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

In the Matter of	)	
	)	
Review of Technical Policies and Rules	)	RM-11565
Presenting Obstacles to Implementation of	)	
Section 307(b) of the Communications Act	)	
and to the Promotion of Diversity and Localism	)	

To: Office of the Secretary
Attention: The Commission

COMMENTS

BROADCAST MAXIMIZATION COMMITTEE

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SUMMARY

Minority Media Telecommunications Council ("MMTC") has endorsed the proposal submitted by Broadcast Maximization Committee ("BMC") for the use of the vacated spectrum in television Channels 5 and 6 (76-88 MHz) and has suggested the creation of an advisory committee in order to speed up the process of considering the merits of the proposal. BMC has proposed to (1) relocate the LPFM service to a portion of this spectrum space; (2) expand the NCE service into the adjacent portion of this band; and (3) provide for the conversion and migration of all AM stations into the remaining portion of the band over an extended period of time and with digital transmissions only.

BMC believes that the benefits from this proposal to all of the broadcast services are enormous. Thousands more LPFM stations can operate--free from interference caused to their limited signals, without having to fight with FM translators over spectrum, without having to share the FM band and without subjecting LPFM stations to possible displacement while greatly expanding the service to new and diverse entrants. NCE stations will benefit from the expansion of its service and the location of this available space adjacent to the current reserved portion of the FM band, presenting a perfect opportunity for this expansion. Based on the large number of applications filed in the last filing window, there is a tremendous amount of interest in providing additional local and specialized NCE programming to diverse and underserved groups.

The greatest benefit will be conferred to the AM service. AM stations have long suffered economically from their inferior quality, unequal day and night service areas, growing man-made interference from numerous RF noise sources, constant detuning, mounting repair and maintenance costs, declines in value and uncertainty about the

effectiveness of the digital mode of operation, among other things. The AM service is badly in need of modernization. Many small businesses, minority owners and new entrants operate AM stations and offer local and news/talk programming. BMC has developed a plan to convert and provide for the migration over an extended period of time for all AM stations to operate in the Ch. 5/6 band in the digital mode.

Since the filing of the BMC proposal in MB Docket 07-294 (July 30, 2008), there has been considerable favorable reaction from many broadcast industry groups representing minority, LPFM and NCE interests. Representatives from Canada have contacted BMC and expressed its keen interest in the concept of using the Channel 5/6 spectrum for this purpose in Canada. BMC recognizes there are also industry groups opposed to the plan and issues to overcome. As a result, BMC believes that an advisory committee may be a reasonable solution to the current impasse. BMC's intent was to offer a framework for the use the vacated spectrum. Input from various sectors of the industry are encouraged. Above all, BMC believes its proposal for use of the Channels 5/6 spectrum deserves serious consideration for the benefit of the AM, LPFM and NCE services.

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COMMENTS

1. The Broadcast Maximization Committee ("BMC"), which consists primarily of a group of consulting engineers and other representatives of the broadcast industry, offers its comments to the MMTC proposal to create an advisory committee to assist the Commission's consideration of BMC's comprehensive plan for the use of television Channels 5 and 6 for FM broadcasting.[1] BMC's proposals for the use of Channels 5 and 6 (76-88 MHz) are as follows:

1) relocate the low power FM ("LPFM") service to a portion of this band;

2) expand the noncommercial educational ("NCE") service into a portion of this band; and

3) reallocate the AM service to the remaining available space in this spectrum over an expanded period of time with digital transmissions.

The benefits flowing from these proposals are enormous for LPFM, NCE, and AM stations as well as many other segments of the broadcast industry. In addition, the proposals will greatly enhance the Commission's localism, diversity and digital radio

[1] *See BMC's Comments* filed on July 30, 2008 in MB Docket 07-294*, Promoting Diversification of Ownership in the Broadcast Services.*

initiatives as well as having environmental benefits. BMC is resubmitting its proposal in this proceeding in order for the Commission to more promptly consider the proposal by either appointing an advisory committee to assist in developing rules and policies for this new spectrum use or to initiate further proceedings to solicit comments from all sectors.

2. The transition of TV stations to the digital service was completed earlier this year leaving Channels 5 and 6 almost entirely vacant. Attempts by some TV stations to remain on these channels has demonstrated the inadequacy of VHF for digital transmissions.[2] BMC demonstrated in its earlier filing that the few remaining Ch. 5/6 TV stations have alternate channels available to them. This study has been updated to reflect changes that have occurred since the earlier study was performed. See attached Technical Statement. Despite the availability of these two VHF channels for some type of broadcast use, no other parties have come forward with a plan to use all of this spectrum. The following discussion highlights the enormous benefits of BMC's proposal to the public at large and to all of the various segments of the broadcast industry.

I. LPFM SERVICE

3. The LPFM service was established by the adoption of rules in 2000. Since that date, approximately 800 LPFM stations have become operational.[3] But the demand for additional LPFM stations is extraordinary as evidenced by the magnitude of comments filed in the LPFM proceeding (MM Docket No. 99-25) in response to the *Second Further Notice, supra.* That proceeding contains 17,425 comments, most of

[2] "Impact of Impulse Noise on DTV Reception at Low VHF", by Victor Tawil of Association of Maximum Service Television, Inc and Charles W. Elnolf, Jr, Consultant and "Reasons Channels 2 Through 6 Are Not Commercially Viable for DTV, R. Evans Wetmore, P.E., Fox Technology Group, October 4, 2004. *See* www.mstv.org/docs/techinfo.pdf

[3] See Creation of a Low Power Radio Service, *Third Report and Order and Second Further Notice of Proposed Rule Making*, 22 FCC Rcd 21912 (2007) ("*Second Further Notice*").

which were filed by individuals/groups asking for the opportunity to file an application for a new LPFM station. Once the freeze on filing applications for new LPFM stations is lifted, a significant number of these interested parties can be expected to file applications. The Commission has stated that following the adoption of new rules in MM Docket No. 99-25, it intends to open a filing window for new LPFM stations.[4]

4. The *Second Further Notice* also proposes, *inter alia*, to eliminate the spacing requirements between 2nd adjacent full service FM and LPFM stations and asks Congress to allow the Commission to eliminate the 3rd adjacent spacing requirements between full service FM and LPFM stations.[5] Until new rules are adopted, the Commission has implemented an interim waiver policy for those LPFM stations displaced by full service stations changing their community of license.[6] Should the Commission eliminate 2nd adjacent spacings and should Congress permit the Commission to eliminate 3rd adjacent spacings, there will be a substantial increase in available spectrum for LPFM applications.[7] The Commission should not lose sight of the fact that it is incrementally eroding the protection that full service stations were promised when they reluctantly accepted the shared use of the FM band by the LPFM service.[8]

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[4] Id at ¶72.

[5] Id at ¶72.

[6] Id at ¶¶68-71.

[7] See H.R. 1147 which was recently approved by the House Subcommittee on Communications, Technology and the Internet on October 8, 2009 and is awaiting full House approval.

[8] *Second Further Notice* at ¶72 where the Commission has also proposed to deny certain applications by full service stations to change city of license. The 307(b) implications of denying a first local service to a community in order to allow a LPFM station which, in many cases, does not provide an adequate signal to reach a community, is expected to be a constant source of litigation between the parties. The move of the LPFM service to the vacated portion of the CH. 5/6 band will provide a solution to this problem as well.

5. The Commission intends to open a new filing window after adoption of new rules. As a result, it is likely that there will be many thousands of applications to process which will overwhelm the Media Bureau's limited resources. These burdens will be further exacerbated whenever minor change applications are filed by the 2nd and 3rd adjacent full service stations causing possible displacement to the LPFM station. These concerns and other related concerns have been expressed in filings responding to the *Second Further Notice* in the pending LPFM proceeding. Based on the limited experience thus far with the interim waiver procedure, full service stations are resisting the waiver in many instances when responding to an Order to Show Cause. This tension will continue to exist as long as there is a sharing of the FM band between full service and LPFM. While it is acknowledged that there is little if any interference received by full service stations within their protected contour, the interference impact on LPFM stations is substantially greater. As more LPFM stations share this overcrowded spectrum space, neither the public, the full service stations nor LPFM stations will benefit.

6. In addition, the number of oppositions from full service stations is expected to increase because very few LPFM stations use professional engineering consultants or legal advisors due to the costs involved.[9] The large number of applications along with the expected increase in opposition filings could very well have a substantial impact on the Media Bureau's ability to process the LPFM applications as well as other types of applications as it devotes processing staff to the LPFM filings. The Bureau has strained to process other window filings in recent years as the number of AM applications

[9] Id at ¶83. At ¶ 35, the Commission noted that one-third of all LPFM applications filed for the original LPFM stations were dismissed for technical and legal deficiencies.

filed in 2004 was much greater than expected and the number of translator applications filed in the 2003 window went far beyond the Bureau's capability to process resulting in the dismissal of applications beyond the limit of 10 from any one entity.[10] The next LPFM window could inundate the Bureau's resources even beyond these cited examples if, as proposed, the 2nd and 3rd adjacent spacings are eliminated and LPFM applicants do not get professional assistance.

7. LPFM stations also share the FM band with translators and have helped delay the processing of thousands of pending new FM translator applications so as not to deprive LPFM interests of filing opportunities. Several commenters in MB Docket 07-294 have asked the Commission to set aside space in the Channel 5/6 spectrum for FM translators or for LPFM stations to eliminate the sharing of the existing FM band as it becomes increasingly scarce. FM translators have become more desirable due to the recent action taken by the Commission to allow AM stations to use FM translators.[11] Of course, under BMC's plan, as will be described, AM stations will no longer need to depend on FM translators for their livelihood especially at night. Instead, AM stations can operate as full time FM stations in the Channel 5/6 spectrum.

8. For the benefit of the LPFM, FM translator and full service FM stations, the Commission should consider the BMC proposal to provide separate spectrum space for the LPFM service. LPFM stations will *receive* far more interference from full service stations than they *cause* on 2nd/3rd adjacent channels. It would greatly benefit LPFM stations and their listening public to have a portion of the available Ch. 5/6 spectrum

[10] Id at ¶ 56.

[11] *Amendment of Service and Eligibility Rules for FM Broadcast Translator Stations,*48 CR 122 (2009).

space set aside similar to what was done when the NCE reserved portion of the FM band was established (87.9-91.9 MHz). BMC has determined that by setting aside eight channels (76.1 to 76.8 MHz) of bandwidth within the Ch. 5/6 space, all of the existing LPFM stations could continue to exist and there will be room for many additional new LPFM stations. See Engineering Statement.

9. The viability of the LPFM service is an important Commission and Congressional goal in providing local service and specialized programming for underserved segments of the population. But the Commission is heading in the wrong direction by increasing the shared use of the FM band for the LPFM service. More interference, processing burdens and litigation among the affected stations will result from the existing course. Instead the Commission should be looking for a long range solution by allowing the LPFM service to flourish in this available spectrum space.

II. NONCOMMERCIAL EDUCATIONAL SERVICE

10. Two years ago (October, 2007), the Commission opened up a filing window for new and major change applications for NCE stations. A larger than expected number of NCE applications (approx. 3,600) were filed resulting in many mutually exclusive situations and the need for 307(b) and point total comparisons. The NCE service is undergoing a rejuvenation and the public would certainly benefit by offering more spectrum availability for new NCE services and the opportunity for existing LPFM station licensees to file for new NCE stations. The Ch. 6 spectrum space is perfect for an expansion of the reserved portion of the FM band below 88.1 MHz. BMC proposes that

ten channels (87.0 to 87.9 MHz) be considered for this expansion.[12] The elimination of most of the existing Ch. 6 stations will also offer existing NCE stations and NCE FM translators an opportunity to expand their service. This opportunity should be extended to all existing NCE stations affected by the remaining Ch. 6 stations. As will be discussed below, there are available substitute channels for these few remaining Ch. 6 stations. The NCE service promotes localism, offers programming for diverse interests and specialized formats for underserved listeners. The Commission should seize this opportunity to expand the NCE reserved portion of the band for the benefit of the listening public, existing NCE stations and the considerable and widespread interest in new NCE service.

III. AM SERVICE

11. There should be no doubt that in 2009, the AM service is long overdue for modernization. For many decades the AM service has fallen behind its FM counterparts. The proliferation of man-made RF noise sources is just the latest problem to affect the quality of this service. AM stations have contended with inferior fidelity and the need to detune every time new construction with supporting metal structures and high tension electrical wires are installed nearby. The new LED traffic lights cause noise interference to car radio reception of the AM signal. The changes in daylight savings time have been detrimental to many stations. The list seems to increase every year. Digital radio is, at best, uncertain for most AM stations. AM stations will fall even further behind other sources of programming if operation in the digital mode is not successful. Presently, AM

[12] 87.9 MHz (Channel 200) is included because it is not generally available for use by NCE stations except in certain specified circumstances. BMC's proposal would make limited (lower power) use of this frequency in order to protect the current analog use of the upper adjacent frequency.

stations transmitting an HD signal must operate without the additional channel streams offered to FM stations operating digitally due to the inherent limitations of the AM band.. The latest technological advance, the inclusion of FM only receivers in the iPod and cell phones portends the further demise of the AM service.

12. AM station owners are also suffering economically as they try to repair, maintain or improve their facilities. The costs of such undertakings often exceed the value of their station as costs increase, financing becomes scarce and sale prices decline. The AM service has so many obstacles to overcome and offering these stations FM translators is a short term fix, is available to a small percentage of AM stations and falls far short of the parity needed for AM stations to survive. Innovative ideas are needed. AM stations still have much to offer. Most news/talk, foreign language and other local and diverse program formats are found in the AM service. The great majority of minority owned stations are AM facilities. BMC believes it has a viable plan for the wholesale conversion of the AM service into the remaining portion of the Ch.5/6 spectrum (100 channels 77.0 to 86.9 MHz). Under this plan, AM stations could transition to this space and immediately operate in the digital mode as they are ready to do so. In this manner, AM stations can solve the current coverage problems they are experiencing, especially at night. They can benefit from the additional channel streams like other FM stations and they can avoid the interference problems that will characterize the dual analog/digital operations in the FM band during the indeterminate period of transition to full digital operation. Above all, AM stations can become competitive, financially viable and immediately have some hope for better days.

13. BMC has set forth this all inclusive plan for every AM station in the country in the attached Technical Statement. Minimum spacing requirements, field strength standards, classes of stations (designed to provide equivalent coverage), channel numbers and coverage maps were developed and are provided in the attached Technical Statement. A few examples of the studies are provided. Certain technical issues are raised and suggested resolutions are offered. But this plan is not intended to resolve all technical issues. The policies, standards and priorities for the conversion and migration of every AM station will need to be developed. BMC has no desire to preempt the Commission's authority in this regard. The creation of an advisory committee to assist the Commission in this major undertaking is a reasonable proposal. BMC offers its plan as a framework to demonstrate that its proposal is possible and achievable and to encourage further discussion.[13] The plan is not intended to state a preference for any particular allocation scheme or policy.

14. For decades, the AM service has been thought of as secondary to FM radio. Somehow AM stations have managed to survive and, in many cases, revive themselves with local and news/talk programming. But AM radio needs a huge boost to enable them to hang on during these especially difficult economic times. Although BMC's conversion idea will take time, perhaps many years, to implement, the Commission's active consideration of this proposal should provide the hope that many struggling stations need to survive. BMC's proposal should also help minority owners

[13] BMC recognizes that special consideration will be needed for the Class I-A clears to obtain equivalent facilities; the negotiation of international agreements, and whether to have voluntary conversion and a time frame for the transition, among many other considerations.

and small businesses persuade their financial sources that there is reason to continue to invest in the AM service.[14]

15. When it comes time to convert the AM station to an FM digital operation, money will indeed be needed. Many AM stations will be able to operate from one of the towers in a multi-tower array and take down the other towers or eliminate all towers and move to a nearby taller tower. As a result, the land on which these towers currently stand can be sold off producing needed funds for the conversion and improvements. Furthermore, the public at large can enjoy the environmental benefits of the eventual elimination of perhaps hundreds of towers nationwide and the potential radiation hazards that these towers present. Although, BMC is not devoting much discussion on the environmental benefits of this proposal because this proposal is focused on other benefits, this type of benefit should not be underestimated.

IV. IMPACT ON OTHER STATIONS

16. BMC is fully cognizant of the impact this proposal will have on the remaining Ch. 5 and 6 DTV stations who either believe they have no other channel available or remain on these VHF channels for other reasons. In the attached Technical Statement under Section III entitled "Reallotment of Existing Channels 5 & 6 Users to Alternative Channels", BMC's engineers have updated the previous studies for each of the DTV stations that would be affected by this proposal. First, the statement mentions what is well known to most broadcasters familiar with VHF digital operation, i.e., that

[14] Of course, receiver manufacturers will need to produce the new radios with these frequencies as they are now doing for HD radio. BMC has had preliminary discussions with industry representatives and the response has been favorable toward inclusion of digital radio service in the Channel 5/6 spectrum. The interest by the general public in buying new receivers will be much greater with the addition of the AM service along with LPFM and NCE stations in the Channel 5/6 space.

low band VHF channels are not optimally suited for DTV operation.[15] The papers cited in Note 2 indicate that there are reception problems, including increased electrical noise from both man-made and natural sources and impulse noise from overhead electric transmission lines. Given the choice, most, if not all, digital TV operators would prefer to operate in the UHF band. With that in mind, BMC identified the 26 post transition DTV stations that will operate on Channel 5 or 6. A substitute channel was found for every one of them.[16] See Technical Statement. One station has a pending request to change to Channel 41 (so no further analysis was made). As for Station WPVI-DT, there are two options that BMC identified. First, WPVI-DT could operate on Ch. 39 if two additional substitutions were made: (1) Station WLVT-DT, Allentown, PA would move to Ch. 48 and (2) Station WJAL, Hagerstown, MD would operate on Ch. 22. Second, Station WPVI-DT could also move to Ch. 4. WPVI-DT has filed pleadings in MB Docket 07-294 opposing the suggested channel changes. It should be noted that within a few days after its transition to digital, WPVI-DT filed an application to increase its power from 7.5 kW to 30 kW to overcome the inherent deficiencies with the use of digital Channel 6.

17. BMC recognizes there are obstacles to overcome. But BMC does not believe that the hurdles are, by any means insurmountable and is willing to work with all interested parties to find solutions. On the other hand, there has been an overwhelming show of support from a variety of sectors of the broadcast industry, manufacturers,

[15] *See* note 2, *supra*.

[16] BMC offered these suggested alternative DTV channels for the purpose of demonstrating that its proposal is feasible and not to impose any particular channels on the respective station licensees.

media, trade associations and even foreign governments. In that regard, representatives of Canada have contacted BMC and expressed its keen interest in the concept of using the Channel 5/6 spectrum for the AM service with digital operation and support for the efforts being made to use Channels 5/6 for this purpose. BMC appreciates the interest that MMTC, in particular, has shown in this proposal and the attempt it is making to get the process underway. BMC stands ready to assist the Commission and the public in this magnanimous pursuit.

18. BMC also pointed out one more benefit in its original filing. After all AM stations convert to the vacated Ch. 5/6 space, the entire AM band will be available for a new service. BMC cannot anticipate what uses would be appropriate or desirable in the indefinite future. But BMC has looked into this issue and understands that there may be perhaps homeland security uses for such things as the emergency alert system or various military uses such as sonar to protect ports. Other security or military uses could be identified or the band could be opened up for ideas from all sectors.

CONCLUSION

19. As a result of the completion of the digital TV transition, the Channel 5/6 spectrum is available for new broadcast uses. BMC believes that the best usage is its comprehensive plan for the LPFM, NCE and AM services. As discussed, BMC's plan will confer enormous benefits to many diverse interests. Starting with the LPFM service, there will be more frequencies available for new entrants without the diminished signal caused by sharing the FM band with full service broadcasters and the risk of displacement when FM stations relocate or increase their facilities. The FM translator service will benefit by the increased availability of frequencies without having to

compete for spectrum space with the LPFM interests. The viability of these services long range could well depend on the use of a portion of the space made available by the vacated TV Ch. 5/6 stations. In addition, the NCE service could greatly benefit from the expansion of the reserved band and the elimination of television Channel 6 station protections that limit the NCE service.

20. The BMC proposal offers a highly robust digital signal to AM small businesses and minority owners which does not appear to be attainable in the AM band particularly at night, on an equivalent level with FM broadcasting. The environmental benefits of the elimination of tower structures and radiation hazards alone warrant serious consideration by the Commission. BMC has made an effort to find UHF channels for all of the remaining Ch. 5/6 stations. There will be station owners who will balk at changing channels and others will object to the competition that they see resulting from these proposals. There will be various other naysayers who will point out problems with the proposal. When they do, BMC implores the Commission to keep in mind the enormous benefits for so many diverse interests. The Commission has just undertaken a massive transition of all TV stations to become digital. With that experience and know how, the AM conversion along with the LPFM and NCE expansion, should be more manageable. BMC urges the Commission to create an advisory committee to consider all of the various aspects of the proposed use of Channel 5/6 and institute further proceedings to start the AM migration.

Respectfully submitted,

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