 stations should have a 100 meter limit, not 60 meters as proposed. I strongly disagree with the secondary class of service called LP100. Creating a station with an ERP of 100 watts and yet having it classified as a 'secondary' service makes it a somewhat costly 'temporary' operation, since there will always exist the possibility of having the LP100 removed if a LP1000 required removal for allocating a frequency in the area. LP100 also consumes a significant broadcasting coverage area that could possibly be considered large enough to support a small 'primary' station and these should be reserved for full time 'primary' broadcasters. There doesn't appear to be any rationale for creating 'temporary' part-time 100 watt radio stations for easy entry into the radio spectrum when LP1000 is designed to offer the same intentions. As long as the LP1000 requirements (as with full-power FM stations) will be required to operate at a minimum of 6am-midnight with a minimum of 100 watts (no minimum HAAT), a potential LP100 candidate could simply apply for a LP1000 and endure similar operating costs. This will pave the way for a more serious and structured applicants/owners and allow the station to remain on the air as a 'primary' station. This will also make better use of the radio spectrum. Therefore, the LP1000 class would more than adequately meet the demands of the radio marketplace. I strongly disagree with the 'microradio' service class. The 'microradio' class would cover a very small area and over burden the FCC with numerous allocations and applications for 'microradio' stations since the coverage area is so small, a multitude of 'microradio' stations can be created. Therefore, the 'microradio' class does not appear to be a viable service. The intentions of the LP1000 class would more than adequately meet the demands of the radio marketplace including those who would possibly consider 'microradio' service.

LPFM NPRM DOCKET NO. MM 99-25 **COMMENTS ON ITEM # 24:**
In some cases the population in the service area of a LP1000 (8.8 radius miles, 17.6 diameter miles) may be large enough to sustain an advertising base assuming the antenna is situated near the center of a medium sized city. For example, the population of Madison, Wisconsin is approximately 209,000 and is approximately 16 miles in diameter at it's widest point, hence a LP1000 would provide just enough 60 dBu coverage in Madison, Wisconsin. In many cases, it's important to cover an entire city/town in order to maintain a reasonable advertising base. A population of 209,000 provides the means of supporting an LP1000, since there exists Class A stations which are supported with less than a population of 209,000 within their 60 dBu contour. This is only one example, and each LPFM community would need to be studied by the potential owner for financial

justification. There are certainly other cases were a slightly larger service area (radius) may be necessary to sustain a LPFM therefore I recommend that the maximum height (HAAT) of a LP1000 be increased to 100 meters (328 feet), which is the same as for Class-A full-power FM stations. This would provide for an additional 2-3/4 miles of coverage without requiring any additional power. Distance to 60 dBu contour would increase from 8.8 miles to 11.76 miles, which could help LPFM stations reach significantly more people, provide extensively more opportunities for LPFM and enhance their ability to survive. My comments regarding noncommercial or commercial service for a LP1000 are previously stated in item # 19.

LPFM NPRM DOCKET NO. MM 99-25 **COMMENTS ON ITEM # 25:**
There are many cases where a LP1000 and even a Class A station would not cover a large enough service area to sustain a sufficient advertising base due to the low density of many small sized cities. Therefore, lowering the power level or antenna height of a LP1000 would make it more difficult in sustaining the financial operation of a LP1000 station. The lower the power and antenna level of a LP1000, the fewer the possibilities their are in making the station financially viable. It is very important to maintain at least the 1000 watts at 60 meters classification in order to make LP1000 a viable operation.

LPFM NPRM DOCKET NO. MM 99-25 **COMMENTS ON ITEM # 26:**
Much like a Class A station, it would be more appropriate to issue a minimum power rating of 100 watts and specify no minimum HAAT for a LP1000. This would reduce confusion among the class of radio stations, keeping it the same as a Class A station, and assist in meeting distance separation requirements in specific circumstances. The minimum power rating of 100 watts at maximum HAAT 60 meters would create a 1 mV/m contour at a radius of approximately 5 miles (exactly 4.95 miles). This lower limit would still maintain the interest of efficient use of the radio spectrum, since it is similar to the Class A standard of stations.

LPFM NPRM DOCKET NO. MM 99-25 **COMMENTS ON ITEM # 27:**
I agree that LP1000 stations should be granted 'primary' status. To grant 'secondary' status would defeat the entire purpose of LPFM and greatly discourage new entrants from investing their extensive time and significant amounts of money into this service.

LPFM NPRM DOCKET NO. MM 99-25 **COMMENTS ON ITEM # 28:**
Since LP1000 stations are considered 'primary' and full time stations, then they also should operate under the majority of the service rules and obligations applicable to primary stations generally. One exception to this would be the 2nd and 3rd adjacent channel interference protection to or from any class of FM radio station. I have detailed

my comments on this matter in item numbers 43 and 46. It would also appear appropriate to have LP1000 stations protect each other's IF frequencies to maintain the quality of the FM band.

LPFM NPRM DOCKET NO. MM 99-25 **COMMENTS ON ITEM # 29:**
I have previously stated my comments on establishing LP1000 with the primary frequency use status in item numbers 27 and 28.

LPFM NPRM DOCKET NO. MM 99-25 **COMMENTS ON ITEM # 30 to 33:**
I have previously stated my comments on the 100-watt secondary service in item number 22.

LPFM NPRM DOCKET NO. MM 99-25 **COMMENTS ON ITEM # 34:**
I have previously stated my comments on the 1-10 watt secondary 'microradio' service in item number 22.

LPFM NPRM DOCKET NO. MM 99-25 **COMMENTS ON ITEM # 35:**
I strongly agree that if the FCC decides to create a 'microradio' service it should include a FCC transmitter certification requirement to prevent interference to other stations and aviation frequencies from exceeding out-of-channel emission limits and the like in order to maintain the quality of the FM band and prevent dangerous interference to aviation operations.

LPFM NPRM DOCKET NO. MM 99-25 **COMMENTS ON ITEM # 36-37:**
If the FCC decides to create a 'microradio' service it should be considered 'secondary' to all other FM radio services including LP1000 and should protect all existing and future primary stations including LP10 stations against co-channel, and 1st-adjacent channel interference, as well as FM translator and boosters and would not receive protection from these stations.

D. INTERFERENCE PROTECTION CRITERIA

LPFM NPRM DOCKET NO. MM 99-25 **COMMENTS ON ITEM # 41:**
The proposed use of minimum distance separations is appropriate for LP1000. However, there may be circumstances where reduced power (down to no lower than 100 watts as in Class A stations) and HAAT and/or a directional antenna may be necessary to 'squeeze' in a LP1000 station and in such cases, it should be up to the petitioner/allocator to provide all the necessary proof (i.e. contours of all related stations) to the FCC such that an allocation would not cause interference nor receive interference from any station's protected contour of service. Therefore, LP1000 stations should be afforded the

opportunity to perform contour protection criteria when necessary. If the FCC decides to create a LP100 and/or LP10 service, then the proposed use of minimum distance separations as the single methodology for creating allocations for these services would be appropriate. More sophisticated methods for LP100 and/or LP10 stations would only cause undo burden upon the FCC especially with the great possibility of having numerous LP100 and/or LP10 applicants. The minimum distance separation method is very straight forward and rather simplistic which makes it an excellent method for identifying allocations. To maintain FM quality and minimize interference, I comment that it would be best to afford a level of protected service for all classes of FM stations including interference protection from all other class stations. This will also simplify the applications process.

LPFM NPRM DOCKET NO. MM 99-25 **COMMENTS ON ITEM # 43 and 45:**
I agree with the removal of the third-adjacent channel protection for LPFM. LP1000 stations operating with maximum facilities would be predicted, under current protection ratios, to cause 3rd-adjacent channel interference to a distance of 1.4 km (0.9 miles) from its antenna, and even this very small predicted interference zone could possibly pose a potential problem to other stations only if the LP1000 station were located at, or very near, the outer edge of the protected station's service contour. In addition, improvements in receiver design since the rules were written decades ago will further decrease any possible interference that may have existed in older receiver designs therefore encouraging the removal of the third-adjacent channel protection criteria. It should be noted that a decision was supported, by nearly all parties filing comments in 1997, to eliminate the 3rd-adjacent channel protection for full power 'grand-fathered short spaced stations' including the hundreds of stations that operate at substantially higher power levels than LP1000 stations. Therefore, with this in mind, there appears no reasonable technical support for including this restriction not to mention that it would severely limit or almost eliminate the inclusion of LPFM.

LPFM NPRM DOCKET NO. MM 99-25 **COMMENTS ON ITEM # 46:**
There appears to be no rationale for having 2nd or 3rd adjacent channel protection standards placed upon LPFM since the FCC did not receive any interference complaints as a result from modifications of 'grandfathered' short-spaced FM stations that modified their facilities without regard to 2nd and 3rd adjacent channel spacing from 1964 to 1987. The FCC found only a small risk of interference in that context, which was outweighed by improved service. Incidentally, the FCC has been willing to accept small amounts of potential 2nd and 3rd adjacent channel interference in the noncommercial band where such interference is counterbalanced by substantial service gains. Since the output power of a LPFM is considerably lower than many of the 'grandfathered' stations mentioned

above that were modified without regards to 2nd and 3rd adjacent channel spacing and since the FCC did not receive any interference complaints on these matters, then it must be stated that the circumstances haven't changed for LPFM. In addition, improvements in receiver design since the rules were written decades ago will further decrease any possible interference that may have existed in older receiver designs therefore encouraging the removal of the 2nd and 3rd adjacent channel protection criteria. The level of risk for interference is very small compared to the substantial service gains of LPFM, therefore, there is no need for 2nd or 3rd adjacent channel separation requirements.

LPFM NPRM DOCKET NO. MM 99-25 **COMMENTS ON ITEM # 47, 49 and 50:**
As mentioned previously in item number 46, since the output power of a LPFM is considerably lower than the 'grandfathered' stations that were modified without regards to 2nd or 3rd adjacent channel spacing from 1964 to 1987, then LPFM would have less if any interference with the current technology of future IBOC (digital radio methodology In-Band-On-Channel). Hence, there is a decision that needs to be made with IBOC, and as far as I can see, there are three choices. Either live with temporary interference with the existing IBOC standards until analog is completely done away with and all stations are completely digital hence back to normal 75 kHz deviation, OR create receivers under the current IBOC standards with filters and other digital improvements to reduce problems from the 'grandfathered' stations and therefore utilize the current IBOC standard more effectively, OR design a different methodology for digital radio to reduce the greater interference problems caused by the already existing 'grandfathered' radio stations that were modified without regards to 2nd and 3rd adjacent channel spacing. I strongly encourage everyone to understand this note; that in the existing radio environment, USADR (a digital radio proponent of IBOC) suggests that 2nd adjacent channel interference from analog FM signals would not pose an interference threat to its IBOC signal. For example, USADR states that "an analog second adjacent interferer will have a negligible effect on the performance of the all-digital signal, since it does not overlap in frequency with the desired all-digital signal." USADR Petition.

E. LPFM EMISSIONS AND BANDWIDTH

LPFM NPRM DOCKET NO. MM 99-25 **COMMENTS ON ITEM # 51:**
I agree with the statement regarding the extent to which LPFM stations would degrade FM radio service on the 2nd-adjacent channel that being considerably limited by their much lower ERP and HAAT levels. Actually, a very small degradation would exist, if any, however no greater if not much less than the 'grandfathered' stations that modified their facilities without regard to 2nd and 3rd adjacent channel spacing from 1964 to 1987 as mentioned previously in item number 46. However, I strongly disagree with any suggestion of reducing the transmission bandwidth for LPFM stations. LPFM must not be

subjected to a narrower bandwidth when compared to full-power FM stations since audio quality would suffer. However, I do support dropping sub-carriers (in the range of 53 kHz to 75 kHz from the center frequency) other than stereo sub-carrier to prevent interference. I strongly agree with FCC certification of transmitters used at all LPFM stations to ensure compliance with out-of-channel emission requirements. A certification requirement will in no way overly burden small operators. More comments on this matter are previously outlined in item # 35. Also, I strongly agree that a modulation monitor be required for all LPFM stations so quality of the FM band is maintained.

LPFM NPRM DOCKET NO. MM 99-25 **COMMENTS ON ITEM # 55 and 56:**
I do support dropping sub-carriers (in the range of 53 kHz to 75 kHz from the center frequency) other than stereo to prevent interference. However, I strongly disagree with any suggestion of reducing the transmission bandwidth for LPFM stations. LPFM must not be subjected to a narrower bandwidth when compared to full-power FM stations since audio quality would suffer.

F. OWNERSHIP AND ELIGIBILITY

LPFM NPRM DOCKET NO. MM 99-25 **COMMENTS ON ITEM # 57:**
The most critical components of LPFM is ownership and eligibility. The goals and principal benefits of a new low power service is to increase the opportunity for entry, enhance diversity and allow new program services. In order to achieve any of these goals even with the slightest success, there must be strict local and cross-ownership restrictions for each and every LPFM created. I agree with the FCC, not to permit a person or entity with an attributable interest in a full power FM or AM broadcast station, regardless of where that entity's interest may be located, to have any ownership interest in any LPFM station in any market or location, and to prohibit joint sales agreements, time brokerage accounts, local marketing or management agreements, and similar arrangements between full power broadcasters and low power radio entities. Multiple ownership should also be limited to one LPFM per community, where community would be defined as the 60 dBu contour, such that no 60 dBu signal overlap should occur on any LPFM stations owned by one entity.

LPFM NPRM DOCKET NO. MM 99-25 **COMMENTS ON ITEM # 58:**
There are a substantial number of individuals and entities with valuable broadcast experience that are eager to enhance the diversity of radio in their community and at the same time do not have any present attributable interest in current full power broadcast stations. Therefore, the cross-ownership restrictions will not prevent these individuals from contributing to the success of the LPFM service, instead it will do just the opposite, by preventing competition from large radio entities which would only drive out the

individual using large sums of money at an auction. Individuals or entities with attributable interest in a full power FM or AM broadcast station should not be permitted to establish a LPFM station in any community, even if that entity does not have an attributable interest in a broadcast station in that particular community. To allow any individual or entity with attributable interest in a full power FM or AM broadcast station to apply for a LPFM will only prevent individuals without attributable interest in a full power FM or AM broadcast station from offering the local community with enhanced diversity. Therefore, all LPFM stations should be reserved exclusively for those individuals or entities with no attributable interest in a full power FM or AM broadcast station and including forms of mass media such as newspaper, cable system, television station or any significant mass media of the like so enhanced diversity becomes evermore possible.

LPFM NPRM DOCKET NO. MM 99-25 **COMMENTS ON ITEM # 59:**
I agree with the FCC in that the Telecommunications Act of 1996 which permits significant local multiple ownership of existing full power stations does not apply to a service that didn't exist in 1996, not to mention that LPFM is specifically designed with minimal multiple ownership in mind. As stated earlier in item number 57, I believe it is appropriate to limit one LPFM per community, such that no 60 dBu signal overlap occurs on any LPFM station owned by one entity. This will increase the availability of LPFM stations to individuals. However, it appears appropriate to allow cooperative arrangements (short of attributable interests in full power FM or AM stations) between LPFM licensees to enable efficiencies in the LPFM radio broadcast industry.

LPFM NPRM DOCKET NO. MM 99-25 **COMMENTS ON ITEM # 60:**
A limit of five LPFM stations nationally to one entity would provide a reasonable opportunity to attain efficiencies of operation while preserving the availability of these stations to a wide range of new applicants. It is quite conceivable to imagine an organization creating every LPFM possible without 60 dBu overlap nationwide while at the same time significantly reducing opportunities for other individuals that can locally provide more diversity, which is one of the main goals of the LPFM service. Therefore, it appears appropriate to set a limit of five LPFM stations nationally to one entity.

LPFM NPRM DOCKET NO. MM 99-25 **COMMENTS ON ITEM # 61:**
I agree that local residency should not be a requirement for ownership of a LPFM. If an owner needs to move for any reason, the owner shouldn't be forced to sell the LPFM station. The owner can simply appoint an assistant station manager (whether part or full-time) to continue the same service to the community which is much easier than having to sell a station.

LPFM NPRM DOCKET NO. MM 99-25 **COMMENTS ON ITEM # 62:**
I agree that an adoption of an integration requirement will cause limitations for LPFM stations and that listeners are more well served by LPFM stations managed by their owners.

LPFM NPRM DOCKET NO. MM 99-25 **COMMENTS ON ITEM # 63:**
I agree that no license should be granted to a foreign government or a representative of a foreign government as stated in Section 310(b) of the Communications Act.

LPFM NPRM DOCKET NO. MM 99-25 **COMMENTS ON ITEM # 64, 65, 66, 67:**
I agree with the statements made by the FCC on items 64, 65, 66 and 67.

G. SERVICE CHARACTERISTICS

LPFM NPRM DOCKET NO. MM 99-25 **COMMENTS ON ITEM # 68:**
I agree with the statements made by the FCC on this item.

LPFM NPRM DOCKET NO. MM 99-25 **COMMENTS ON ITEM # 69:**
My comments regarding noncommercial or commercial service for a LPFM are previously stated in item # 19.

LPFM NPRM DOCKET NO. MM 99-25 **COMMENTS ON ITEM # 70-78, 80-87:**
I agree with the statements made by the FCC on items 70-78 and 80-87.

LPFM NPRM DOCKET NO. MM 99-25 **COMMENTS ON ITEM # 88:**
Since LP1000 stations are considered 'primary' stations and cover a somewhat reasonable amount of territory and since LP1000 stations are required to operate under the rules and regulations as full power FM stations, then the four-letter call sign identification system should be used for LPFM stations as is used for full power FM stations, that being the Wxxx and Kxxx system. However, if the FCC decides to create LP100 and/or LP10, 'secondary' LPFM stations, then these 'secondary' stations should use a sign identification system unlike the four-letter call sign system to distinguish them from 'primary' stations. Suggestions include a system similar to the FM translator call sign system using a combination of an LP prefix, followed by the channel number, followed by two letters assigned by the FCC as follows, LP###xx. For example, LP215AB.

LPFM NPRM DOCKET NO. MM 99-25 **COMMENTS ON ITEM # 89 and 90:**
I agree with the statements made by the FCC on items 89 and 90.

H. APPLICATIONS

LPFM NPRM DOCKET NO. MM 99-25 **COMMENTS ON ITEM # 91-102:**

The second most critical component of LPFM is to make the application process affordable and logically fair for the original frequency allocator. This is achievable by offering a mandatory electronic filing system however much more importantly by offering the first-come (allocator), first-serve (construction permit) procedure without a 'window'. This procedure would not only greatly benefit the applicant, but also significantly reduce the burdensome mutually exclusive applications hence reducing the FCC's workload. For example, Madison, Wisconsin has attempted several times to create a contemporary Christian radio station (which has been desperately requested by the vast church community) by first spending large amounts of time and money to allocate a frequency, only to be over-run by other applicants with millions of dollars during the Form 301 'window' process.[11] The 'window' process is an open invitation for mutually exclusive applications. Therefore, it creates a much more costly process for the individual trying to start a radio station, whereas one of the primary goals of LPFM is to provide an easier entry into the radio industry. There doesn't appear to be any rationale to adopt a 'window' process (and allotment table) since this only creates a very difficult entry way. Reducing mutually exclusive applications will not only reduce the cost and time factors for the individual who originally allocated the frequency but also remove a large and costly work load from the FCC. If anyone is seriously interested in starting a radio station, they shouldn't be threatened by the possibility of being over-run by additional applicants who are only invited by the Form 301 'window' process. If any of these additional applicants are truly serious about starting a radio station, they should simply start an allocation process just like any serious individual would do. Instead they take advantage of someone else's hard work, money, and time, that being the original

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[11]Two recent cases include; **(a)** 105.5 FM was allocated to Verona, Wisconsin (a few miles southwest of Madison) in the late 1980's by a group of Christian individuals in response to the Madison church community. However, after spending up to $50,000 to allocate the frequency and attempt to win at a comparative hearing, the station was lost due to the "30 day Form 301 window" process which invited additional applicants to file in competition to the original allocator, hence the "winner" of the construction permit was a late applicant with a significant amount of money to guarantee a win at a comparative hearing. **(b)** 93.1 FM was allocated to Deforest, Wisconsin (a few miles northeast of Madison) in the early 1990's by another group of Christian individuals in continued response to the Madison church community. However, after spending up to $20,000 to allocate the frequency and attempt to win at a comparative hearing, yet another station was lost due to the "30 day Form 301 window" process which invited additional applicants to file in competition to the original allocator, hence the "winner" (of the soon to be awarded construction permit) had a significant amount of money indirectly available from their large radio conglomerate to guarantee a win at an auction.

allocator. It should be noted that the process for starting a LPFM should be made an affordable and simple process by simply allocating a frequency and if/when the frequency is allocated, the FCC notifies the allocation applicant and only allows the allocation applicant to submit Form 301, since it is the allocation applicant that is seriously interested in starting the radio station. The only rationale seen for a Form 301 'window' process would be for those situations where the allocator's Form 301 application is not in good standing. Only at that time, should the frequency be added to a LPFM allotment table with a 10 day 'window' indicating that there are no Form 301 applications on file in good standing requesting additional applicants to file.

LPFM NPRM DOCKET NO. MM 99-25 **COMMENTS ON ITEM # 103-107:**
As mentioned in the previous paragraph, electronic filing of the first-come (allocator), first-serve (construction permit) procedure without a 'window' would significantly reduce mutually exclusive applications. However, in the extremely rare if not almost impossible event more than one individual sends an electronic file simultaneously to the FCC for the exact same frequency allocation it appears that the Balanced Budget Act of 1997 would appear to be the mandating process (that being auctions) for mutually exclusive applications.

LPFM NPRM DOCKET NO. MM 99-25 **COMMENTS ON ITEM # 108:**
It should be noted that an entity should be exempt from the auction process where the entity has intentions of utilizing a frequency as a non-profit operation even in the commercial band (due to no availability of frequencies in the non-commercial band).

LPFM NPRM DOCKET NO. MM 99-25 **COMMENTS ON ITEM # 109-111:**
I agree with the statements made by the FCC on items 70-78 and 80-87.

III. CONCLUSION

LPFM should be legalized under the guidelines expressed within this document in order to truly make this rule making effective and achieve the goals as outlined by the FCC for the radio community, which is to satisfy the vital needs of the communities across the United States as stated by FCC Chairman Bill Kennard in Radio World April 15, 1998. Kennard is interested in creating a low-power radio service, "so that small businesses and churches and community groups can use the airwaves to broadcast to their communities." In a world in which most Americans get most of their news from broadcasting, Kennard asked, "How can America have a strong democracy when most stations are concentrated in the hands of only a few?" That question is answered by LPFM provided that strict local and cross-ownership restrictions and first-come, first-serve regulations are part of LPFM in order to truly provide new entrants the ability to add their voices to the existing

mix of political, social and entertainment programming and address special interests shared by residents of geographically compact areas. This low power radio service as described within the FCC's NPRM and commented in detail within this document establishes a more efficient use of the spectrum hence it would further the Commission's goals in providing stable, efficient and diverse radio service to the public. The purpose of this document is to make comments on the FCC's NPRM LPFM Docket No. 99-25 as requested by the FCC, regarding a new class of broadcast stations to be called Low Power FM (LPFM), which will allow, for the first time, people of limited financial means to have a voice in broadcasting in America.

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Signed: _____ Date: July 27, 1999

Michael E. Hoyer - President of DeForest Broadcasting Company, Inc.

IV. MIKE HOYER'S RESUME AND HISTORY OF RADIO EXPERIENCE

SUMMARY

Mike Hoyer's over 20 years of radio experience includes (but is not limited to) remote live radio broadcasts, equipment installations, sales and marketing of radio, development of extensive radio business plans, an FCC petition for frequency allocation, application for a construction permit and live radio announcing on various AM and FM radio stations. Mike also holds a Bachelors Degree in Electrical Engineering and has held positions such as Quality Assurance Manager, Product Marketing Manager and Marketing/Applications Specialist. The following is an outline of his education, experience and community involvement as an engineer and also as a radio professional.

EDUCATION

Bachelor of Science, Electrical Engineering
New York Institute of Technology, Old Westbury, New York
GPA 3.0/4.0 in major, Graduated May 1987.

Associates in Engineering Science
State University of New York, Farmingdale, New York
Deans List, Graduated August 1984.

SUMMARY OF ENGINEERING EXPERIENCE

Nicolet Instrument Technologies Inc., Madison, Wisconsin
Product Marketing/Applications Manager, June 1991 to Present

Responsible for developing new products and bringing them to the market place worldwide to solve customer data acquisition needs in research and development. This process includes but is not limited to market analysis, product design, product marketing, sales and training worldwide.

Customers include but are not limited to Boeing, Breed Automotive, Caterpillar, Chrysler, Ford, General Motors, Morton International, NASA, Ontario-Hydro, S&C Electric, Sandia, plus worldwide support of entire sales force including regional managers, distributors and representatives.

Hi-Techniques, Incorporated, Madison, Wisconsin
Sales/Marketing/Applications Specialist, September 1990 to June 1991

In charge of maintaining current and future clientele for the entire US territory, by providing solutions for various research, development and test applications using data acquisition and analysis instrumentation.

Typical customers were Allen-Bradley, Allied Signal, Barber-Colman, Beech

Aircraft, Caterpillar, Cooper Power Systems, Eaton, Harley Davidson, J.I. Case, John Deere, Kodak, Kohler Company, S&C Electric, Xerox and Zenith.

Leader Instruments Corporation, Hauppauge, New York
Applications/Product Marketing Manager, April 1989 to September 1990
In charge of the oscilloscope product line for the entire US territory regarding technical product information and support, advertising, public relations, trade show supervision, market trends, literature, training sessions and instruction manuals.

Provided technical product information and support to customers such as General Electric, General Instruments, Honda, Panasonic-Technics, Sony and to regional managers and distributors.

Cortronic Corporation, Ronkonkoma, New York
Electrical Engineer/Quality Assurance Manager, May 1986 to February 1989
Implemented Quality Assurance Program for manufacturing arterial pressure monitor.

Supervised technical personnel to provide a quality analysis of the entire manufacturing process. Assisted/reviewed engineering department on new and current project builds per UL544, CSA and FDA codes for medical manufacturing company; utilizing various technical equipment.

RADIO EXPERIENCE

WNWC, 102.5 FM, Madison, Wisconsin
Part-Time On Air Talent and Radio Consultant, April 1998 to Present
On Air Talent and consultant for Madison's listener supported inspirational radio station.
Provide extensive radio consultant advice on format, marketing and technical issues regarding radio operation. Play inspirational music for target audience of 40+ years of age, give away prizes, on weekend day shifts. Regulary performed shift: Saturday 3pm-8pm.

93.1 FM, DeForest-Madison, Wisconsin
FCC Petition To Start A Radio Station, December 1991 to Present
Petitioned FCC to start a radio station in DeForest-Madison, WI. Details on this matter appear later in this document.

WMMM, 105.5 FM, Verona/Madison, Wisconsin
Part-Time On Air Talent, December 1991 to Present
On Air Talent for Madison's New Rock Choice.

Play variety of rock music, gave away prizes, on weekend day and morning shifts.
Regulary performed shifts: Saturday/Sunday 2pm-6pm, and 6am-10am.

WBLI, 106.1 FM, Patchogue, Long Island, New York
Part-Time On Air Talent, July 1986 to September 1990

On Air personality for Long Island's Number 1 Hit-Radio Station.
Played Top-40 music, gave away cash and prizes, on weekend day and night shifts.
Regulary performed shifts: Saturday/Sunday 6am-11am, and 3pm-7pm.

WGLI, 1290 AM, Babylon, Long Island, New York
Part-Time On Air Talent, December 1982 to July 1986

On Air personality for Long Island's Number 1 Oldies Station.
Played oldies music, gave away cash and prizes, on weekend day and night shifts.
Regularly performed shifts: Saturday/Sunday 6am-12pm, 12pm-5pm, and 8pm-12am.

Christian Music Broadcast, Babylon, Long Island, New York
On Air Talent/Programmer/Producer, October 1982 to February 1983

Programmer, Producer and On Air Talent of 13 week contracted Live Christian Music Show.
Obtained sponsors to pay for on-air time on radio station, produced sponsor's commercials, programmed and hosted an exclusive full hour Christian Music Show, aired live every Sunday on 1290 AM, WGLI from 3:30pm to 4:30pm.

Assembly of God Live Radio Service, Bay Shore, Long Island, New York
On Air Announcer/Sound Engineer, June 1979 to February 1983

On Air Announcer and Sound Engineer of Live weekly remote radio program.
Announced and sound engineered entire live church service on Long Island's Contemporary Christian Radio Station, WLIX, 540 AM. Installed equipment used at the remote facility.

COMMUNITY INVOLVEMENT

High Point Church, Madison, Wisconsin
Sound Engineer, 1994 to Present

Engineer and consultant regarding the sound in the auditorium and recordings for Sunday services and live Christmas and Easter performances.

Lake City Church, Madison, Wisconsin
Sound Engineer, September 1991 to 1994

Engineer and consultant regarding the sound in the auditorium and recordings for Sunday

services and live Christmas and Easter performances.

Smithtown Gospel Tabernacle, Smithtown, Long Island, New York
Sound Engineer, September 1987 to September 1990
Engineered the sound in the auditorium for Sunday morning and evening services, live Christmas and Easter Performances and Christian concerts. Installed equipment used at the church.

Bay Shore Assembly of God, Bay Shore, Long Island, New York
Sound Engineer, June 1979 to February 1983
Engineered the sound in the auditorium, on the radio and the recordings for all services, Christmas and Easter performances and Christian concerts. Installed equipment used at the church.

References are available upon request.

RECENT/CURRENT 93.1 FM FCC PETITION

I'm strongly in favor of LPFM as long as it is placed into the FCC rule books specifically in favor of small business and community owners hence keeping out medium and large businesses who wish to apply and sell construction permits and who already own existing radio stations. I say this from experience as described below:

1991-1992: Mike Hoyer surveyed the Dane County area churches and communities and concluded, without a doubt, that contemporary Christian radio was a lacking and essential component in the community which focuses on the age group 12 to 40. Hence, a vision was born to create a contemporary Christian non-profit radio station in Dane County, financially supported by the local community and area churches, in order to meet the essential spiritual needs of the community. Consequently, after extensive research and the development of a detailed business plan, it was concluded that the birth of a contemporary Christian non-profit radio station, focusing on the 12 to 40 age group, was the best method to fulfill this essential component. Therefore, Mike Hoyer formed DeForest Broadcasting and filed a petition with the FCC to allocate 93.1 FM to DeForest, Wisconsin.

1993-1995: Many petitions (more than the usual) were filed against the allocation of 93.1 FM. After much prayer and exhaustive effort due to the filing of many additional petitions to the FCC by DeForest Broadcasting, in September of 1995 the FCC announced the allocation of 93.1FM to DeForest, Wisconsin.

In response, DeForest Broadcasting submitted Form 301 (application for a construction permit) to the FCC. DeForest Broadcasting noted that seven applicants, in addition to DeForest Broadcasting, submitted Form 301 to the FCC for 93.1 FM. Despite and fully aware of the fact that the current process to allocate and apply for a construction permit is no where near logical, DeForest Broadcasting was and is still quite disturbed about additional applicants appearing last minute. For if any of the applicants had any genuine desire to start a radio station, they could have at any time in the past, petitioned the FCC to allocate 93.1 FM. But it wasn't until DeForest Broadcasting started the process of researching the community by petitioning the FCC, and successfully allocating the frequency, did the additional applicants 'jump on the band-wagon'. Hence the only alternative was for DeForest Broadcasting to wait for the FCC to finish re-writing the rules for comparative hearings and attend a hearing.

1997: DeForest Broadcasting received several pleas to surrender
to one of the other applicants and join their partnership plan which calls for the buying out of the remaining applicants in the future, including DeForest Broadcasting. The applicant proposing the partnership did not share in the same vision as DeForest Broadcasting, hence this would have eliminated the vision to bring contemporary Christian radio to Dane County and would have not met the essential spiritual needs of the people in the community. Therefore, DeForest Broadcasting was faced with two options in the attempt to continue the vision as follows:

Option Number 1:
As a kind gesture on behalf of DeForest Broadcasting to help the additional applicants recover their costs of submitting Form 301, DeForest Broadcasting proposed to pay each of the additional seven applicants the amount equal to the costs incurred to submit Form 301, not to exceed $10,000 per applicant, providing that each applicant agreed to dismiss their application. Payment to all applicants would have been made, in full, when the FCC's grant of the DeForest Broadcasting application had become "final".

Option Number 2:
Wait to hear from the FCC.

Mike Hoyer personally paid for all professional services and spent an enormous amount of time and effort on this project since 1991. Hence, Mike Hoyer 'paid' for the frequency since step one which includes the following major steps:

1991: Identify need, research methods to fulfill need
1992: Frequency search via engineering team

1992: Business Plan via extensive research into all avenues of starting and operating the business over a 5 year period
1992: Petition to FCC via attorney
1993: Several additional petitions to FCC via attorney and engineering teams
1995: Form 301 Filing via attorney and engineering teams

These steps were taken to meet the needs of the youth and young families of the Dane County community and not to line my own pockets. However, the ideas of the additional applicants only consisted of money, money, money with no concern for Mike Hoyer's extensive plea for helping the Madison Community. To make matters worse, in August 1997, a federal auction was mandated by the federal government unless matters were settled privately by January 30th, 1998. Naturally, Mike Hoyer didn't have millions of dollars (like some of the other applicants who owned numerous radio stations) to win a federal auction for the Madison community, therefore, Mike Hoyer was forced to give up the radio frequency that he so earnestly started by giving into to a private settlement by one of the other applicants. Finally by 2pm, January 30th, 1998, all applicants agreed to a private settlement with an applicant that already indirectly owned and operated many radio stations in Madison, Wisconsin and throughout the Midwest. It was a losing battle. Now, after years of hard work and money, Mike Hoyer is back to square one in trying to solve this serious Madison community problem. Question is: Will LPFM be the answer? The answer will only be yes, IF the big money maker applicants who own existing radio properties are kept out.

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