

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554**

In the Matter of	)	
	)	
Amendment of Parts 73 and 74 to Improve 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  
National Association of Broadcasters**

The National Association of Broadcasters (NAB)<sup>1</sup> hereby files comments on the above-captioned Notice of Proposed Rulemaking regarding low power FM (LPFM) service.<sup>2</sup> Specifically, NAB is concerned that the proposal to allow LPFM licensees expanded use of directional antennas could cause interference to full-service FM stations.<sup>3</sup> We further object to the Commission’s proposal to grant a blanket authorization to LPFM operators to use boosters.

As a preliminary matter, NAB strongly supports the Commission’s rejection of proposals to allow LPFM stations to increase power above 100 watts, use a contour spacing analysis to assess potential interference to other stations and amend the LPFM/FM

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<sup>1</sup> NAB is a nonprofit trade association that advocates on behalf of local radio and television stations and also broadcast networks before Congress, the Federal Communications Commission and other federal agencies, and the courts.

<sup>2</sup> *Amendment of Parts 73 and 74 to Improve the Low Power FM Radio Service Technical Rules, Modernization of Media Regulation Initiative*, Notice of Proposed Rulemaking, MB Docket Nos. 19-193 and 17-105 (July 30, 2019) (Notice). The Notice was issued in response to a Petition for Rulemaking filed by REC Networks, RM No. 11810 (June 13, 2018) (REC Petition).

<sup>3</sup> Notice at ¶¶ 4-7. See, e.g., Letter from Andrew P. Sutor, IV, Executive Vice President and General Counsel, Entercom Communications Corp., to Marlene H. Dortch, Secretary, FCC, MB Docket Nos. 19-193 and 17-105 (Sep. 16, 2019).

translator cross-ownership limits.<sup>4</sup> We agree that granting these requests would needlessly complicate LPFM licensing and contradict the Local Community Radio Act's prohibition against reducing distance separations between LPFM and full-service FM stations.<sup>5</sup> NAB also opposed these proposals as risks to the careful balance struck by the Commission when creating LPFM service in 2000. The Commission has sought to promote local, noncommercial low power radio service while preserving the technical integrity of existing radio services.<sup>6</sup> NAB explained that the net effect of enacting these proposals would be more congestion in the already crowded FM band, particularly in suburban and urban areas. Regarding the proposed power increase, we noted that the LCRA was crafted to balance the interest in providing LPFM licensing opportunities with the need to protect the technical integrity of the FM band, and this balance was explicitly based on LPFM service with a maximum power level of 100 watts.<sup>7</sup> Allowing LPFM stations to increase power would run afoul of the LCRA as well as reduce the supposedly "hyperlocal" quality of LPFM service. The Commission correctly dismissed these requests, and nothing in the record of this proceeding should change its conclusions.

In the Notice, the Commission proposes to allow LPFM licensees expanded use of directional antennas, either off-the-shelf or composite models, and seeks comment on what requirements should be imposed to ensure their proper operation.<sup>8</sup> The Commission

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<sup>4</sup> Notice at ¶ 3 note 15.

<sup>5</sup> *Id.* citing Local Community Radio Act of 2010, Pub. L. No. 111-371, 124 Stat. 4072 (2011) (LCRA), § 3(b)(1).

<sup>6</sup> NAB Comments, RM-11810 (July 20, 2018), at 1-2; *Creation of Low Power Radio Service*, Report and Order, 15 FCC Rcd 2205, 2230 (2000).

<sup>7</sup> NAB Comments at 10 (referencing LCRA legislative history that demonstrates Congress' understanding that LPFM stations may operate with no more than 100 watts of power).

<sup>8</sup> Notice at ¶¶ 4-7.

suggests a range of safeguards, from verification by a licensed engineer that an antenna is properly installed, to simply “leaving decisions about antenna use to the applicant’s discretion.”<sup>9</sup> Regardless of which safeguards the Commission adopts, however, it is doubtful at best whether LPFM operators could, or would, implement the precautions needed to use directional antennas in a way that protects full-service FM stations from interference.

The Commission first seeks comment on employing fairly stringent criteria, such as requiring LPFM operators to hire a licensed engineer to verify that a directional antenna is installed properly, and use a multipoint mount to prevent changes to the antenna position due to wind or other conditions.<sup>10</sup> For custom models, the Commission suggests that it could treat LPFM licensees like full-service stations, and require a custom proof that sets forth measurement data for the Commission’s verification of height, orientation and other radiation characteristics of the antenna.<sup>11</sup> However, even Prometheus and Common Frequency, two leading LPFM advocates, concede that such safeguards would be too expensive for LPFM licensees.<sup>12</sup>

NAB anticipates that some LPFM parties will argue that fairness or the LCRA dictates that the technical rules for FM translators (including those with directional patterns) should simply be ‘copied and pasted’ for LPFM operations.<sup>13</sup> This comparison is inapposite. Translators are owned by full-service broadcast stations that have the resources, experience and long-term financial incentives to ensure proper installation and ongoing maintenance of their translators. In addition, NAB has solicited feedback from broadcast engineers that are

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<sup>9</sup> *Id.* at ¶ 7.

<sup>10</sup> See, e.g., Comments of John Hall, RM-11810 (July 19, 2018), at 1.

<sup>11</sup> Petition at ¶ 7 citing 47 C.F.R. § 73.316(c).

<sup>12</sup> Comments of Common Frequency and Prometheus Radio Project, RM-11810 (July 19, 2018) (Prometheus Comments), at 8.

<sup>13</sup> Comments of the Low Power FM Advocacy Group, RM-11810 (July 14, 2018), at 2.

familiar with LPFM operations, and the consensus reports that few LPFM licensees have the wherewithal to hire an experienced, certified engineer to properly install and orient an antenna. Thus, strict requirements that will help ensure LPFM stations' proper use of directional antennas, such as some kind of certified installation and proof of performance, are outside the reach of most LPFM licensees and would lead to noncompliance and interference to full-service stations.

The Commission also seeks comment on a more flexible approach, such as REC's recommendation to simply leave decisions about directional antenna use to the applicant's discretion, or Prometheus's proposal to merely require LPFM operators with directional antennas to solve any actual interference.<sup>14</sup> This approach would undoubtedly be problematic. The track record of LPFM compliance with the Commission's rules does not instill confidence that licensees will take the steps needed to properly deploy directional antennas. As discussed in NAB's earlier comments, too many LPFM operators have already demonstrated failures to comply with even the most straightforward rules governing their maximum power output, proper antenna location, underwriting and the Emergency Alert System (EAS).<sup>15</sup> More recently, the Commission has issued Notices of Violation to LPFM licensees for operating from an antenna almost three times higher than authorized and 12 kilometers away from its authorized location,<sup>16</sup> operating at variance with its licensed location also on an antenna three times higher than allowed<sup>17</sup> and entered into a consent

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<sup>14</sup> Notice at ¶ 7.

<sup>15</sup> NAB Comments at 8.

<sup>16</sup> *American Multi-Media Syndicate Inc., Licensee of Station WDKK-LP*, Notice of Violation (Sep. 18, 2018).

<sup>17</sup> *305 Community Radio, Inc., Licensee of Station WMIV-LP*, Notice of Violation (Nov. 16, 2018).

decree with an LPFM station for failing to notify the Commission that its entire governing board had changed, falsely certifying construction in accordance with its permit and violating the underwriting rules for noncommercial services.<sup>18</sup> These are just a sampling of problems since the REC Petition was filed last summer.

Given these failures to comply with even simple rules governing LPFM service, NAB remains concerned that LPFM operators will not install and maintain directional antennas without causing interference to other radio services. Allowing LPFM operators to use directional antennas would also further crowd the FM band and hinder neighboring radio stations. LPFM advocates concede as much, stating that their goal is to cram more LPFM stations into “urban communities.”<sup>19</sup> Finally, the use of directional antennas and the extensive engineering required even for off-the-shelf models conflicts with the intended nature of LPFM service. The Commission designed LPFM service to be a simple, hyperlocal, noncommercial service that new entrants and amateurs could operate. However, the expense and expertise associated with properly deploying a directional antenna is beyond this scope. Simply put, the trade-off between allowing an LPFM station to reach a few more homes or buildings with a directional antenna is not worth the risk of degrading FM service to thousands or tens of thousands of listeners, not to mention the resources that FM stations and the Commission will have to devote to resolving the resulting interference issues.

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<sup>18</sup> *San Tan Educational Media, for License, Modification of License, Transfer of Control, and Special Temporary Authority, Station KFXV-LP, Order*, (Sep. 5, 2019).

<sup>19</sup> Prometheus Comments at 2.

For many of the same reasons, NAB objects to allowing LPFM licensees to use boosters absent a waiver.<sup>20</sup> We agree with Prometheus that boosters would be useful to only a “handful” of LPFM stations.<sup>21</sup> As the Commission stated, there would be few instances where an LPFM station could operate a booster without causing interference to its own signal, and terrain obstacles rarely disrupt an LPFM signal within its limited contour.<sup>22</sup> Moreover, the costs of properly deploying a synchronized booster can be prohibitive considering the costs for initial hardware, design and ongoing operational maintenance. The economics of a 100-watt low power noncommercial station thus would make it impractical for nearly all LPFM operators. That said, for the few LPFM stations that may choose to use a booster, NAB is concerned about the risk of increased interference to other radio services.

For example, if an LPFM licensee operates a booster in an area with rolling terrain, the booster could increase interference to the listeners of a full-service station located outside the station’s protected service area. Again, the tradeoff is not worth the risk. Moreover, most implementations of on-channel boosters cannot be successful without the use of directional antennas, which should continue to be prohibited as too expensive and complex for most LPFM licensees. Properly installing an on-channel booster is also highly technical. Even full-service stations occasionally struggle with boosters, and must enlist assistance from experienced, expensive engineers and purchase specialized synchronization equipment that would be unaffordable for LPFM licensees.

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<sup>20</sup> Petition at ¶ 18.

<sup>21</sup> Prometheus Comments at 11.

<sup>22</sup> *Creation of a Low Power Radio Service Amendment of Service and Eligibility Rules for FM Broadcast Translator Stations*, Fifth Order on Reconsideration and Sixth Report and Order, 27 FCC Rcd 15402, 14542 n. 333 (2012).

We also reiterate that LPFM licensees have not proven themselves adept at observing many of the existing technical rules governing low power service. Permitting them to use boosters would only exacerbate the risks of additional noncompliance. Given the financial and technical challenges of properly operating boosters, the risk of interference to other radio services substantially outweighs the miniscule benefits of granting blanket authorization to LPFM stations to use boosters. The more prudent course is to retain the current waiver process, which has been entirely sufficient for the few LPFM licensees that have sought to use a booster. In addition, the waiver process provides Commission staff with an opportunity to review the intended use of the booster and help ensure that the booster will be implemented in a way that does not unlawfully extend the LPFM station's service area or cause predicted or actual interference to neighboring radio services. For these reasons, NAB requests that the Commission dismiss this proposal, and continue to require LPFM licensees to seek a waiver to use a booster. issue.

For the foregoing reasons, NAB opposes the proposal in the Notice to allow LPFM stations expanded use of directional antennas.

Respectfully submitted,

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