Before the

FEDERAL COMMUNICATIONS COMMISSION
Washington, D. C. 20554

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

ADDITIONAL REPLY COMMENTS OF KENNETH W. BOWLES

The Federal Communications Commission's (FCC) Notice of Proposed Rule Making (NPRM) seeks comments on the creation of a Low Power FM (LPFM) Radio Service. I am taking this opportunity to reply to the selected comments and reply comments of others. The following reply comments are in addition to those previously filed with the Commission. The previous filing also includes a statement of my background in radio broadcasting.[1]

I have been encouraging the Commission to immediately create noncommercial LP1000 radio stations that provide co-channel, first adjacent channel, and second adjacent channel protection. The stations would essentially have the same responsibilities and privileges as current Full Power stations. *My replies to the comments and reply comments of others are often based on such a LPFM Radio Service.*

The Present State of Radio Broadcasting Stifles the Competition of Worldviews

Many comments filed with the Commission worry that the lack of localization because of high power, regional radio stations can be partially resolved with the proposed LPFM Radio Service.[2] Even the comments by the National Association of Broadcasters (NAB) describe how current regulations have been ineffectual in increasing the number of formats.[3] However, there is also the problem of a lack of competing worldviews in broadcasting:

> When I was a kid and life was simple, a cookie company could reliably be expected to produce cookies. Later, in the 1970s, the same company might be found making cookies, lightbulbs, and airplanes. Confusing, perhaps, but not yet sinister. But increasingly we are seeing—note Walt Disney Co.'s 1996 purchase of ABC—a vertical integration of related enterprises for the purpose of leveraging one media to achieve dominance in another. In this latest movement across media boundaries to aggregate control, CBS kicks in the advertising outlets, TV and radio stations, cable; Viacom kicks in film companies, publishing houses, a chain of video stores, Internet business.
>
> Net result: an insidious drift toward a centralizing of information into fewer and fewer hands that approaches a de facto ministry of culture; the most trafficked websites owned

[1] Reply Comments of Kenneth W. Bowles, September 1, 1999, p. 1.
[2] See ibid., pp. 7-8, and many others. ". . . the Commission emphasized localism as a 'touchstone value' of the terrestrial radio broadcast service (FCC, NPRM 99-237, Digital Audio Broadcasting Systems and their Impact on the Terrestrial Radio Broadcast Service, paragraph 6).
[3] See Comments of the National Association of Broadcasters, August 2, 1999, Volume I, Attachment B, pp. 5, 7, as well as the interpretation of their comments found in my reply comments, p. 8.

by the familiar big conglomerates; news and entertainment bleeding into each other; media firms that comment on themselves in an incestuous conflict of interest; a bundling of news and advertising to steer the unwary to certain messages; cross-promotion that leaves the illusion of choice where in fact choice is increasingly narrowed; technically a plethora of selections but practically a drowning of the voices of dissidence by the din around it.

Come to Philadelphia sometime and see our variety. The fifth largest city in America has not one classical music radio station (we do have five CBS stations), as WFLN went belly up last year, the victim of a corporate financial decision. Now almost everywhere you flip your dial sounds like a cut from the same heavy metal album. My 16-year-old son loves it. I think it's scary.

Or consider Rupert Murdoch, that media mogul, who saw to it that a book critical of the Chinese governor of Hong Kong would never see the light of day at Random House because he didn't want to offend China.

What difference does it make if you have a hundred stations if they're all the same station? Where's the variety, the originality, the daring, the courage, the real dialogue, when all share a common worldview a mile deep—then quibble fatuously over the one-inch top layer of disagreement?[4]

A worldview is not a format. A format may be part of the one-inch top layer of a worldview. A worldview may contain many formats that espouse the same understanding of how society should operate. In broad strokes, born again Christians have a worldview in which all of mankind is tainted by sin, creation is devolving, and the sovereign God rules. Non-born again persons have a worldview in which all of mankind is tainted by good, creation is evolving, and mankind is sovereign. Admittedly these categorizations are oversimplified.

According to polling done by the Barna Research Group, 39% of the United States population in 1998 were born again Christians.[5] According to the National Religious Broadcasters (NRB), there were 1,223 full-time radio stations broadcasting a Christian format in 1998.[6] The FCC indicates there were 12,329 licensed full-time radio stations in June 1998.[7] Thus, 10% of all radio stations in 1998 were Christian radio stations (1,223/12,329). Interestingly, Barna also notes that around 36% of Christian radio listeners are not born again.[8]

Roughly, the statistics support the following:

- Listeners involved in one worldview will listen to programming reflecting other worldviews. Furthermore, I would say it is healthy for a person to subject himself to varying worldviews though the listener will probably adopt only the one he considers superior. This would add to the listener's maturity and his confidence in his worldview selection.

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[4] Andree Seu, Soul Food, Ministry of Culture, Inc., So who needs censorship, anyway? World, October 2, 1999, p. 61.

[5] http://www.barna.org/cgi-bin/PagePressRelease.asp?PressReleaseID=17.

[6] 1999 NRB Directory of Religious Media, p. 388. It should be noted that NRB's definition of a full-time Christian radio station is not severe. A station is full-time Christian if it broadcasts 15 or more hours per week of religious programming! Furthermore, the number of full-time Christian stations includes international and shortwave stations. The data from the FCC does not include international and shortwave stations. Thus, the unbiased observer would probably conclude that the NRB data has a tendency to mislead the reader since he would expect that full-time stations are those that dedicate their entire broadcast day to religious related programming.

[7] http://www.fcc.gov/mmb/asd/totals/bt980630.html.

[8] http://www.barna.org/cgi-bin/PagePressRelease.asp?PressReleaseID=8.

- The non-born again worldview representation within broadcasting is 48% more than its representation in the population ([1.00 – 0.10]/[1.00 – 0.39] – 1.00). In reality, the non-born again monopoly on broadcasting is probably greater because the number of full-time Christian stations provided by NRB seems to be inflated.[9]

Creating a LPFM Radio Service could be a step towards additional diversity in worldviews heard on radio stations. New owners with different worldviews would be brought into broadcasting.

Comments of NAB[10]

I am additionally impressed how NAB overstated interference and manipulated readers:

- NAB did not use the accepted method of testing radios for interference.[11]
- NAB studies give less used radios, which are more susceptible to interference, the same weight as the most used radios. The more used radios are less susceptible to interference.[12]
- NAB studies inflate the amount of interference by including hypothetical LPFM stations that could never be constructed.[13]
- Charts and maps published by NAB, in which one would expect to find the quantity of listeners receiving interference, manipulate readers by substituting instead the number of persons living in areas where interference is expected.[14]
- The degree of interference discovered by NAB in their studies is not observed in the real world.[15]

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[9] See footnote 6.

[10] Comments, NAB.

[11] "'Volume Two,' dealing with their receiver study, is an expert example of how to manipulate the numbers to attempt to support a pre-determined goal, in this case, an attempt to show that creating a LPFM service would create interference. For example, a 10 dB 'fudge factor' for the NAB-sponsored receiver study was built in by claiming that the FCC's method of predicting interference, which the NAB and the broadcast industry as a whole has supported for many years, is now, all of a sudden, suspect and 'inappropriate.' In an attempt to weaken the received (desired) signal by 10 dB, to try to make it easier to show interference from the undesired LPFM signal, they refer only to a land mobile document, which has no bearing on this matter (Reply-Comments of J. Roger Skinner, Jr., September 17, 1999, pp. 1-3)." Skinner elaborates extensively. Also note that the FCC did not use this method in its study (Second and Third Adjacent Channel Interference Study of FM Broadcast Receivers, Project TRB-99-3, Interim Report, July 1999).

[12] NAB studies are based on the false assumption that the usage of the various categories of radios follows sales figures for the categories. For example, walk-man radios are given the same weight as automobile radios even though the former are novelty radios used in limited circumstances where interference is tolerated by the listener. Automobile radios are the workhorses of broadcasting--used daily especially during morning and afternoon drive times. Since the most used categories have less susceptibility to interference, the false presupposition artificially increases interference concerns. See Bowles, pp. 3-4, 6-7.

[13] NAB places LPFM stations on first adjacent channels. Such stations could not exist because they would interfere with each other (Bowles, p. 4). They also locate LPFM stations in the midst of bodies of water (p. 5).

[14] The effect is dramatic! I use the example of St. Louis. NAB lists a *minimum* of 40,716 persons living in the interfered area but only 20 listeners would receive interference. I also remind readers that many of the 20 listeners would be in vehicles and would quickly move out of the area of interference (p. 6).

- Without warning the reader, NAB presupposes the most extreme operational characteristics of hypothetical LPFM stations so that the interference problem is exacerbated.[16]
- NAB uses bulk to impress readers.[17]

NAB has used biased study methods and spinning techniques to develop an unthinking herd mentality in opposition to LPFM.

Reply Comments of NRB[18]

As my earlier reply comments have indicated I am a member of NRB and appreciate the organization. However, I believe NRB's opposition to LPFM is misplaced.

Copies of my earlier reply comments were supplied to NRB prior to the preparation of their reply comments.

The NRB reply comments rely on the defective NAB and CEMA comments.

Since NRB extensively relies on the work of NAB, many of the problems found in NAB's presentations find their way into NRB's comments and reply comments.[19] Those problems are identified above and will not be repeated in this section.

NRB also relies on the problematic CEMA comments. I addressed CEMA's problems in my earlier reply comments and they will not be addressed here.[20]

There is nothing in the NRB reply comments that resolves the CEMA and NAB problems.

The NRB comments and reply comments do not represent the entire membership.

My reply comments engaged the comments of NRB. Being a member of NRB, I criticized them for not mentioning that their comments do not represent all their members and for not polling membership before making filings with the FCC.[21]

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[15] I note that the National Lawyers Guild study shows that the reduction of third adjacent channel interference protection would result in an interference level similar to what is currently experienced from fourth adjacent channel stations. No reasonable person would insist that the current FM radio station channel assignments should be changed due to too much fourth adjacent channel interference (p. 6).

[16] NAB uses the lowest power LPFM station in combination with a very close, highest power Class B station to over-emphasize the interference a normative LPFM station would receive (Bowles, p. 7).

[17] The first impression a reader receives, when faced with the NAB comments, is the bulk. He thinks that surely an organization, which publishes such a huge report, has thoroughly supported its position. However, the person who actually accepts the challenge to study all three volumes finds that the vast majority of Volume III's pages contain maps that only illustrate data found elsewhere in the report. He also finds a loathsome amount of unsupported propaganda in Volume I. Then there are the above problems with the studies.

[18] Reply Comments of National Religious Broadcasters, September 17, 1999.

[19] NRB staff members have told me that the organization does not have technical persons on its staff. They relied on contract personnel in the preparation of its reply comments.

[20] Bowles, pp. 4-5.

[21] Ibid., p. 12.

Letters to the editor in the NRB magazine have identified additional members in favor of LPFM:

Michael Bond, President/Founder of Global Radio Outreach (GRO), criticized NRB because NRB enticed him to join on the basis that it would be helpful in fulfilling GRO's goal of broadcasting to ethnic groups in the major markets of the United States. However, NRB instead has attacked the proposed LPFM Radio Service. Bond believes that LPFM has promise to be a tool in achieving GRO's goal.[22]

Wayne Nestor, a broadcast engineer, expressed fears that there is no place in NRB for those who support LPFM. Speaking of NRB, Nestor stated with satire, "I understand you must stand behind those station owners who are more concerned about money than outreach!"[23]

The comments and reply comments of NRB neither represent the position of its complete membership nor was the membership polled before NRB comments were filed.

This is what the NRB should have said about the impact of LPFM on the public interest.

My reply comments documented that teen and Hispanic populations are under served by religious radio.[24] LPFM would help solve these problems.

Bond believes that there is also a need for LPFM to provide religious radio directed to Arabic speaking listeners:

> Take Detroit, MI, for example. As many as 350,000 Arabs reside there, mostly in the south area of Dearborn. However, it's almost impossible to get airtime there to broadcast the Gospel in [another] language. None of the Christian broadcasters is willing to break up a broadcast schedule and allow an hour of Arabic. And even if one did, there are no less than 75 languages represented in most of our major cities. How will we reach them?
>
> Granted, there is an Arabic station in Detroit, but it's a secular station and Muslims have bought up all the airtime from early morning until late evening. LPFM would allow us to set up small FM stations to reach communities with their languages. Many immigrants do not speak English. But even those who do speak English would feel joyful to hear something on the radio in their own language, opening real possibilities for us and for the Gospel.[25]

LP1000 stations could provide service to groups who are presently left out of most religious radio.

NRB's concern that poor people will lose quality FM service is not valid.

In my reply comments, I gave an example of a LP1000 station in a top twenty market. There would only be six interfered, poor listeners! It would be quite easy for the LPFM station to supply improved radios to these six persons.[26]

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[22] Michael Bond, Trade Talk, NRB, October 1999, p. 22.
[23] Wayne Nestor, Trade Talk, NRB, October 1999, p. 22.
[24] Bowles, pp. 12-14.
[25] Bond, p. 22.
[26] Bowles, p. 12.

NRB was given a copy of my reply comments before they prepared their reply comments. But they choose not to refute my calculations. It is odd that they continued to press this discredited argument concerning the poor in their reply comments.[27]

NRB's "real life" illustrations of interference harm do not exist in "real life."

NRB provides six illustrations of harmful interference that they say occur in *"real life."*[28] The illustrations came from the comments of the Adventist Radio Network, Inc. (ARN), and concern their stations WSMC, WAUS, and KEEH (see Figure 1).[29]

Figure 1

Adventist Radio Stations

Call Sign	City Of License	Frequency (MHz.)	Effective Radiated Power (KW.)	Antenna HAAT (Meters)	Latitude	Longitude
WSMC	Collegedale, TN	90.5	100	314	N35:15:20	W85:13:34
WAUS	Berrien Springs, MI	90.7	50	150	N41:57:42	W86:21:02
KEEH	Spokane, WA	104.7	0.320	420	N47:34:45	W117:17:48

This data was found at http://207.91.54.150/radiostation/ on October 11, 1999 and is ultimately from the FCC engineering database.

None of the illustrations are from "real life."

While the stations are actually on the air, the examples of interference are theoretical and in some cases are erroneous. No experimental LPFM stations were built. No field measurements were taken of the actual interference between existing Full Power stations and experimental LPFM stations.[30] There is nothing "real life" in the examples.

The WSMC-FM 90.5 Collegedale illustrations are erroneous.

Along with NPRM 99-25, the FCC published corresponding software that gives guidance as to where LPFM stations might be constructed according to the document.[31] When applied to the latitude and longitude of the potential LPFM station that ARN says would interfere with WSMC-FM, the program indicates that no LP100 or LP1000 stations would be available using the largest grid selection (see Figure 2)!

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[27] Footnote 4, Reply Comments, NRB, p. 2.
[28] Reply Comments, NRB, pp. 3-4.
[29] Comments of the Adventist Radio Network, Inc., August 2, 1999.
[30] ARN Comments, Engineering Statement, Appendix A, ARN, pp. 5,
[31] "Mass Media Bureau Releases Low Power FM Radio Spectrum Availability Computer Program, Public Notice DA 99-464, March 5, 1999.

Figure 2

Potential Location of LPFM Stations in Vicinity of Latitude 34-48-45N and Longitude 084-57-09W

WSMC
Latitude 34-48-45
Longitude 084-57-09
Grid Size 31 X 31
Micro FM 100 Watts at 30m HAAT
Co-Channel and 1st Adjacent Protected
2nd Adjacent Channel Not Protected
3rd Adjacent Channel Not Protected
I.F. Protected
TV Channel 6 Protected
CP Records Protected
APP Records Protected
FM Translators Protected
TV Channel 6 Translators Protected

200	0	220	0	240	2	260	0	280	0
201	0	221	0	241	0	261	0	281	0
202	0	222	0	242	0	262	0	282	0
203	0	223	0	243	0	263	0	283	0
204	0	224	807	244	0	264	0	284	0
205	0	225	0	245	0	265	0	285	0
206	0	226	0	246	0	266	362	286	0
207	0	227	0	247	0	267	144	287	59
208	0	228	0	248	0	268	0	288	0
209	0	229	0	249	0	269	0	289	0
210	0	230	0	250	245	270	0	290	39
211	0	231	0	251	0	271	0	291	0
212	0	232	0	252	0	272	0	292	0
213	0	233	83	253	0	273	231	293	0
214	0	234	0	254	0	274	0	294	0
215	0	235	0	255	0	275	12	295	0
216	0	236	0	256	0	276	0	296	0
217	0	237	0	257	0	277	0	297	19
218	0	238	0	258	0	278	0	298	288
219	0	239	0	259	0	279	0	299	0
								300	0

Total 2291

FCC databases, dated October 8, 1999, were used in the construction of this and the following figure. Since there are no available LP100 assignments that would interfere with WSMC, there would also be none available for LP1000 assignments. There would be a potential LP100 assignment wherever a LP1000 assignment exists.

WSMC would be unaffected by LP100 or LP1000 stations at the location since the closest channel that could take a LPFM station would be channel 224. WSMC is on channel 213.

WSMC will never receive any adjacent channel interference from LP100 stations nor from LP1000 stations at the specified location. There will be no one in the interference area of such a LP1000 station. NRB and ARN incorrectly state there would be 30,012 persons in the area. There will be no one in the interference area of a LP100 station. NRB and ARN incorrectly state there would be 5,407 persons in the area.

The WAUS 90.7 Berrien Springs illustrations are erroneous.

Using the same method, it is discovered that WAUS would never receive adjacent channel interference from a LPFM station at the location specified by ARN. See Figure 3.

Figure 3

Potential Location of LPFM Stations in Vicinity of Latitude 42-25-15N and Longitude 086-15-37W

WAUS
Latitude 42-25-15
Longitude 086-15-37
Grid Size 31 X 31
Micro FM 100 Watts at 30m HAAT
Co-Channel and 1st Adjacent Protected
2nd Adjacent Channel Not Protected
3rd Adjacent Channel Not Protected
I.F. Protected
TV Channel 6 Protected
CP Records Protected
APP Records Protected
FM Translators Protected
TV Channel 6 Translators Protected

200	0	220	0	240	0	260	0	280	0
201	0	221	0	241	0	261	0	281	0
202	0	222	0	242	0	262	112	282	0
203	0	223	169	243	0	263	16	283	0
204	0	224	0	244	237	264	0	284	0
205	0	225	0	245	0	265	0	285	625
206	0	226	127	246	0	266	0	286	127
207	0	227	247	247	424	267	0	287	0
208	0	228	69	248	0	268	0	288	105
209	0	229	0	249	0	269	0	289	0
210	0	230	0	250	0	270	0	290	0
211	0	231	235	251	0	271	0	291	142
212	0	232	0	252	0	272	3	292	14
213	0	233	0	253	0	273	961	293	0
214	0	234	0	254	0	274	0	294	0
215	0	235	0	255	691	275	0	295	0
216	0	236	121	256	0	276	17	296	0
217	0	237	0	257	0	277	0	297	0
218	0	238	0	258	1	278	0	298	0
219	0	239	0	259	0	279	0	299	0
								300	5

Total 4448

WAUS would be unaffected by LPFM stations at the location since the closest channel that could take a LP100 station would be channel 223. WAUS is on channel 214.

WAUS will never receive any adjacent channel interference from LP100 stations nor from LP1000 stations at the specified location. There will be no one in the interference area of such a LP1000 station. NRB and ARN incorrectly state there would be 6,470 persons in the area. There will be no one in the interference area of a LP100 station. NRB and ARN incorrectly state there would be 1,779 persons in the area.

The KEEH 104.7 Spokane illustrations spin results by listing "population in the interference area" rather than "listeners hearing interference."

ARN admits there would be no one in the LP100 "population in the interference area."

ARN states that 3,134 persons will be in the "population in the interference area." However, such a statement misleads the reader because he makes the following false assumptions:

- That everyone in the area is listening to radio.
- That all the listeners are listening to the interfered station.

We will continue making an assumption that there really are 3,134 persons in the "population in interference area" of KEEH caused by a LP1000 station being in an adjacent channel. However, it will also be assumed that only 30% of these persons are listening to radio. Furthermore, it is assumed that 2% of the listeners are listening to KEEH. Thus there would only be 19 listeners hearing interference (3,134 X 0.30 X 0.02 = 19). Some of these listeners will be in their vehicles and would soon move outside the area of interference.

Only 19 listeners would hear interference produced by the LP1000 station.

The KEEH 104.7 LP1000 illustration does not take into the account the tradeoff between the small number of excluded listeners and the much larger number of listeners the LP1000 station would draw.

Running a ten-mile radius from Spokane's Zip Code 99201, one finds the population density to be 967 persons per square mile.[32] The coverage area of a LP1000 station is ([9 mile radius]^2 X π) 254 square miles. There would be 245,618 persons in the coverage area (254 square miles X 967 persons per square mile). Making the same assumptions as above, this would translate into 1,474 listeners (245,618 X 0.3 X 0.02).

Certainly **a godly owner like ARN would rejoice at the opportunity to add 1,455 listeners** (1,474 LP1000 listeners minus 19 KEEH listeners interfered) to Christian radio by allowing a Christian LP1000 at the location specified.

The view of NRB does not agree with the view of churches and their pastors and representatives.

The Electronic Comment Filing System (ECFS) was searched to discover the opinions of churches and their pastors and representatives.[33] Sixteen such entities filed in favor of LPFM:

- Calvin Christian Reformed Church
- United Church of Christ
- National Council of Churches
- United Methodist Church

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[32] http://link-usa.com/zipcode/

[33] The search was completed on November 8, 1999, at https://gullfoss.fcc.gov/cgi-bin/ws.exe/prod/ecfs/comsrch_v2.hts. The database was searched for the following words to find these entities: church, Catholic, fellowship, chapel, life, Baptist, Bible, Brethren, Assembly, God, Christian, Christ, Center, Temple, Holy, Word, Rev., Pastor, Dr., Evangelical, Presbyterian, Methodist, Wesley, Pentecostal, Ministry, Nazarene, Mormon, Lutheran, Synod, Witness, Episcopal, Gospel, Orthodox, Assemblies, Adventist, Worship.

- Evangelical Lutheran Church
- Mendon Presbyterian Church
- Abyssinian Baptist Church
- Immanuel Presbyterian Church
- Bible Baptist Church
- United States Catholic Conference
- Grace Bible Fellowship, undated
- Lifehouse
- Assembly of Christian Churches
- Rev. Maurice C. Napper
- Rev. Martin Oeschler
- Pastor Daniel P. Lantis, First Christian Fellowship Church

No churches, that do not presently own radio stations, or their pastors or representatives were found making comments against LPFM. **All of the churches, that made comments and do not currently own radio stations, are in favor of LPFM.**

Formal support of NRB's opposition to LPFM by Christian radio station owners is weak.

NRB provides a list of "Radio Group Ownerships" in its Directory of Religious Media. Sixty-six ownerships are listed.[34] On various occasions both NRB and NAB have encouraged stations to file in opposition. Of all the owners of Christian radio stations, group owners would be expected to be the most informed and best able to file comments and reply comments to a NPRM that they oppose. However, only six ownerships filled comments and/or reply comments generally in opposition to the proposed LPFM Radio Service.[35] One ownership filed generally in favor of LPFM.[36] **There is no outpouring of support among Christian radio station ownerships in support of NRB's opposition.**

Digital Audio Broadcasting (DAB)

The Commission has recently published its NPRM on DAB.[37] Some comments on the creation of LPFM, given the new context of DAB NPRM, are necessary.

As I write these reply comments, I note that the number of comments and reply comments received by the FCC concerning LPFM is approaching 3,100. Hundreds of additional comments have been provided in mass filings. The vast majority of these mainly grassroots filings favor LPFM. There is unprecedented public interest in the creation of a LPFM Radio Service.

I do not believe that the public interest in creating DAB even approaches the interest in LPFM. Furthermore, LPFM involves the implementation of a new, necessary service to the public. DAR only enhances existing services. Therefore, the formulation of DAR rules must not

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[34] 1999 NRB Directory of Religious Media, pp. 149-154.
[35] Ibid. ECFS was searched for occurrences of the ownerships' comments and reply comments. The ownerships generally opposing LPFM are Bott Radio Network, Christa Ministries, Crawford Broadcasting Company, Northwestern College Radio Network, Radio Training Network, and Salem Communications Corp. The Warner Robins, GA, stations owned by the Toccoa Falls Radio Network also filed against LPFM. However, the filing seems to be the work of only the Warner Robins stations not the ownership.
[36] Ibid. WAY-FM Media Group, Inc. is generally in favor of LPFM.
[37] FCC, NPRM 99-325, November 1, 1999.

work against the soon, successful implementation of a robust LPFM service. With this goal in mind, I suggest the following timetable.

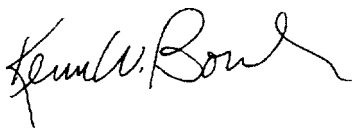
First, **the awarding of construction permits for new Full Power stations and associated translators should be frozen** until after LPFM is successfully implemented in its first and second waves. This should happen immediately.

Second, **rules for LP1000 stations, that drop the level of third adjacent channel interference protection,[38] should be immediately published and the process of placing the first wave of LPFM stations on the air should be expedited**.

Third, **TV channel six should be reserved for use of non-In Band On Channel (IBOC) DAB stations and/or for use in resolving any significant interference problems** once LPFM has been implemented. Left over spectrum would be reserved for future LPFM (the third wave) and Full Power stations.

Fourth, **a second wave of LP1000 stations should be implemented reducing both second and third adjacent channel interference protections**. Implementation would begin as soon as it is determined that such stations will not interfere significantly with IBOC stations, as soon as it is determined that DAB will be non-IBOC, or upon determining that DAB is no longer a viable alternative.

Thank you for the opportunity of providing these reply comments.



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[38] Ibid., paragraph 25: "Both Lucent and USADR expressed concern about the impact of LPFM on DAB but it appears that the possible relaxation of 3rd adjacent channel protection standards for LPFM would have no material impact on digital signal reception. 'Because of the design of the USADR IBOC system, digital reception is essentially not susceptible to third adjacent channel interference; nor is IBOC likely to increase the potential for causing such interference to analog stations (USA Digital Radio, Inc., Petition for Rulemaking, Appendix D at 3).'"