

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

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| In the Matter of |) | |
| |) | |
| Amendments of Parts 73 and 74 to Improve the Low Power FM Radio Service Technical Rules |) | MB Docket No. 19-193 |
| |) | |
| Modernization of Media Regulation Initiative |) | MB Docket No. 17-105 |
| |) | |

COMMENTS OF THE CITY OF BOSTON, MASSACHUSETTS

EXECUTIVE SUMMARY

WBCA-LP serves Boston, Massachusetts and its citizens as a source of public safety programming with the additional benefits of community and civic programming. Boston partnered with the FCC and two Boston community institutions to create this public safety tool in response to the tragic events that took place at the Boston Marathon in April of 2013. Boston files in this proceeding to voice its support for the Commission’s proposals to permit LPFM licensees (1) to make use of boosters along the same guidelines already in place for full power FM stations, and (2) to permit directional antennas, using either off-the-shelf or composite antennas.

BACKGROUND

The City of Boston, Massachusetts (the “City” or “Boston”)¹ files these comments in response to the Commission’s July 30, 2019 Notice of Proposed Rulemaking (“NPRM”) regarding the Low Power FM (“LPFM”) radio service.²

In 2000, the FCC established the LPFM service to provide programming responsive to local community needs and interests, and to serve underrepresented groups within communities.³ To that end, the FCC chose to limit the LPFM service to operations on a noncommercial educational basis by entities that do not hold an attributable interest in any other broadcast station or other media.⁴ The FCC also limited LPFM stations to lower power and antenna heights than full power FM stations, omnidirectional antennas, and minimum spacing requirements to prevent interference to other LPFM stations, FM stations, and FM translators.⁵ In the NPRM, the Commission sought comment on potentially relaxing some of these limitations, and made various proposals to improve LPFM reception and increase flexibility in siting while maintaining interference protection and the core LPFM goals of diversity and localism.⁶

¹ The City, incorporated as a town in 1630 and as a city in 1822, exists under Chapter 486 of the Acts of 1909 and Chapter 452 of the Acts of 1948 of The Commonwealth of Massachusetts which, as amended, constitute the City’s Charter. The Mayor is the chief executive officer of the City. Martin J. “Marty” Walsh is the City’s fifty-fourth mayor. He has general supervision of, and control over, the City’s boards, commissions, officers, and departments. The City’s budget for all departments and operations including the Boston Public Library system, except the School Department and the Boston Public Health Commission, is prepared under the Mayor’s direction.

² *Amendments of Parts 73 and 74 to Improve the Low Power FM Radio Service Technical Rules*, MB Docket Nos. 19-193, 17-105, Notice of Proposed Rulemaking, FCC 19-74 (Rel. Jul. 30, 2019) (“NPRM”).

³ See *Creation of a Low Power Radio Service*, MM Docket No. 99-25, Report and Order, FCC 00-19, para. 4 (Rel. Jan. 27, 2000).

⁴ *Id.* para. 1.

⁵ See 47 C.F.R. § 73.801 *et seq.*

⁶ NPRM ¶ 1.

Boston files these comments in its capacity as the broadcast licensee of WBCA-LP, Facility ID No. 194505 (“WBCA”). The tragic events that took place at the Boston Marathon in April of 2013 underscored the need for the City to have a reliable source of public safety communications and emergency alert notification for its citizens.

The City applied for a construction permit to build an LPFM station later that year,⁷ and was granted a license for WBCA in 2016.⁸ Mayor Walsh intended for WBCA to fill the local loss of community radio Boston experienced in 2015 and 2016 by utilizing the station as a source for community and civic programming. As a result, WBCA provides public safety programming for Boston residents on a regular and frequent basis as a source of news and information in the event of any local or regional emergency.

Boston Neighborhood Network (“BNN”) now programs this new radio station for the residents of Boston as a new forum to present a community voice. News and community programming is scheduled daily from 6:00 pm to 2:00 am and currently features a mix of local news and talk programming with a range of topics, from education and technology to multi-language programming and sports. The producers and hosts at BNN present community and ethnic programming for Boston’s immigrant communities, which are often overlooked by mainstream media, but not at BNN, where Boston’s residents are valued customers and listeners. At least one-third of Boston’s households speak a language other than English at home. BNN provides a forum for news and information and involvement for all of these residents.

Thus, WBCA has not only fulfilled the City’s need for public safety programming, but has also provided programming geared toward underrepresented communities. Locally produced

⁷ FCC File No. BNPL-20131106ARV.

⁸ FCC File No. BLL-20160512ABI.

programming is prioritized, as is programming that addresses political issues with objectivity, fairness, and balance to include various viewpoints.⁹

DISCUSSION

As demonstrated above, Boston has utilized the LPFM service in furtherance of each of the service's core goals, diversity and localism, while also filling a vital public safety need. Boston applauds the Commission's proposal to allow LPFM licensees greater flexibility in improving their stations' reception, and files these comments to urge the Commission to permit LPFM licensees (1) to make use of boosters along the same guidelines already in place for full power FM stations, and (2) to permit directional antennas, using either off-the-shelf or composite antennas.

1. Booster Stations

In the NPRM, the Commission proposes permitting LPFM/FM booster cross-ownership subject to guidelines similar to those currently applicable to LPFM/FM translator cross ownership.¹⁰ This would entail allowing LPFM stations to make use of booster stations under the following conditions:

1. The contour of the booster must be fully inside the service contour of the primary LPFM station and the ERP must be no more than 50 watts;
2. The LPFM station must be licensed (not an unbuilt construction permit);
3. In the top 50 Nielsen rated markets, the proposed FM booster location must be within 10 miles (16.1 kilometers) of the LPFM station's transmitter site;

⁹ More information regarding WBCA programming may be found on BNN's website, <https://bnnmedia.org/programming/radio>.

¹⁰ *NPRM* ¶ 16.

4. The booster must run on the same channel and carry the same programming as the LPFM station; and
5. The LPFM station must currently meet the distance separation requirements of 47 CFR § 73.807(a) to all full-service stations on co-channel and first-adjacent, second-adjacent, and third adjacent stations.¹¹

The NPRM suggests that booster use by LPFMs would be “rare,” but asserts that boosters could be quite helpful to LPFM stations facing “unique terrain challenges.”¹² Boston files these comments to suggest to the Commission that booster use may not be as rare as the NPRM suggests. Boston itself faces reception issues with WBCA. While WBCA has proved to be an invaluable resource for the City, not all Boston residents have enjoyed that resource equally. Specifically, East Boston and Charlestown (northeast of the transmitter), as well as Allston and Brighton (northwest of the transmitter), have experienced poor reception due to issues with terrain and weather. The Commission’s proposal would alleviate these reception issues, helping to ensure that as many Boston residents as possible share in the crucial benefits provided by WBCA. For these reasons, Boston supports the Commission’s proposal to permit LPFM/FM booster cross-ownership.

Boston offers one modification to this aspect of the NPRM. The NPRM proposes allowing booster stations to receive the signal of a commonly-owned LPFM station by any means authorized in Section 74.1231(i) of the Commission’s rules.¹³ Section 74.1231(i) specifies that booster stations may receive the signals of a primary station “directly through space and

¹¹ *Id.*

¹² *Id.*

¹³ *NPRM* ¶ 18.

suitably amplified, or received by alternative signal delivery means including, but not limited to, satellite and terrestrial microwave facilities.”¹⁴

Boston asks the Commission to clarify that “alternate signal delivery” may include the delivery of signals through Internet Protocol or fiber. This modification would enable LPFM licensees to make use of resources already utilized by stations, thereby allowing licensees to make use of boosters without having to acquire assets outside of their means.

This inclusion makes sense because many localities are already making use of fiber networks, including Boston. The Boston Fiber Network (“BoNet”) expansion is a \$12 million new investment in the City network’s fiber backbone and switching infrastructure. The City of Boston’s fiber network is built for municipal use, but also incorporates functionality for expanding delivery of wireless, Wi-Fi and Smart Cities technologies.

The City designed and installed carrier-class equipment and redundancy on the network ring, including DWDM optical electronic gear. The primary objective of the network is to meet the growing demand for connectivity while reducing the ever-increasing leased line costs by transitioning administrative, public safety and city services data traffic onto this new fiber optic network. This transition has already been achieved for more than half the City’s network managed services and the City realizes a savings in managed services recurring charges and cost avoidance of over \$4,000,000, annually.

This network build-out will expand the BoNet network by connecting all Boston Public Schools with city fiber, as well as all public safety locations, elderly housing developments, community centers, libraries, and other sites. Altogether, the project aims to connect more than 450 City buildings and some public spaces with network fiber backhaul to strengthen public

¹⁴ 47 CFR § 74.1231(i).

safety communications and to provide broadband service to the City's public schools and libraries, public works, and public housing.

As a result of this fiber project in Boston, and similar fiber projects occurring in other localities, LPFM licensees are uniquely positioned to make use of already existing fiber connectivity, and should be permitted to make use of fiber to feed signals to booster stations.

2. Directional Antennas

The NPRM also proposes allowing LPFM stations to use directional antennas, using either off-the-shelf or composite antennas, upon a satisfactory engineering showing of the elements contained in Section 73.316(c) of the Commission's rules.¹⁵ Section 73.316(c) requires the following:

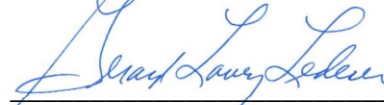
1. A tabulation of the composite antenna pattern for the proposed directional antenna;
2. A value of 1.0 must be used to correspond to the direction of maximum radiation. The pattern must be tabulated such that 0° corresponds to the direction of maximum radiation or alternatively, in the case of an asymmetrical antenna pattern, the pattern must be tabulated such that 0° corresponds to the actual azimuth with respect to true North;
3. Applications must include valuations tabulated at intervals of not greater than ten (10) degrees. In addition, tabulated values of all maximas and minimas, with their corresponding azimuths, must be submitted.

Boston supports the Commission's directional antenna proposal for largely the same reasons it supports the booster proposal. Boston files these comments, in part, to let the

¹⁵ NPRM ¶ 6.

Commission know that the use of a directional antenna could be valuable to WBCA in alleviating its reception issues. To that end, Boston fully supports the Commission's efforts, and asks the Commission to proceed as proposed.

Respectfully submitted,



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October 21, 2019