

**FCC FACT SHEET\*****Amendments of Parts 73 and 74 to Improve the LPFM Radio Service Technical Rules**  
Report and Order – MB Docket Nos. 19-193, 17-105**Background:**

The Commission established the Low Power FM (LPFM) service in 2000 as a secondary, noncommercial broadcast radio service with a community focus. The Commission designed the LPFM technical rules to be simple so that non-profit organizations with limited engineering expertise and small budgets could readily apply for, construct, and operate community-oriented stations serving highly localized areas. In July 2019, the Commission adopted a Notice of Proposed Rulemaking proposing to update the LPFM technical rules to reflect the maturity of the service. These proposals reflected changes sought by LPFM advocates and licensees to improve their signals and provide more regulatory flexibility. The Report and Order would adopt most of the NPRM's proposed rule changes, with small revisions. The measures set forth in the Order would allow LPFM licensees to improve reception and increase flexibility in transmitter siting while maintaining interference protection and the core LPFM goals of diversity and localism.

**What the Order Would Do:**

- Expand the circumstances in which LPFM stations may use directional antennas and allow custom models designed for specific locations instead of only “off-the-shelf” models with parameters set by the manufacturer.
- Redefine LPFM station “minor changes,” which an LPFM licensee can apply for at any time without awaiting a filing window. The Order would revise the current definition from a change in transmitter location that does not exceed 5.6 kilometers to a change which either: (a) does not exceed 11.2 kilometers; or (b) involves overlapping 60 dBu contours of the station's own existing and proposed facilities.
- Permit LPFM stations to own and operate FM booster stations, which amplify and rebroadcast a station's signal, usually in areas with irregular terrain.
- Make available to LPFM stations and other broadcast stations operating on the FM reserved band (Channels 201 to 220) waivers of the requirement to protect television stations operating on television channel 6 (TV6), which is adjacent to the FM reserved band. An FM radio applicant may request such a waiver if the TV6 station concurs or the applicant demonstrates that no interference would result. The Order would defer to a future proceeding the question of whether to sunset TV6 protections entirely after the July 13, 2021, completion of the transition of low-power television operations from analog to digital.
- Clarify that LPFM stations that go silent must, like other broadcast stations, notify the Commission if they are off-air for more than ten days and request Commission authority to remain off-air more than 30 days.
- Make non-substantive rule changes to conform provisions governing third-adjacent channel interference, correct repetitive language, and remove outdated information.

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

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

REPORT AND ORDER\*

Adopted: []

Released: []

By the Commission:

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\* This document has been circulated for tentative consideration by the Commission at its April 2020 open meeting. The issues referenced in this document and the Commission's ultimate resolutions of those issues remain under consideration and subject to change. This document does not constitute any official action by the Commission. However, the Chairman has determined that, in the interest of promoting the public's ability to understand the nature and scope of issues under consideration, the public interest would be served by making this document publicly available. The Commission's ex parte rules apply and presentations are subject to "permit-but-disclose" ex parte rules. See, e.g., 47 CFR §§ 1.1206, 1.1200(a). Participants in this proceeding should familiarize themselves with the Commission's ex parte rules, including the general prohibition on presentations (written and oral) on matters listed on the Sunshine Agenda, which is typically released a week prior to the Commission's meeting. See 47 CFR §§ 1.1200(a), 1.1203.

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## I. INTRODUCTION

1. In this *Report and Order*, we revise the technical rules governing the Low Power FM (LPFM) service. Specifically, we adopt the following main proposals: (1) expanding the permissible use of directional antennas; (2) permitting waivers of protections of Television Channel 6 by reserved channel LPFM, FM, Class D, and FM translator stations; (3) expanding the definition of minor change applications for LPFM stations; and (4) allowing LPFM stations to own boosters.<sup>1</sup> These changes are designed to provide LPFM stations with greater flexibility, to improve their service, and to remove regulatory burdens. With this Order, we continue our efforts to modernize our media regulations.<sup>2</sup>

## II. BACKGROUND

2. As detailed more fully in the 2019 Notice of Proposed Rulemaking (NPRM) in this proceeding, the Commission established the LPFM service in 2000 as a secondary, noncommercial radio service. It adopted LPFM engineering requirements that are more basic than those for full-service FM stations so that non-profit organizations with limited expertise and small budgets could build and operate community-oriented stations serving highly localized areas. The Commission has since clarified, adjusted, and modified the LPFM rules several times.<sup>3</sup> In 2012, for example, the Commission adopted additional

<sup>1</sup> We also allow co-located LPFM stations to share Emergency Alert System decoders; clarify silent station notification requirements; affirm that LPFM transmitters must be certified; and make small, non-substantive wording changes to the rules. We will not, however, consider suggestions outside the scope of this proceeding that would be more appropriately raised in a new petition for rulemaking. For example, we will not address proposals to allow LPFM stations to operate commercially, a suggestion that the NPRM noted is beyond the scope of this proceeding. *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, 34 FCC Rcd 6537, 6539, n15 (2019) (NPRM); Sibert Comments at 12. Nor will we consider suggestions that LPFM stations be sold at a free-market price after a holding period, or to sunset HD Radio. See Sibert Comments at 15; Johnson Comments at 2. Nor will we consider concerns outside the Commission's authority such as whether the Corporation for Public Broadcasting (CPB) should fund LPFM stations. See Las Vegas Public Radio Inc. (LVPR) Comments at 2.

<sup>2</sup> See *Commission Launches Modernization of Media Regulation Initiative*, MB Docket No. 17-105, Public Notice, 32 FCC Rcd 4406 (2017) (initiating a review of rules applicable to media entities to eliminate or modify regulations that are outdated, unnecessary, or unduly burdensome).

<sup>3</sup> See *Creation of a Low Power Radio Service*, MM Docket No. 99-25, Report and Order, 15 FCC Rcd 2205 (2000) (*LPFM Order*); *clarified*, Memorandum Opinion and Order on Reconsideration, 15 FCC Rcd 19208 (*Recon. Order*); *modified*, Second Report and Order, 16 FCC Rcd 8026 (2001), *recon. in part*, Second Order on Recon. and Further Notice of Proposed Rulemaking, 20 FCC Rcd 6763 (2005); *modified*, Third Report and Order and Second Further Notice of Proposed Rulemaking, 22 FCC Rcd 21912 (2007); *review denied in part and dismissed in part*, *National Assoc'n of Broad. v. FCC*, 569 F.3d 416 (D.C. Cir. 2009); *modified*, Fourth Report and Order and Third Order on Recon., 27 FCC Rcd 3364 (2012) (*Fourth R&O*); *clarified*, Fifth Report and Order, Fourth Further Notice of Proposed Rulemaking and Fourth Order on Recon., 27 FCC Rcd 3315 (2012) (*Fifth R&O*); *clarified*, Fifth Order on Recon. and Sixth Report and Order, 27 FCC Rcd 15402 (2012) (*Sixth R&O*); *recon. granted in part*, Sixth Order on Recon., 28 FCC Rcd 14489 (2013). See also *Reexamination of the Comparative Standards and Procedures for Licensing Noncommercial Educational Broadcast Stations and Low Power FM Stations*, Report and Order, MB Docket No.19-3, 34 FCC Rcd 12519 (2019) (*Comparative Standards*) (making non-technical rule changes).

rules needed to implement requirements of the Local Community Radio Act of 2010 (LCRA).<sup>4</sup> The Commission has opened filing windows for new LPFM station applications in 2000 and 2013.

3. The Commission initiated the current proceeding in response to a June 13, 2018, petition for rulemaking from REC Networks (REC) that aimed to address difficulties LPFM stations experience when trying to maximize community coverage.<sup>5</sup> The NPRM proposed to modernize technical aspects of the Commission's rules (Rules) governing LPFM radio stations.<sup>6</sup> The NPRM sought comments on proposals to improve LPFM reception and to increase flexibility in siting of LPFM stations while maintaining interference protection to other radio stations and the core LPFM goals of diversity and localism.<sup>7</sup> However, in the NPRM, the Commission tentatively rejected proposals that it believed would too greatly alter the simplicity of the LPFM service, such as proposals to increase maximum power levels for LPFM stations to 250 watts from the current maximum of 100 watts.<sup>8</sup> The Commission noted that it previously declined to increase LPFM power and that there had not been subsequent changes warranting a different result. In addition, the Commission asked for comments and invited related suggestions.<sup>9</sup> Commenters support most of the NPRM's proposals, but some suggest that the Commission reconsider its tentative rejection of a power increase proposed by LPFM supporters.<sup>10</sup> With the exception of the proposal to eliminate requirements to protect Television Channel 6, which we defer to a future proceeding, we adopt all of our proposals from the NPRM, with small revisions as detailed below.<sup>11</sup>

### III. DISCUSSION

#### A. Expand Permissible Use of Directional Antennas

4. As proposed in the NPRM, we revise section 73.816 to expand opportunities for LPFM stations to use directional antennas, including custom-designed equipment.<sup>12</sup> We require LPFM permittees to submit proofs of performance with their applications to license directional facilities, thereby

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<sup>4</sup> *Sixth R&O*, 27 FCC Rcd at 15424, para. 70, *implementing Local Community Radio Act of 2010*, Pub. L. No. 111-371, 124 Stat. 4072 (2011).

<sup>5</sup> See REC Petition for Rulemaking, RM No. 11810 (rec. June 13, 2018) (Petition).

<sup>6</sup> See NPRM, 34 FCC Rcd 6537.

<sup>7</sup> Specifically in the NPRM, the Commission proposed to allow expanded use of directional antennas; to eliminate a requirement to protect TV6 stations; to expand the definition of "minor" change applications that can be submitted outside of filing windows; to permit LPFM/FM booster cross-ownership; and to make small rule revisions to correct typographical errors and to better track language used in other broadcast services. *Id.* at 6539-47, paras. 4-20.

<sup>8</sup> The NPRM also rejected proposals to modify LPFM/FM translator cross-ownership restrictions; or evaluate potential LPFM interference using a contour analysis rather than distance separations. The Commission did, however, tentatively accept a proposal to use contour overlap on a brief, interim basis in connection with a TV6 waiver process. See *id.* at 6541-44, paras. 8-13.

<sup>9</sup> *Id.* at 6548, para. 24.

<sup>10</sup> See, e.g., REC Comments at 6-34; Peter Gray Comments at 1; Steven L. White (White) Comments at 4; CREA Reply at 4-10.

<sup>11</sup> Although the NPRM declined to commit to a date of a future LPFM filing window (*Id.* at 6539, n.15.), REC suggests that the Commission open a filing window for full-service, reserved band NCE stations before opening one for LPFM applicants so that LPFM applicants can have greater assurance that they will not, due to their secondary status, be displaced. REC Comments at 50. Although the Commission has not yet announced an LPFM or NCE filing window and does not address that issue here, we agree in principle that it is preferable to grant permits to primary facilities before accepting applications for secondary facilities.

<sup>12</sup> *Id.* at 6539-41, paras. 4-7.

ensuring proper installation and use of such equipment. All commenters support this change, with the exception of full-power stations.<sup>13</sup>

5. When the Commission created the LPFM service in 2000, it permitted only omnidirectional antennas because it wanted to implement service quickly by simplifying application preparation and processing.<sup>14</sup> The Commission later permitted some directional antenna use but only by: (1) public safety organizations in the Travelers Information Service (TIS); or (2) organizations that would not otherwise obtain waivers of second-adjacent channel spacing requirements.<sup>15</sup> Stations covered by those exceptions were limited to “off-the-shelf” antennas with directional patterns pre-set by the manufacturer;<sup>16</sup> they could not use composite antennas or other custom directional patterns.<sup>17</sup>

6. In the NPRM, the Commission proposed to allow any LPFM facility to operate directionally if desired, using either off-the-shelf or custom antennas,<sup>18</sup> because directional antennas, if properly engineered, can provide significant flexibility in certain situations.<sup>19</sup> Similarly, the NPRM noted that custom directional patterns might make it easier for stations to relocate in areas with many stations and few transmitter sites.<sup>20</sup> In response to concerns that malfunctioning directional operations may cause interference, the NPRM proposed to license directional LPFM stations upon a satisfactory engineering study verifying the radiation characteristics of the antenna, as installed, similar to that required of full-service FM stations in section 73.316(c).<sup>21</sup>

7. A majority of commenters express support for an option for additional LPFM stations to operate directionally. LPFM organizations support potential use of directional antennas because they seek more flexibility for LPFM stations to relocate<sup>22</sup> and to operate near international borders.<sup>23</sup> Jeff Sibert (Sibert) views directional antennas as a tool that might help LPFM stations protect short-spaced FM translator stations, which he says have become more prevalent with increased FM translator construction following recent AM Revitalization windows.<sup>24</sup>

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<sup>13</sup> See REC Comments at 53-54; Positive Hope, Inc. (PHI) Reply at 1; White Comments at 2; see also National Association of Broadcasters (NAB) Comments at 5; New Jersey Broadcasters Association (NJBA) Comments at 4.

<sup>14</sup> See *LPFM Order*, 15 FCC Rcd at 2248, para. 108. At that time, the Commission viewed directional operations as unnecessary because LPFM interference protection would be based on distance separations. *Id.*

<sup>15</sup> See 47 CFR § 73.816(c); *Recon. Order*, 15 FCC Rcd at 19247, para. 49; *Sixth R&O*, 27 FCC Rcd at 15429, para. 79.

<sup>16</sup> See *Recon. Order*, 15 FCC Rcd at 19226-28, paras. 46-50; *Sixth R&O*, 27 FCC Rcd at 15429-30, paras. 79-80.

<sup>17</sup> See *Recon. Order*, 15 FCC Rcd at 19227-28, para. 50 & n.53.

<sup>18</sup> NPRM, 34 FCC Rcd at 6540, para. 6.

<sup>19</sup> For example, along the U.S. border with Mexico, stations might limit signal strength toward Mexico but operate with full signal strength to areas away from the border, thereby reaching more people domestically while continuing to comply with international agreements. *Id.* at 6540, para. 5.

<sup>20</sup> *Id.* at 6540, para. 6. Such flexibility would most likely be of the most use in situations where an LPFM station can use contour protection, such as to demonstrate that it should receive a waiver of second-adjacent spacing requirements.

<sup>21</sup> See 47 CFR § 73.316(c).

<sup>22</sup> See REC Comments at 53-54; PHI Reply at 1; White Comments at 2. *Contra* NAB Comments at 5; NJBA Comments at 4.

<sup>23</sup> REC Comments at 53. PHI Reply at 1.

<sup>24</sup> Sibert Comments at 3-4. The City of Boston (Boston) views directional antennas as valuable in alleviating reception issues. Boston Comments at 8.

8. The National Association of Broadcasters (NAB) and the New Jersey Broadcasters Association (NJBA), trade groups representing full-service stations, oppose the proposal in the NPRM. Each questions why LPFM stations would need directional antennas to reach more LPFM listeners given the highly localized purpose of the LPFM service.<sup>25</sup> Each also expresses doubts about whether LPFM licensees have the expertise and financial resources to design, construct, and maintain directional antennas without causing interference to co-channel and first-adjacent channel full-service stations.<sup>26</sup> NAB is also concerned that LPFM directional operations could potentially result in: (1) LPFM operators failing to comply with whatever safeguards the Commission might adopt to prevent potential interference;<sup>27</sup> (2) crowding of the FM band; (3) degradation of full-power FM service to “thousands or tens of thousands of listeners” while only modestly increasing LPFM listenership; and (4) interference complaints that would require the resources of full-service stations and of the Commission to resolve.<sup>28</sup> The supporting commenters dispute the opposition’s characterization of LPFM licensees as too unsophisticated to operate directionally. REC, for example, argues that such views are based on stereotypes of LPFM applicants as non-compliant.<sup>29</sup> Others, including five engineers who consider themselves to be “community-radio engineer advocates” (CREA), jointly dispute concerns about potential interference and say that LPFM stations are increasingly hiring engineering experts to handle matters that require such expertise.<sup>30</sup>

9. We find no compelling reason to continue restricting the use of directional antennas in the LPFM service. As noted in the NPRM and supporting comments, directional operations have the potential to improve LPFM service and can be especially helpful in maximizing the domestic reach of stations that must limit their signals toward Canada and Mexico. We disagree with NJBA’s view that our proposal would result in a “*carte blanche*” expansion of LPFM directional antenna use.<sup>31</sup> Directional equipment and its associated engineering are costly and we, thus, agree with CREA that cost will serve as a gate-keeping mechanism.<sup>32</sup> We also do not anticipate substantial use of directional antennas because they would not be necessary or cost-effective in the majority of circumstances. We expect, consistent with the views of REC and CREA, that LPFM applicants will use the option primarily in border regions and similarly targeted circumstances where the benefits justify the additional expense.<sup>33</sup>

10. The primary concern of commenters opposing directional LPFM operations is interference.<sup>34</sup> We find, however, that those concerns are largely unfounded because LPFM stations operating directionally would still be secondary and subject to the same minimum spacing and maximum power requirements as non-directional stations.<sup>35</sup> Directional stations would simply gain the flexibility to *diminish* power in one or more directions. Moreover, as discussed below, based on our experience with a

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<sup>25</sup> NAB Comments at 5; NJBA Comments at 4.

<sup>26</sup> See NAB Comments at 4; NJBA Comments at 4-5. NAB distinguishes the permitted use of directional antennas in the FM translator service, arguing that translators are generally owned by full-service stations with “the resources, experience, and long-term financial incentives to ensure proper installation and ongoing maintenance.” NAB Comments at 3.

<sup>27</sup> *Id.* at 4-5 (citing LPFM violation of rules governing power, antenna location, underwriting, and emergency alerts).

<sup>28</sup> *Id.* at 5.

<sup>29</sup> See REC Comments at 53-54.

<sup>30</sup> CREA Comments at 2. See also White Comments at 2.

<sup>31</sup> See NJBA Comments at 5.

<sup>32</sup> See CREA Comments at 2.

<sup>33</sup> See CREA Comments at 1-2; REC Reply at 13.

<sup>34</sup> NAB Comments at 3-4; NJBA Comments at 4-5.

<sup>35</sup> See CREA Reply at 3; REC Reply at 13.

similar protection for FM stations under Section 73.316(c), we believe that our adoption of a requirement to perform and submit a proof of performance study will serve as an effective safeguard against the potential for a directional antenna to cause interference if the antenna is not properly installed or maintained.<sup>36</sup>

### 1. Safeguards

11. We agree with several commenters that an appropriate safeguard against interference is to require a proof of performance study prior to licensing and, thereby, validate operations within required parameters.<sup>37</sup> Accordingly, we revise our rules, as proposed, to make the FM directional antenna requirements of section 73.316(c) applicable to the LPFM service.

12. NAB asserts that no safeguard would be effective in the LPFM service because LPFM stations will be unable or unwilling to comply with any such safeguard.<sup>38</sup> The few cases NAB cites to support this position do not, as NAB suggests, indicate that the entire LPFM service has a general propensity for non-compliance. Nor is there support for NAB's argument that safeguards would be inadequate because "few [LPFM] licensees have the wherewithal to hire an experienced, certified engineer to properly install and orient a directional antenna."<sup>39</sup> When LPFM was a new service, the Commission limited LPFM stations to omnidirectional antennas because such equipment is simpler and less costly to install. The LPFM service, now approaching its twentieth year, still consists of stations with limited budgets but applicants are now considerably more experienced. As commenters note, and we have observed in processing applications, LPFM operators are increasingly engaging the services of engineering consultants.<sup>40</sup> Given the maturation of the LPFM service, limited budgets should not, in our opinion, automatically preclude LPFM use of directional equipment. We expect that stations choosing to incur the substantial additional expense to operate directionally will comply with any related Commission requirements.

13. Conversely, we do not believe that we should disregard the use of proofs of performance as an established tool to safeguard against interference concerns about licensees' choices to operate directionally simply because of their cost or complexity.<sup>41</sup> The proof of performance safeguard in fact is likely to reduce overall expenses for LPFM stations seeking to use directional antennas by making it unnecessary for LPFM stations to become involved in interference disputes.<sup>42</sup> Moreover, we believe it is preferable to make sure that LPFM directional antennas are properly functioning before licensing them.

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<sup>36</sup> NPRM, 34 FCC Rcd at 6540-41, para. 7.

<sup>37</sup> See Boston Comments at 4; White Comments at 2-3. See 47 CFR § 73.316.

<sup>38</sup> NAB Comments at 4-5. The argument that a violation by one licensee can foretell a violation by others is unpersuasive, and not supported by record evidence. NAB simply cites incidental cases of violations of a wide variety of rules not necessarily resulting in interference (such as those pertaining to power, antenna location at a lower height than authorized, underwriting, emergency alert system, and transfer of control) by certain LPFM licensees. *Id.*, citing *Sun Tan Educ. Media*, Order, DA 19-638, 2019 WL 4240779 (MB and EB Sept. 5, 2019); *American Multi-Media Syndicate Inc.*, Notice of Violation, File No. EB-FIELDSCR-18-00026933 (EB rel. Sept. 18, 2018); *305 Community Radio, Inc.*, Notice of Violation, File No. EB-FIELDSCR-15-00020507 (EB rel. Mar. 10, 2016).

<sup>39</sup> NAB Comments at 3.

<sup>40</sup> CREA Reply at 4; REC Comments at 40; White Comments at 2.

<sup>41</sup> According to Sibert, such studies can cost tens of thousands of dollars "for a measly 3 dB increase in a small portion of service area." Sibert Comments at 4. See also CREA Comments at 1 (contending that requiring such a study would be "overkill" because LPFM stations have very small footprints).

<sup>42</sup> In contrast, the commenter-suggested interference resolution model would fundamentally change interference protection requirements in the LPFM service, potentially making it more like that in the FM translator service where the interference remediation process can be lengthy and resource-intensive.

We recognize that the cost to prepare a proof of performance study might make directional antennas unaffordable for some LPFM applicants but note use of these antennas is optional. The option to use a directional antenna will be available in circumstances where the LPFM station determines the potential benefits outweigh the costs.

14. We also reject a second option advanced in the comments, which is similar to that currently applicable to FM translator stations, to require only that LPFM stations resolve any actual interference caused without a requirement to submit a pre-licensing proof of performance study.<sup>43</sup> The primary benefit of this option is that LPFM organizations could conserve resources by avoiding the cost of a pre-licensing study. NAB, however, believes that if an LPFM station is concerned about the cost of performing a proof of performance study, it should not attempt directional operations because it likewise would not have the financial resources to mitigate interference discovered upon commencement of operations without such a study.<sup>44</sup> We find that the second option could also be more resource-intensive for non-LPFM stations and the Commission if they must, respectively, file and evaluate interference complaints resulting from directional equipment.

## 2. Custom Patterns Versus Off-the-Shelf Antennas

15. We adopt the NPRM's proposal to allow composite and custom designed directional antennas in addition to off-the-shelf models. The only commenter to address this matter, REC, considers standard patterns too limiting and observes that only one manufacturer makes most of the off-the-shelf equipment.<sup>45</sup> We will allow applicants to determine the style of antenna that would best suit their needs and budgets, consistent with our goal to provide LPFM stations as much flexibility as possible.<sup>46</sup>

### B. Redefine LPFM "Minor" Changes

16. As proposed in the NPRM, we redefine the types of LPFM facility changes that qualify as "minor" to provide additional flexibility for LPFM stations to relocate their facilities.<sup>47</sup> Based on the fact that LPFM stations typically have 60 dBu service contours with a radius of slightly more than 5.6 kilometers, and that the contours of two such facilities can be expected to overlap at double that distance (11.2 kilometers), we will allow LPFM site changes up to 11.2 kilometers, or up to any greater distance that would result in overlapping 60 dBu service contours between the existing and relocated facilities. This approach simplifies the NPRM proposal to allow moves so long as the existing and proposed 60 dBu contours overlap and has significant support among commenters.<sup>48</sup>

17. Currently, an LPFM station may apply to relocate its transmitter site without awaiting the opening of a filing window if the change is "minor," which section 73.870(a) currently defines as a move not exceeding 5.6 kilometers.<sup>49</sup> The Commission has granted waivers exceeding this limit when the applicants demonstrated a lack of viable sites within 5.6 kilometers.<sup>50</sup> However, the LPFM stations in

<sup>43</sup> Sibert Comments at 4; CREA Comments at 2; REC Reply at 15. See 47 CFR § 74.1203(a).

<sup>44</sup> NAB Comments at 3.

<sup>45</sup> REC Reply at 14.

<sup>46</sup> Our requirement for proof of performance studies will address any concerns about the challenge of designing and mounting custom antennas.

<sup>47</sup> See Petition at 38-39; NPRM, 34 FCC Rcd at 6553, Appendix A, Proposed Rules, section 73.870 (proposing to amend the Rules to allow LPFM stations to move to any rule-compliant location provided that the current and proposed 60 dBu service contours overlap.).

<sup>48</sup> See, e.g., Sibert Comments at 6; CREA Comments at 3.

<sup>49</sup> See 47 CFR § 73.870(a). 5.6-kilometers is the approximate distance from a 100-watt LPFM station's transmitter that the station is capable of serving.

<sup>50</sup> See, e.g., *Southside Media Collective*, File No. BMPL-20150720AAH (granted July 22, 2015); *Sloan Canyon Communications*, File No. BMPL-30240623AAG (granted Dec. 22, 2014).



those cases also proved that the 60 dBu service contours of the existing and relocated stations would overlap.<sup>51</sup>

18. The NPRM proposed to change the definition of LPFM minor changes to one which either: (1) does not exceed 5.6 kilometers (the existing standard in the Rule); or (2) involves overlapping 60 dBu contours of the existing and proposed facilities (the existing standard for waivers).<sup>52</sup> The Commission anticipated that most LPFM applicants would continue, under the first prong, to make simple site moves within readily ascertainable distances of 5.6 kilometers or less without the increased engineering costs of plotting contour overlap. However, the Commission tentatively agreed with REC that if an applicant cannot find a viable site within 5.6 kilometers, and is willing to bear the expense of an engineering study to demonstrate overlap between its existing and proposed facilities, it should be permitted, under the second prong, to move a greater distance by rule rather than by waiver.<sup>53</sup>

19. Only NJBA opposes an expanded definition of “minor” changes. NJBA expresses concern that such a change might cause interference to full-power stations.<sup>54</sup> We see no connection, however, between that concern and the definition of minor changes.<sup>55</sup> The Commission merely proposed to revise the distance within which an LPFM station can apply for a move without having to await a filing window. We did not propose any change to the minimum distance that the LPFM station must place between itself and other stations. Regardless of whether an LPFM application proposes a major change (one that needs to await a filing window) or a minor change (one that can be filed at any time), the proposal must meet the same spacing rules that protect existing stations. As CREA and REC observe in their replies, full-power stations would remain protected under the distance separation requirements, which have a built-in 20-kilometer buffer.<sup>56</sup>

20. Although the remaining commenters generally support an expanded definition of minor changes, most would do so by increasing the currently permitted 5.6 kilometer distance, which REC contends is “over-restrictive.”<sup>57</sup> Sibert and CREA suggest revising the distance to 11.2 or 13 kilometers, respectively. They would not make contour overlap part of the new definition.<sup>58</sup> REC proposes an intermediate approach that would allow moves of less than 11.5 kilometers without an engineering showing and moves of greater distances with a showing of overlapping service contours.<sup>59</sup>

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<sup>51</sup> FM translator licensees, in contrast, can apply to make such changes without a waiver because a contour overlap standard for determining minor changes is codified in the translator rules. *See* 47 CFR § 74.1233(a)(1) (a major change in antenna location for FM translator is one in which the station would not continue to provide 1 mV/m service to some portion of its previously authorized 1 mV/m service area).

<sup>52</sup> *See* NPRM, Appendix A, Proposed Rules, section 73.870.

<sup>53</sup> NPRM, 34 FCC Rcd at 6545.

<sup>54</sup> NJBA Comments at 7.

<sup>55</sup> What distinguishes major from minor changes is not any greater potential for interference but, rather, the permissible timeframe in which the application can be filed and the possibility that others will file conflicting proposals at the same time.

<sup>56</sup> CREA Reply at 3; REC Reply at 16.

<sup>57</sup> REC Comments at 53.

<sup>58</sup> Sibert doubles the 5.6 kilometer radius of a typical LPFM station to 11.2 kilometers. Sibert Comments at 6. CREA contends that, after rounding, minor changes of 6.4 kilometers currently are allowed. CREA doubles 6.4 to 12.8 and rounds up to 13 kilometers. CREA Comments at 3. CREA’s use of rounding is incorrect. It relies on 47 CFR § 73.208(c)(8), which permits rounding of certain distances to the nearest kilometer. However, the Commission has never approved rounding with respect to the 5.6-kilometer definition of a minor change.

<sup>59</sup> REC Reply at 18. REC proposes a distance of less than 11.5 kilometers because it is equivalent to “11 kilometers rounded,” as is Sibert’s 11.2 kilometer figure. *See id.*

21. We find merit to the suggestion that we should specify a larger distance that a station can propose in a minor change application. A larger distance provides additional flexibility for station relocations. It will also be less expensive for stations wishing to relocate more than 5.6 kilometers because they will not, as proposed in the NPRM, need to perform an engineering study for every such move. Because all LPFM stations currently operate with similar technical parameters, typically equivalent to 100 watts at 30 meters height above average terrain (HAAT), we agree that it is possible to adopt a uniform distance at which the contours of most existing and relocated LPFM facilities would generally overlap. As proposed by Sibert, we accept 11.2 kilometers as that distance and redefine minor changes as moves of 11.2 kilometers or less. We choose not to adopt the alternative 13-kilometer standard suggested by CREA because we recognize that there will be some LPFM stations operating in irregular terrain. Use of the shorter of the two distances will allow us to be confident that the signal of the relocated facility would continue to serve a portion of its original service area. We also find merit to the REC suggestion that stations seeking to move a greater distance should have the option to demonstrate that the contours of their existing and proposed facilities would overlap at that distance. Accordingly, stations will be able to propose moves exceeding 11.2 kilometers upon a showing of contour overlap.

22. Although the NPRM's discussion of minor change applications focused on site moves, CREA also asks the Commission to clarify whether certain channel changes are minor. To avoid uncertainty, we confirm that CREA properly interprets section 73.870(a)(1), which provides that any LPFM channel change (including a move to a non-adjacent channel) is considered minor upon a showing of reduced interference. CREA notes that many LPFM stations have been short-spaced by FM translator facilities, and argues that such LPFM stations should be able to move to any channel that meets all spacing rules even if the LPFM station will have to accept some resulting interference to its own signal. CREA is correct that, under the existing rule, a change that reduces interference *caused* to a short-spaced station would be classified as minor, even if interference *received* by the LPFM station increases. The Rule is framed in terms of "reduced interference, to any frequency." Neither the Rule, nor the proceeding in which it was adopted, specifies that interference must be reduced on the station's own frequency.<sup>60</sup>

### C. Allow LPFM Cross-ownership of FM Booster Stations

23. As proposed in the NPRM, we revise section 73.860 to permit LPFM licensees to own and operate FM booster stations, subject to guidelines similar to those currently applicable to LPFM ownership of FM translator stations.<sup>61</sup> The NPRM tentatively concluded that FM boosters should be available on a non-waiver basis to any LPFM station that might be able to operate a booster without causing interference to itself. Accordingly, the Commission proposed to amend section 73.860 to incorporate guidelines for potential LPFM use of an FM booster in lieu of use of an FM translator.<sup>62</sup> Under the proposal, such booster stations could receive the signal of the commonly-owned LPFM station by any means authorized in section 74.1231(i), a general rule that applies to all FM booster stations.

24. A majority of the commenters addressing the NPRM's LPFM/booster cross ownership proposal support it. REC and Boston believe that there would be significant interest in booster use,

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<sup>60</sup> See *LPFM Order*, 15 FCC Rcd at 2231-33, paras. 65-67.

<sup>61</sup> An FM booster station operates "for the sole purpose of retransmitting the signals of an FM radio broadcast station, by amplifying and reradiating such signals." 47 CFR § 74.1201(f).

<sup>62</sup> Our Rules generally prohibit LPFM licensees from owning non-LPFM stations. 47 CFR § 73.860(a). The Rules make a limited exception to permit non-Tribal LPFM licensees to operate up to two FM translator stations meeting certain engineering requirements. *Id.* § 73.860(b). A Tribal applicant, defined at 47 CFR § 73.853(c), can operate up to four FM translators. *Id.* § 73.860(c). Likewise, the staff has occasionally permitted LPFM stations to use boosters on a waiver basis to fill in terrain-associated gaps in service. See *Strategic International Ministries*, File No. BNPFTB-20150521ACF (granted June 22, 2017); *Laguna Radio, Inc.*, File No. BNPFTB-20160421AFL (granted June 22, 2017).

especially by LPFM stations experiencing poor reception due to terrain.<sup>63</sup> Commenters opposing LPFM use of boosters are NAB and NJBA, who believe that it would be more prudent to retain the current waiver process.<sup>64</sup> NJBA raises numerous concerns<sup>65</sup> and suggests that the Commission not allow LPFM stations to operate an associated FM booster unless the Commission also permits Class A FM broadcast stations to increase their power level from 3 kW to 6 kW to combat potential interference.<sup>66</sup>

25. We are not persuaded by NJBA's opposition. We find that its concerns are similar to those we have rejected above in allowing directional antennas and redefining minor changes. We reject arguments that LPFM stations cannot be trusted to seek engineering guidance or to comply with the Rules. The LPFM service has matured and stations should be able to decide for themselves whether they are able to bear the additional expense needed to purchase, design, and maintain customized equipment. With respect to interference, we note that none of our proposed rule changes would alter distance separations between LPFM stations and other stations. Likewise, an LPFM booster would retransmit the LPFM station's signal only within the station's existing service area, subject to existing distance separations governing the underlying station. Accordingly, the booster should have no impact on reception of other stations.

26. As proposed in the NPRM, we revise section 73.860 to enable non-Tribal LPFM licensees to seek authorizations for up to two translators, two boosters, or one of each. Some of the commenters supporting LPFM/booster cross ownership seek, however, to amend or clarify these limits. CREA and Sibert argue that restricting of the number of boosters an LPFM may use is unnecessary because boosters use a station's existing channel efficiently without requiring more spectrum, do not extend a station's signal beyond its existing authorized contours, and are not restricted in other radio services.<sup>67</sup> Although REC considers two boosters or translators sufficient in most cases, it identifies circumstances such as service areas with multiple canyons, in which more boosters might be helpful.<sup>68</sup> Even though the comments maintain that LPFM stations are interested in using FM booster stations, due to the unique circumstances of each station, it is not yet possible to know how many LPFM stations could alleviate reception difficulties without causing interference to their own signal. The comments present no compelling evidence that more than two translators, two boosters, or one of each are necessary to improve LPFM reception. Thus, at this time, we find that a rule permitting a total of two such stations will be sufficient.<sup>69</sup>

27. None of the commenters oppose the NPRM's proposal to allow any method of signal delivery to boosters authorized in section 74.1231(i). Rather, commenters ask for confirmation that it would be permissible for LPFM licensees to deliver their signals to boosters by such methods as

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<sup>63</sup> REC Comments at 52-53; Boston Comments at 5; Sibert Comments at 7.

<sup>64</sup> NAB Comments at 7; NJBA Comments at 7-8.

<sup>65</sup> NJBA argues that the Commission should not allow LPFM/booster cross-ownership on a non-waiver basis because: (1) not many LPFM stations would use boosters due to risk of interference with their own stations; (2) boosters are too expensive for LPFM stations to design, equip, and maintain; (3) there is a risk of interference to other radio services, particularly in areas with rolling terrain; (4) most boosters require directional antennas which can be expensive and complex; and (5) there is a risk of LPFM noncompliance with booster rules. NJBA Comments at 6-7.

<sup>66</sup> *Id.* at 3. REC responds that NJBA's proposal to upgrade full-power Class A FM stations is not comparable to REC's proposal to upgrade LPFM stations. REC Reply at 8-9.

<sup>67</sup> CREA Comments at 4; Sibert Comments at 7-8.

<sup>68</sup> REC Comments at 53; REC Reply at 17.

<sup>69</sup> In unusual circumstances, such as a canyon example cited in the comments, applicants can seek a waiver of the cross-ownership limit. *See* REC Reply at 17.

microwave, station-to-transmitter link, internet protocol (IP), and fiber.<sup>70</sup> We confirm that IP, fiber, and other non-broadcast methods of signal delivery are permitted alternatives to over-the-air reception.

28. CREA asserts that booster-related additions to section 73.860(b), as proposed in the NPRM, are limiting and/or confusing. First, it questions the NPRM's proposed addition of booster language to section 73.860(b)(2), which as currently written requires FM translators to rebroadcast an LPFM station's primary analog signal or digital HD-1 signal. CREA suggests that the HD-1 language may impose unnecessary technical limitations on LPFM boosters.<sup>71</sup> CREA does not, however, explain the perceived limitation or what broader use of LPFM boosters it envisions. Accordingly, we adopt the revised section 73.860(b)(2) as proposed.<sup>72</sup>

29. We agree with CREA, however, that there is an inconsistency between proposed sections 73.860(b)(1) and (b)(5). As proposed in the NPRM, the former would require a booster station's service contours to overlap those of the LPFM station, whereas the latter would require the booster's contours to remain entirely within those of the LPFM station.<sup>73</sup> This inconsistency arises because section 73.860(b)(1), as proposed, sets standards for FM translators as well as FM boosters. We revise the proposed language of section 73.860(b)(1) to enunciate that the standards for LPFM translators and boosters are different. Specifically, the new language provides that an LPFM station's service area must overlap that of a commonly-owned FM translator, but must entirely encompass that of a co-owned booster. That revision to section 73.860(b)(1) makes it unnecessary to adopt the proposed new section 73.860(b)(5), which would be duplicative.

**D. Make Small Non-Substantive Wording Changes.**

30. As proposed, we make several small non-substantive changes to the wording of the LPFM rules.

**1. Protect Full-service Stations and Previously Authorized Secondary Stations from Third-adjacent Channel Interference**

31. As proposed in the NPRM, we revise third-adjacent channel language in section 73.810 (which is applicable to LPFM stations) so that it would track recent revisions to similar language in sections 74.1203(a)(3) and 74.1204(f) (which are applicable to FM translators).<sup>74</sup> Although the LCRA eliminated LPFM third-adjacent spacing requirements, it instead required LPFM stations to address any complaints of actual interference that might be received from third-adjacent stations.<sup>75</sup>

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<sup>70</sup> REC states that it has tested a booster for KWSV-LP, Simi Valley, California, which is fed by the Internet, and has found the transition to be smooth. REC Comments at 53. Boston notes that many localities have invested in fiber networks, and applicants may wish to utilize those existing resources. Boston Comments at 7.

<sup>71</sup> *Id.* at 5.

<sup>72</sup> CREA is further concerned that many LPFM stations might be prevented from receiving a license for a new booster station if the LPFM facility has become "boxed-in" by subsequent FM translator stations because the booster (like the LPFM station) would be short-spaced to the translator. CREA Comments at 4. We clarify that no rule change would be needed to address this situation because a booster within the service contours of its LPFM station is licensable without regard to the existence of short-spaced FM translators. A very limited exception is contained in 47 CFR § 74.1204(i), which requires booster stations to protect certain first-adjacent stations. The Commission does not base licensing of booster stations on distance separations, regardless of whether a particular booster rebroadcasts the signal of an LPFM or non-LPFM station.

<sup>73</sup> CREA Comments at 5.

<sup>74</sup> See *Amendment of Part 74 of the Commission's Rules Regarding FM Translator Interference*, MB Docket No. 18-119, Report and Order, FCC 19-40, at 26, para. 50 (May 9, 2019), modifying 47 CFR §§ 74.1203(a)-(d); 74.1204(f).

<sup>75</sup> See *Sixth R&O*, 27 FCC Rcd at 15433, para. 88.

32. The Commission is not aware of any complaints of LPFM third-adjacent interference and we expect that such complaints would occur rarely, if at all. Nevertheless, making the proposed change would clarify that LPFM and FM translator stations must protect the same types of stations, *i.e.*, that neither can cause either predicted or actual interference to any other broadcast station on a third-adjacent channel, including previously authorized secondary services. There were no comments on this relatively small change in wording, and we adopt it as proposed.

## 2. Correct Small Typographical Errors and Duplicative Language

33. We also, as proposed, correct some small typographical errors and out-of-date information in the LPFM rules. No commenters address these small housekeeping matters. First, we delete paragraph (c)(2) from section 73.871 of the Rules because that provision (concerning minor amendments) essentially repeats information already provided in paragraph (c)(1).<sup>76</sup> Similarly, we delete from paragraph (c)(1) language which states that paragraph (c)(5) is included in the definition of “minor” amendments. That statement is superfluous because it duplicates paragraph (c)(5) itself. Finally, we delete section 74.1290, which contains an outdated address for a Media Bureau web page concerning FM translator and FM booster stations.<sup>77</sup>

### E. FM Protection of Channel 6 Television Stations

34. We defer consideration of the proposal in the NPRM to eliminate in their entirety the rules requiring radio stations operating in the FM reserved band (including LPFM, Noncommercial Educational (NCE) FM, Class D FM (10 watt), and FM translator stations) to protect Television Channel 6 (TV6).<sup>78</sup> The NPRM proposed: (1) to eliminate TV6 distance separation rules for LPFM, NCE, Class D (10 watt), and FM translator stations operating on reserved band FM Channels 201-220 stations after completion of the LPTV digital transition;<sup>79</sup> and (2) in the meantime, to allow the foregoing classes of stations/applicants to seek waiver of distance separation requirements, including those in section 73.825 of the Rules, by allowing stations to demonstrate lack of interference to the TV6 station, such as by using the FM translator TV6 contour protection requirements of section 74.1205(c).<sup>80</sup> After release of the NPRM, the Media Bureau, in a separate proceeding, asked for comment on the continued use of TV6 for analog audio services.<sup>81</sup> Because the outcome of that proceeding could have implications to TV6

<sup>76</sup> See 47 CFR § 73.871(c)(1)-(2).

<sup>77</sup> *Id.* § 74.1290.

<sup>78</sup> NPRM, 34 FCC Rcd at 6541-6544. See 47 CFR §§ 73.825(LPFM), 73.525 (NCE FM), 74.1205 (FM translators). The TV6 spectrum is located at 82 to 88 MHz, immediately adjacent to the lower end of the FM band. Most full-power television TV6 stations, however, moved to different spectrum as a result of the June 12, 2009 full-power television digital transition. Class A television stations completed their transition to digital on September 1, 2015. LPTV and TV translator stations will be completing their transition by July 13, 2021. See *Amendment of Parts 73 and 74 of the Commission’s Rules to Establish Rules for Digital Low Power Television and Television Translator Stations*, MB Docket No. 03-185, 30 FCC Rcd 14927, 14932-33, para. 9 (2015) (*Third Digital Order*); see also *Incentive Auction Closing and Channel Reassignment Public Notice: The Broadcast Television Incentive Auction Closes; Reverse Auction and Forward Auction Results Announced; Final Television Band Channel Assignments Announced; Post-Auction Deadlines Announced*, Public Notice, 32 FCC Rcd 2786 (2017). Since 1985, the Commission has required all stations proposing operations on FM reserved band channels 201 through 220 to protect full-service television, LPTV, Class A, and television translator stations operating on TV6. See 47 CFR § 73.525; *Changes in the Rules Relating to Noncommercial, Ed. FM Broad. Stations*, Memorandum Opinion and Order, FCC 85-328, 1985 WL 1196332 (June 27, 1985).

<sup>79</sup> NPRM, 34 FCC Rcd at CITE, paras. 10, 12,

<sup>80</sup> *Id.* at paras. 11-12.

<sup>81</sup> See *Media Bureau Seeks to Update the Record on the Operation of Analog Radio Services by Digital LPTV Stations as Ancillary or Supplementary Services*, MB Docket No. 03-185, Public Notice, 34 FCC Rcd 11162 (MB 2019) (*Update Notice*). In MB Docket No. 03-185, the Commission is considering whether to allow continued

(continued....)

protection requirements, as well as concerns that the development of a more detailed record is needed, we defer further action on this issue.<sup>82</sup> We also agree with ABC that the record lacks full information about what impact, if any, eliminating TV6 protections would have on digital TV6 operations once all television stations have transitioned from analog to digital, an ongoing process that will not be complete until July 13, 2021, the deadline for Low Power Television (LPTV) stations to transition.<sup>83</sup>

35. The Commission will be in a better position to reach an informed decision by addressing TV6 issues after the July 13, 2021 completion of that transition. Until such a decision, and consistent with the interim approach proposed in the NPRM, the staff will consider waiver requests to use FM spectrum that is short-spaced to TV6, and grant such requests if it determines that the FM applicant demonstrates no interference. As proposed, LPFM applicants could make such a showing using the FM translator TV6 contour protection requirements of section 74.1205(c).<sup>84</sup> As also proposed, NCE, Class D (10 watt) and FM translator stations operating on the reserved band can submit similar waiver requests with demonstrations of no interference caused to a TV6 station that they are required at that time to protect.<sup>85</sup> They may, for example, show that there would be no contour overlap with the TV6 station, lack of population, unique terrain, or other factors specific to that particular location or station. We will review these exhibits on a case-by-case basis to determine whether the short-spaced TV6 station is adequately

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operations of approximately 26 Low Power Television (LPTV) stations that currently provide analog radio-type audio programming on 87.7 MHz, which is second-adjacent to the FM channel 201 (88.1 MHz). *See Third Digital Order*, 30 FCC Rcd at 14932-33, para. 9. When these LPTV stations convert to digital by July 13, 2021, they will be unable to continue providing such radio service because the digital audio portion of their signal can no longer be received by FM receivers, that typically lack the ability to decode a digital television signal. As stated above, the Commission recently invited additional comments to refresh the record of Docket 03-185, and the additional comment cycle was completed only recently on February 6, 2020. Unless the Commission permits such operations to continue, the question of interference obligations between such analog operations and adjacent radio stations will become moot on July 13, 2021.

<sup>82</sup> Specifically, the NPRM framed the issue primarily in terms of whether FM stations should continue to protect TV6 stations, whereas commenters are also concerned about whether any remaining TV6 audio operations should be required to protect FM stations. Educational Media Foundation (EMF), REC, and Sibert would resolve all TV6-related matters immediately in the current proceeding. EMF Comments at 1-4; REC Comments at 48-52; Sibert Comments at 5. California State University Long Beach Research Foundation (CSULBRF) and the Preserve Community Programming Coalition (PCPC) would wait to resolve all TV6 issues until the Commission decides in MB Docket No. 03-185 whether existing analog audio services on TV6 can remain after the LPTV digital transition. CSULBRF Comments at 2; PCPC Comments at 2, 4. CREA and NPR propose a hybrid approach, with the Commission resolving TV6 matters that are ripe for consideration in the instant proceeding, even if it waits to address some related issues separately. CREA Comments at 2; NPR Reply at 3 (“the need for more effective rules to address one category of interference does not justify deferring the elimination of other interference rules that are obsolete and counter-productive to the public interest.”). Although we agree with CREA and NPR that it would be possible to address a portion of TV6 matters now, CSULBRF and PCPC are also correct that some issues would benefit from consideration in a future proceeding.

<sup>83</sup> ABC, Inc. (ABC), licensee of a TV6 station in Philadelphia, PA, submits that any decision to sunset TV6 protections should be based on a full, contemporary record. *See Ex Parte Comments of ABC, Inc.* (rec. March 9, 2020). ABC faults the pre-DTV transition studies relied upon in the NPRM as not reflective of real-world operating conditions. Sinclair Broadcast Group, Inc. (Sinclair) and Gray Television, Inc. (Grey), which also operate television stations, express support for ABC’s position. *See Ex Parte Comments Sinclair Comments at 1; Ex Parte Comments of Gray at 1.*

<sup>84</sup> *See NPRM at para. 11; 47 CFR § 74.1205(c).*

<sup>85</sup> *See NPRM at para. 12.* Because analog audio on TV6 is scheduled to end by July 13, 2021, radio stations would not have to protect it after that time and, thus, would not have to request waivers regarding such operations. *See supra*, note 81.

protected.<sup>86</sup> Consistent with the proposal to grant some relief prior to the proposed sunset of distance separation requirements, we will also amend our rules to exempt reserved band LPFM and Class D stations from the Channel 6 protection requirements where the applicant can provide an agreement indicating the concurrence of all potentially affected TV6 stations, affording them the same opportunity for exemption as our rules allow NCE FM and FM translator applicants. Because the rules concerning LPFM protection of TV6 (section 73.825) do not currently provide for such a concurrence option, we add one, similar to the option already available in sections 73.525 (NCE FM) and 74.1205 (FM translators). We also amend section 73.512 (Class D) which currently addresses interference to television stations in general, but is not specific to TV6 and does not include a concurrence option.

#### **F. Decision Not to Increase Power from 100 Watts to 250 Watts**

36. Consistent with our tentative decision in the NPRM, we do not alter the 100-watt maximum effective radiated power (ERP) of LPFM stations.<sup>87</sup> We continue to believe that REC's proposal that the Commission establish a new class of LPFM stations LP-250<sup>88</sup> conflicts with the LCRA, would complicate LPFM licensing, and is inconsistent with Congress's and the Commission's intent when establishing the LPFM service. The Commission has already taken action to improve LPFM signals by allowing them to apply for consent to rebroadcast their signals over FM translators.<sup>89</sup>

37. NAB and NJBA support keeping maximum LPFM power at 100 watts.<sup>90</sup> Many other commenters, however, urge reconsideration of the tentative rejection of an LP-250 service.<sup>91</sup> They argue that a power increase could overcome poor signal quality that many LPFM stations face due to building penetration difficulties, irregular terrain, spectrum congestion, interference from fill-in translators, and substandard antenna locations. Commenters note that the Commission has helped other broadcast services experiencing various difficulties and ask the Commission to assist LPFM stations as well.<sup>92</sup>

38. REC's original LP-250 proposal discussed a "Section 73.815 Regime" whereby the Commission would apply LP-10 spacings to LP-250 stations. The NPRM rejected this approach as contrary to the LCRA.<sup>93</sup> In its comments, REC now proposes instead to allow LP-100 stations to upgrade

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<sup>86</sup> We will require an affirmative demonstration of no TV6 interference, not merely a showing of "good cause." *Compare*, 47 CFR § 1.3. For purposes of these waivers, it will not be sufficient for the applicant to show that the relevant TV6 station is no longer operating in analog.

<sup>87</sup> NPRM, 34 FCC Rcd at 6539 n.15.

<sup>88</sup> LP-250 stations would have a proposed maximum ERP of 250 watts at 30 meters HAAT. *See* Petition at 14-21; REC Comments at 2-9. The average 60 dBu contour of stations with such parameters would have a radius of about 7.1 kilometers.

<sup>89</sup> The Commission has not yet, however, opened a filing window in which LPFM stations can submit such applications. We believe that once LPFM stations have an opportunity to implement an FM translator option, there will be significant improvements in many of the reception issues that cause them to seek a power increase.

<sup>90</sup> NAB Comments at 1-2; NJBA Comments at 2-3. NAB asserts that creating a class of LP-250 stations would lead to more crowding on the FM band and upset a "careful balance" between LPFM service and "the technical integrity of [already] existing radio services." NAB Comments at 2. NAB also maintains that Congress, in the LCRA, anticipated a maximum power level of 100 watts. *Id.* NJBA is concerned about confusion to listeners and potential interference to EAS messaging. NJBA Comments at 3.

<sup>91</sup> *See, e.g.*, Brad Johnson (Johnson) Comments at 2 (poor LP-100 reception only one mile from transmitter); REC Comments at 15-16 (LP-250 stations would be on par with FM translators but not lose their "local flavor"); Peter Gray Comments at 1 (wider reach of public safety information to rural areas); Las Vegas Public Radio Comments at 2 (LP-100 power prevents LPFM business growth).

<sup>92</sup> CREA Reply at 8-9; Johnson Comments at 2; PHI Comments at 4.

<sup>93</sup> NPRM, 34 FCC Rcd at 6539, n.15. The Commission's primary concern with that proposal was the use of LP-10 distance separation tables for LP-250 stations whereas the LCRA prohibits spacing reductions.

to LP-250 while continuing to use LP-100 spacing and requiring, as a “backstop,” contour studies to demonstrate no overlap (or no increased overlap) with other stations, especially in terrain that REC calls “foothills.”<sup>94</sup> REC states that the signals of LP-250 stations would extend into the existing 20-kilometer buffer zone LPFM stations must currently maintain but would generally still be sufficiently spaced from other stations to avoid any interference.<sup>95</sup> EMF, however, contends that the Commission must examine the foothills problem before expanding service by LPFM stations and potentially adversely impacting full-power stations.<sup>96</sup>

39. We find REC’s revised proposal does not fully address our concerns. Although, as the Commission has previously noted, the LCRA does not contain any language limiting LPFM power levels,<sup>97</sup> the LCRA prohibits reduction of the minimum distance separations between LPFM and full-service stations.<sup>98</sup> When Congress adopted the LCRA, Commission distance separation rules, which require greater spacings between higher powered stations, were in effect. REC has not shown how its proposal is consistent with the LCRA or with the concept that the spacings needed to protect against interference increase along with the station power levels. REC still proposes to double power without any concomitant increase in spacing to other stations. REC acknowledges a resulting decrease in the 20-kilometer buffer zone without showing how a reduced buffer would be consistent with spacing requirements. We believe that an increase in power without a comparable increase in spacing is effectively a reduction in channel distance separation and therefore is inconsistent with the LCRA.<sup>99</sup> The proposed use of contour overlap would also introduce an unnecessary level of complexity to LPFM licensing by requiring all LP-250 applicants to prepare engineering studies examining the relationship of their own contours to those of all adjacent channel stations, a requirement that is inconsistent with the simple design of the LPFM service.<sup>100</sup> The simplicity of LPFM licensing has worked well, facilitating filing of LPFM applications with acceptable engineering proposals that the Commission can process expediently. Although, as REC observes, the Commission has sometimes used a contour overlap analysis

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<sup>94</sup> REC Comments at 32. If there is overlap at the 250-watt level, REC proposes that the applicant could request a reduced power as low as 101 watts, which would still be an improvement over LP-100 service. REC Comments at 32. Also, REC states that if the upgraded facility gets interference complaints, the station could simply reduce power back to 100 watts. *Id.* at 33-34. REC would allow LPFM stations to use contour overlap to protect short-spaced FM translators and other LPFM stations. REC would require a contour study in each LP-250 upgrade application to address a phenomenon that it calls the “foothills effect,” *i.e.*, interference by a station located between a valley and a mountain. Such interference can result because elevations are averaged in calculating permissible antenna heights. REC Comments at 31.

<sup>95</sup> REC Comments at 15-16.

<sup>96</sup> EMF Comments at 2. EMF notes that the Commission adopted the LPFM distance separation requirements based on predicted coverage at the maximum allowable height and power but that the predictions are not accurate in foothill areas. *Id.* at 6. EMF is concerned about the foothills effect for LP-100 as well as LP-250 stations and regardless of whether the station is seeking a second-adjacent channel waiver. EMF Comments at 7. REC and CREA argue that steps to address foothills-related concerns are only needed for LP-250 stations. REC Reply at 20; CREA Reply at 2.

<sup>97</sup> See *Sixth R&O*, 27 FCC Rcd at 15479, para. 206.

<sup>98</sup> LCRA § 3(b)(1) (“The Federal Communications Commission shall not amend its rules to reduce the minimum co-channel and first- and second-adjacent channel distance separation requirements in effect on the date of enactment of this Act between--(A) low-power FM stations; and B) full-service FM stations.”).

<sup>99</sup> *Id.*

<sup>100</sup> REC contends that the proposed contour analysis would be no more complex than the process approved herein to obtain interim TV6 waivers or to obtain second-adjacent channel short-spacing waivers, each of which uses contour overlap. REC Comments at 45. CREA further argues that good coverage is more important than simplicity and that it is preferable for an LPFM organization to bear the expense of hiring an engineer than to have a poor signal. CREA Reply at 4-5.



to grant waivers to LPFM stations seeking short-spaced authorizations, such actions differ significantly from REC's LP-250 proposal, which would authorize an entire new class of LPFM stations on a regular, non-waiver basis subject to the requirement that they undertake complex overlap studies.<sup>101</sup>

40. We also find no merit to REC's contention that new circumstances since the Commission last rejected an LPFM power upgrade warrant a different outcome. REC's purported "new evidence," including public support for a power increase<sup>102</sup> and more knowledge about the "foothills effect," is not significant enough to form the basis for creation of a new class of station.<sup>103</sup> With respect to the argument that LPFM stations are struggling and need assistance like that available to other radio services,<sup>104</sup> we note that the Commission previously took steps to improve LPFM coverage by allowing them to use FM translators.<sup>105</sup> The Commission is taking further action herein to address some additional difficulties without substantially altering the localized, simple nature of the service. Although the record demonstrates that LPFM stations would welcome the opportunity to upgrade their power and would be willing to accept some added complexity to do so, they do not provide evidence that altering the simplicity of the LPFM service, an important, continuing concept underlying the success of the LPFM service is appropriate or would be fully consistent with the LCRA.<sup>106</sup>

#### **G. Decision Not to Publish Updated Lists of Stations Carrying Radio Reading Services**

41. We decline to impose any new requirements on stations hosting radio reading services or to make any changes with respect to the obligation of LPFM applicants to protect third-adjacent channels carrying radio reading services for individuals who are blind or visually impaired.<sup>107</sup> The NPRM tentatively rejected REC's proposal that the Commission revise a list that the Commission released in 2000 of stations carrying such reading services. Some LPFM applicants continue to rely on this list in determining which FM radio stations require third-adjacent protection.<sup>108</sup> The Commission noted that

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<sup>101</sup> We note that our revised definition of a "minor" change includes an option to use contour overlap in a manner quite different from that REC proposes for LP-250 stations. Stations applying for authority to make minor changes can make a simple distance showing. If they exceed that distance, they can choose to demonstrate that contours of their own existing and proposed facilities would overlap, thereby showing that the relocated station would continue to reach a portion of the existing service area. *See supra*, para. 21. Such a contour analysis, involving a single LPFM station and not based on any interference protection, is considerably less complex than one using contours to demonstrate that a proposed LPFM station would not cause interference to multiple stations of all kinds, licensed to others.

<sup>102</sup> REC Comments at 14. Specifically, REC states that comments filed in response to an LP-250 proposal that REC filed in a different proceeding in 2015 evidence public support for creation of such stations. *Id.*, citing CG-RM-11749.

<sup>103</sup> REC Comments at 9. REC argues that the concept of the foothills effect was not a known until after the *Fourth NPRM* and not experienced in actual operations until after the *Sixth R&O* and completion of the 2013 LPFM filing window.

<sup>104</sup> CREA mentions, for example, a proposed rulemaking to improve Class A commercial radio, AM Revitalization, "Mattoon" waivers for translator relocation, improved translator interference rules, and AM digital broadcasting. CREA Reply at 8-9. *Cf. John F. Garziglia, Esq.*, Letter, 26 FCC Rcd 12685 (MB 2011) (case concerning station in Mattoon, Illinois, establishing a waiver policy to allow certain FM translators that would rebroadcast AM stations to file minor change applications to relocate over distances that would otherwise be considered major changes).

<sup>105</sup> *See Sixth R&O*, 27 FCC Rcd at 15453, paras. 142-43.

<sup>106</sup> *See, e.g., LPFM Order*, 15 FCC Rcd at 2210, 2220, 2253, paras. 9, 36, 125.

<sup>107</sup> Such programming, which is not broadcast to the general public, is transmitted over FM subcarriers and received by individuals who are blind or visually impaired using special equipment that provides them with access to aural presentations of written materials such as newspapers. *See* 47 CFR § 73.295.

<sup>108</sup> In 2000, the Commission released a list of stations which were operating reading services at that time and stated that it would retain third-adjacent protection for the listed stations, at least temporarily. At issue was whether the

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requiring FM stations to report to the Commission about their hosting of reading services would be potentially burdensome for those stations while providing potential LPFM applicants with only a short-lived tool that would be inferior to other available resources.<sup>109</sup>

42. No commenter disputes the Commission's statement in the NPRM that any revised list would soon become out-of-date again unless the Commission were to require periodic reports from stations with reading services. Thus, we are not convinced that we should burden stations providing this important service with a new reporting requirement. However, we take this opportunity to make clear that the Commission last used the 2000 list to evaluate applications filed in the 2013 LPFM filing window.<sup>110</sup> The Commission has not used the list in examining subsequent modification applications and, contrary to the assumptions of Sibert and REC,<sup>111</sup> does not plan to use it in processing LPFM applications filed in future windows. Each LPFM applicant must determine whether it meets spacing requirements with respect to reading services and certify the accuracy of its answer as part of the application.<sup>112</sup> It is current staff practice to rely upon such certifications unless we receive an objection or petition disputing the certification's accuracy. Accordingly, Sibert and REC's concerns are unfounded and we need not adopt any additional rules pertaining to radio reading services.

## H. Emergency Alert Requirements

43. As proposed, we continue to include LPFM stations in the Emergency Alert Service (EAS). The NPRM rejected a suggestion to eliminate EAS requirements for LPFM stations and sought comment on how to increase EAS participation by LPFM stations.<sup>113</sup> The Commission noted that LPFM

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special equipment designed only to receive reading services over FM subcarrier channels might be more susceptible to third-adjacent channel interference than standard consumer radios. The Commission expected that this question could not be resolved without further study. The LCRA has since made the protection of radio reading services permanent but without reference to a list. The LCRA eliminated LPFM spacing requirements to stations on third-adjacent channels except for those providing radio reading services. *See* LCRA §§ 3, 4. *See also* 47 CFR § 73.807(a)(2).

<sup>109</sup> NPRM, 34 FCC Rcd at 6547, para. 21. Sibert argues that a link in the NPRM to reading service information compiled by the International Association of Audio Information Services (IAAIS) is not useful because it only lists the organizations providing the reading service rather than the stations carrying the service. Sibert Comments at 9. We disagree. The IAAIS identifies each organization providing a reading service within a particular state. Some, but not all, of the organizations on the IAAIS site have names that include the call letters of associated stations, such as the "WTSU Radio Reading Service" in Alabama. For each organization, regardless of name, IAAIS provides a link to the organization's website from which one can obtain more information. If an LPFM applicant does not find a nationwide resource of this kind sufficient, it can use more local resources such as inquiring of local organizations for the blind or contacting the engineer at FM stations within the third-adjacent distance separations to ask whether they offer a reading service.

<sup>110</sup> *See, e.g., Christian Charities Deliverance Church*, Memorandum Opinion and Order, 30 FCC Rcd 10548, 10553-54, paras. 13-14 (2015) (rejecting untimely argument that Commission's failure to update the 2000 list was a basis for waiving requirement to protect station providing a reading service).

<sup>111</sup> Sibert and REC explain for the first time that the primary concern prompting their desire for an updated list is their belief that Commission staff will dismiss applications for failure to protect listed stations, even those that no longer provide a reading service. *See* Sibert Comments at 9, REC Reply at 28. Sibert suggests that the Commission could, in the absence of an updated list, allow curative amendments. Sibert Comments at 9. We note that several other commenters seek opportunities for corrective amendments for mistakes beyond failure to protect radio reading services by eliminating 47 CFR § 73.870(c). *E.g.,* Johnson Comments at 1; CREA Comment at 6; Middleton Comments at 1. Those suggestions are beyond the scope of this proceeding.

<sup>112</sup> FCC Schedule 318, Technical Certifications Section, Interference Question.

<sup>113</sup> NPRM, 34 FCC Rcd at 6548, para. 23. The NPRM noted that fewer than half of LPFM stations had participated in recent EAS tests and sought comment. *Id.* Sibert and REC respond that LPFM stations may be unaware of tests and/or EAS activation may relate to matters well beyond the LPFM station's service area. They suggest several

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stations already have fewer EAS requirements than full-service stations and stated that the requirements are not overly burdensome.<sup>114</sup> Several commenters disagree and explain that EAS equipment is very expensive for small noncommercial organizations.<sup>115</sup> They provide several suggestions of how to make EAS participation more affordable for LPFM stations if the requirement is not eliminated outright. These suggestions include providing government subsidies for purchase of standard EAS equipment,<sup>116</sup> permitting non-certified home-built equipment with open-source software, as they say is permitted in Canada,<sup>117</sup> and/or allowing shared EAS equipment for LPFM stations that share time.<sup>118</sup> On the other hand, NJBA argues that LPFM stations compromise the integrity of the EAS because they do not have adequate EAS infrastructure.<sup>119</sup>

44. The comments do not change our decision not to remove EAS requirements for LPFM stations. We continue to believe that when there is a serious matter warranting EAS activation, the public should receive alerts from the stations to which they are listening at that time, including LPFM stations. We appreciate the commenters' detailed suggestions on making EAS compliance more affordable for LPFM stations. Most of the suggestions are not within the Commission's exclusive jurisdiction and, thus, could not be adopted in the current proceeding.

45. However, we find that the suggestion to reduce the number of EAS units required for LPFM stations operating on a time-shared basis, , under these limited circumstances, would be a reasonable way to promote increased EAS participation by LPFM stations, as proposed in the NPRM .<sup>120</sup> Accordingly, we adopt that suggestion. REC says that "there should be no reason why an LPFM station that shares the audio chain with another time-shared LPFM station should be required to purchase a separate EAS unit."<sup>121</sup> No party has opposed this REC proposal. We agree that commonly-located LPFM stations, such as those operating pursuant to time-sharing agreements with other LPFM organizations, should be permitted to operate a single, decode-only EAS system. The Commission's EAS

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Commission actions to address these matters. See Sibert Comments at 10; REC Comments at 56; REC Reply at 22.

<sup>114</sup> See 47 CFR §§ 11.11, Table 1 (LPFM stations must decode but not encode), 11.51(e) (LPFM stations not required to have equipment to generate certain EAS codes and signals).

<sup>115</sup> Sibert says that equipment often exceeds \$3,000, which is about one-third of the cost to construct an LPFM station, and that software updates of about \$500 every few years add up. Sibert Comments at 10. Sibert also maintains that there is a lack of grant money available to LPFM stations and that many states fail to include LPFM stations in their EAS plans. CREA says that EAS systems can sometimes cost more than an LPFM station's transmitter and firmware updates are excessive. CREA Comments at 5. See also REC Reply at 22-23. REC contends that a practice of frequent changes to the Common Alerting Protocol (CAP) enacted by the Federal Emergency Management Agency (FEMA) has been a major burden both in terms of the time and the cost needed for software and firmware updates. REC Comments at 55. REC reports that some LPFM stations have held fundraisers just to pay for such updates. *Id.*

<sup>116</sup> REC suggests Congressional funding of EAS purchases by small noncommercial broadcast stations. REC Comments at 56. Sibert suggests that the Commission establish a grant. Sibert Comments at 11. The Commission, however, does not administer EAS grant programs.

<sup>117</sup> See REC Comments at 56-57; Sibert Comments at 11; Johnson Comments at 2, CREA Comments at 5, n.9.

<sup>118</sup> CREA Comments at 5-6. REC estimates there are over 60 LPFM stations in time-share agreements. REC Reply at 24-25.

<sup>119</sup> NJBA Comments at 1.

<sup>120</sup> LPFM time-sharing generally occurs when there is more interest than available spectrum for establishing an LPFM station in a particular area. The Commission may grant more than one license, with each licensee receiving its own call sign, but being authorized for limited hours because it must share the same channel. For example, one station may operate mornings and another may operate evenings.

<sup>121</sup> REC Reply at 25.

rules, in Part 11, already allow co-owned, co-located facilities, such as AM and FM stations licensed to the same entity and at the same location, to monitor using just one EAS decoder.<sup>122</sup> That rule does not currently apply to LPFM stations because they cannot satisfy the “co-owned” prong of the rule due to ownership restrictions. We agree, in principle, that shared use of an EAS decoder by co-located stations could help LPFM stations with limited budgets to better participate in EAS tests. Time-sharing LPFM stations, that are generally the smallest LPFM operations, *i.e.*, with the most limited operating hours, would be able to share with another such station the costs of equipment and software updates needed for EAS participation. From the Commission’s perspective, however, we would need to ensure that lack of common ownership does not limit access to the shared equipment or frustrate Commission efforts to enforce EAS requirements.

46. We modify section 11.52(c) to allow shared EAS decoder use by co-located but not co-owned LPFM stations, provided that: (1) the respective LPFM licensees enter into a written agreement ensuring that each has access to the co-located equipment; and (2) the written agreement acknowledges that each licensee party to the agreement remains fully and individually responsible for compliance with all EAS rules and obligations applicable to LPFM EAS participants in Part 11 of the Commission’s rules, and any EAS violations involving the shared, co-located equipment. To be clear, each and every LPFM licensee entering into such an arrangement remains fully and directly liable for enforcement actions involving the shared equipment as well as all other obligations attendant to LPFM EAS Participants in Part 11 of the Commission’s rules, regardless of which party to the agreement took or failed to take the actions giving rise to the violation. Thus, as with co-owned stations, the Commission will not be limited in its ability to hold a licensee liable for a monetary forfeiture or for remedying an EAS-related problem. We do not extend this provision to LPFM stations that only share time but operate from different locations. We cannot be sure that such stations could readily access EAS equipment at other locations in an emergency.

#### **I. Pending Proceedings**

47. Applications that have not been the subject of any staff decision as of the effective date of the rules adopted in this *Report and Order* will be decided based on the new rules.<sup>123</sup> Applications that have been the subject of a staff decision, even if the subject of a pending petition for reconsideration or application for review, will be decided on the rules in existence prior to this *Report and Order*.

#### **J. Notification of Silent Periods.**

48. We adopt REC’s proposal to modify section 73.850 to clarify that LPFM stations must, like other broadcast stations, notify the Commission if they temporarily stop broadcasting.<sup>124</sup> The Rules generally require radio stations to notify the Commission within 10 days of temporarily discontinuing operations and to obtain Commission authorization if the discontinued operations last beyond 30 days.<sup>125</sup> If a station permanently discontinues operation, it must forward the license to the Commission for cancellation; the license of a station that fails to transmit broadcast signals for twelve consecutive months expires automatically pursuant to section 312(g) of the Act.<sup>126</sup> The Rules make each of these

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<sup>122</sup> See 47 CFR § 11.52(c).

<sup>123</sup> See *Amendment of Part 74 of the Commission’s Rules Regarding FM Translator Interference*, MB Docket No. 18-119, Report and Order, para. 49 (May 9, 2019), citing *Melcher v. FCC*, 134 F.3d 1143, 1165 (D.C. Cir. 1998); *Chadmoore Commc’ns, Inc. v. FCC*, 113 F.3d 235, 241 (D.C.Cir.1997); *Hispanic Inf. & Telecomm. Network, Inc. v. FCC*, 865 F.2d 1289, 1294-95 (D.C.Cir.1989) (“The filing of an application creates no vested right to a hearing; if the substantive standards change so that the applicant is no longer qualified, the application may be dismissed.”).

<sup>124</sup> *Id.* at 58.

<sup>125</sup> 47 CFR §§ 73.561(d) (NCE), 73.1740(a)(4) (AM and FM), 74.1263 (FM translators and boosters).

<sup>126</sup> 47 U.S.C. § 312(g); 47 CFR §§ 73.1740(c), 73.1750.

requirements explicit for AM, FM, NCE, FM translator, and FM booster stations,<sup>127</sup> however, only the permanent discontinuance/twelve month prong is explicitly highlighted as applicable to LPFM stations.<sup>128</sup> Although the Bureau has consistently applied the general 10 day and 30 day requirements to LPFM stations, the LPFM rules do not explicitly state that these general requirements will apply to LPFM stations. REC believes this lack of an explicit reference to the general obligation to notify the Commission was an oversight from when the Commission created the LPFM service in 2000 and suggests that the Commission, on its own motion, complete the administrative task of amending section 73.850 to add clarifying LPFM language similar to the NCE language in section 73.561(d).<sup>129</sup> White makes a similar suggestion and argues the Commission cannot adequately evaluate LPFM performance without knowledge of silent periods.<sup>130</sup>

49. Although the NPRM did not propose to modify section 73.850, we find that REC's proposal serves the broader purpose of the NPRM in preserving LPFM service and serving the goals of localism and diversity--the proposal codifies a longstanding policy that the Bureau already applies to the LPFM service and that allows it to identify and assist LPFM stations at risk of losing their licenses due to automatic expiration.<sup>131</sup> In the NPRM, the Commission sought to assist LPFM applicants that must move to different locations.<sup>132</sup> Depending upon the circumstances of the move, relocating stations may need to limit their operations temporarily. The notification requirement is the primary way that the Commission can ensure that it is aware of impending automatic expirations pursuant to section 312(g) of the Act and can attempt to assist stations to return to the air prior to that statutory loss of license. As REC suggests, we modify section 73.850 to clarify that the existing notification requirement applies to LPFM stations. As a transitional matter, any currently silent LPFM stations may file a request for Special Temporary Authority (STA) reflecting the original date the station went silent without any sanction if that date is more than 10 days from the filing. However, if the station had been silent more than 365 days, provisions of section 312(g) involving license cancellation would apply.

#### **K. LPFM Protection of FM Translators**

50. Finally, we do not, as suggested by Sibert, change the requirements for LPFM protection of FM translators. Several commenters are concerned that LPFM stations can become "boxed-in" and unable to move as a result of the differences in protection between LPFM and FM translator stations.<sup>133</sup> Under the rules, the Commission, using the contour overlap standard applicable to FM translators, will authorize a new translator with a contour that comes close to, but does not overlap with, that of an existing LPFM station. From an LPFM perspective, however, the stations are short-spaced because LPFM stations must protect other stations using distance separations rather than contour protection. The LPFM facility can remain at its existing location because it was there first, but the LPFM station may find

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<sup>127</sup> See *supra*, note 126.

<sup>128</sup> See 47 CFR § 73.801 (specifying that 47 CFR § 73.1750 is applicable to LPFM stations).

<sup>129</sup> REC Comments at 58-59.

<sup>130</sup> White Comment at 5.

<sup>131</sup> See, e.g., Letter from Lisa Scanlan, Deputy Chief, Audio Division, FCC Media Bureau to Ryan Greig, President, San Tan Educational Media, Letter Order (MB Dec. 13, 2017) (granting LPFM licensee's request for special temporary authority to remain silent and requiring licensee to notify the Commission when broadcast operations resumed); Letter from Lisa Scanlan, Deputy Chief, Audio Decision, FCC Media Bureau to J. Robertson, Pastor, Buffalo Baptist Church, Letter Order (MB Feb. 12, 2015) (granting LPFM licensee's request for extension of special temporary authority to remain silent and requiring licensee to notify the Commission when broadcast operations resumed); Boston Rouge Progressive Network, Notice of Apparent Liability for Forfeiture, 25 FCC Rcd 905, 908 (MB 2010) (noting that it is improper for an LPFM licensee to request silent authority on FCC Form 318).

<sup>132</sup> NPRM, 34 FCC Rcd at 6544-45, para. 15.

<sup>133</sup> Sibert Comments at 4; REC Comments at 38; White Comments at 3.

itself “boxed in” if it later needs to relocate, such as if it loses its transmitter site. The Commission, under minimum spacing rules, will not authorize the LPFM station to move any closer to the FM translator even if there would be no contour overlap.<sup>134</sup> LPFM options to relocate can become especially limited if the LPFM station is short-spaced to more than one FM translator in different directions.

51. The NPRM tentatively rejected a commenter position that the Commission should use contour protection for both services pursuant to an LCRA description of each as “equal in status.”<sup>135</sup> Several commenters urge the Commission to reduce the “boxed-in” problem by allowing LPFM stations to protect FM translators in the same way that FM translators protect LPFM stations, *i.e.*, with contour protections and interference remediation requirements.<sup>136</sup> REC argues that although contour protection is not as simple as spacing requirements, contour protection would be more spectrum-efficient and would level the playing field with FM translators.<sup>137</sup> Sibert and REC, apparently assuming use of a contour-protection analysis, believe that directional antennas could help short-spaced LPFM stations protect FM translators.<sup>138</sup> Sibert and CREA say that if the Commission does not allow mutual contour protection between LPFM and FM translators, then FM translators should not be permitted in locations that would cause LPFM short-spacing.<sup>139</sup>

52. While we recognize the concern about LPFM stations becoming “boxed-in” by FM translators, we decline to alter section 73.807’s requirement that LPFM stations protect adjacent FM translators. Short-spaced LPFM stations that find themselves “boxed-in” by an FM translator on a second-adjacent channel can seek a waiver and may use a contour analysis to demonstrate lack of interference as part of the waiver request. In that limited, waiver context, an LPFM station’s use of the new option to operate directionally with a pattern directed away from a short-spaced FM translator may help to remedy “boxed-in” situations.<sup>140</sup>

53. We decline REC’s suggestion that we alter the Rules to replace LPFM distance separations with contour protection.<sup>141</sup> As discussed above in our rejection of a similar proposal for LP-250 stations, the greater complexity and interference remediation obligations associated with contour protections are not best suited for the LPFM service outside of a waiver context.<sup>142</sup> Nor, as stated in the NPRM, would the LCRA’s “equal in status” language require licensed LPFM and FM translator stations to operate under identical rules.<sup>143</sup>

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<sup>134</sup> See 47 CFR § 73.807(a)(1) (short-spaced LPFM station cannot lessen the spacing to subsequently authorized stations). REC states that the situation may be especially pronounced if the FM translator operates with a directional antenna because the Commission treats all translators as non-directional. REC Comments at 37-38.

<sup>135</sup> NPRM, 34 FCC Rcd at 6539, n.15. See LCRA § 5.

<sup>136</sup> REC Comments at 38; White Comments at 3; Sibert Comments at 4; Mora Comments at 1.

<sup>137</sup> REC Comments at 38.

<sup>138</sup> Sibert Comments at 4, REC Comments at 54.

<sup>139</sup> Sibert Comments at 15; CREA Reply at 10.

<sup>140</sup> See generally Sibert Comments at 3-4; REC Comments at 54. A station could demonstrate by waiver request that its directional operations would pull back its contour so as not to overlap with a second-adjacent channel FM translator. A directional antenna would not be an effective remedy for “boxed-in” stations on a non-waiver basis because the contour modification possible with a directional pattern is immaterial under the spacing rules.

<sup>141</sup> See REC Comments at 36-40.

<sup>142</sup> See *supra* para. 39.

<sup>143</sup> NPRM, 34 FCC Rcd at 6539, n.15, citing *Sixth R&O*, 27 FCC Rcd at 15426, n.139. The Commission has understood that language as simply requiring priority neither to new LPFM stations nor to new FM translators when making spectrum available for initial licensing. *Id.*, citing *Sixth R&O*, 27 FCC Rcd at 15422, para. 59.

## L. Certified LPFM Transmitters

54. Commenters seek amendment or clarification of section 73.1660(a), which, in one paragraph, requires LPFM transmitters to be “certified” but in another requires non-LPFM transmitters to be “verified.”<sup>144</sup> White believes that the language and standards for LPFM and non-LPFM equipment should be the same, especially after 20 years of LPFM compliance.<sup>145</sup> Several commenters argue that there is not any substantial difference between equipment that has been “certified,” “verified,” and/or “type accepted” and believe that each should be permissible for LPFM use.<sup>146</sup> CREA considers certification and verification “essentially the same” but recognizes a difference with respect to whether the manufacturer sends the antenna to an outside lab for testing and certification or verifies that it has done the testing in-house.<sup>147</sup> CREA argues that outside testing, though not necessarily better, is expensive so there are fewer “certified” transmitters available.<sup>148</sup> REC does not support any change in the certification requirement because it notes that uncertified foreign transmitters are being mass marketed to consumers.<sup>149</sup>

55. We will continue to require that LPFM transmitters be “certified.” When the Commission created the LPFM service, it required that LPFM transmitters be “certified” because it was “vitaly concerned” about protecting stations on adjacent channels, as well as aviation frequencies, from interference.<sup>150</sup> Certification is approved by the Commission based on data submitted by an applicant, generally the equipment manufacturer.<sup>151</sup> The Commission did not believe that a certification requirement would overly burden small operators, given then recent streamlining of our certification procedures nor that certification of equipment would add appreciably to the cost.<sup>152</sup> The importance to the Commission that equipment be “certified” is evident in its subsequent correction of originally proposed language in section 73.1660, the same rule at issue here, when the Commission inadvertently used the word “verified” rather than “certified.”<sup>153</sup> Despite the LPFM services’ 20 years of generally successful operation, there have been recent instances of use of uncertified equipment.<sup>154</sup> The reason that there are two paragraphs in section 73.1660(a) is that LPFM transmitters must be specifically certified for LPFM use. Not all “type accepted” equipment, including that which may be used in full-power FM broadcasting, is suitable to operate at the lower parameters in the LPFM service. The Commission’s Office of Engineering and Technology maintains databases from which permittees can determine whether equipment they are considering purchasing has been certified for use in the LPFM service.<sup>155</sup>

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<sup>144</sup> 47 CFR § 73.1660(a)(1)-(2).

<sup>145</sup> White Comments at 4.

<sup>146</sup> White Comments at 4; Johnson Comments at 2; PHI Reply at 2; Middleton Comments at 1.

<sup>147</sup> CREA Reply at 10-11.

<sup>148</sup> *Id.*

<sup>149</sup> REC Reply at 27.

<sup>150</sup> See *Creation of a Low Power Radio Service*, MB Docket 99-25, Notice of Proposed Rulemaking, 14 FCC Rcd 2471, 2485, para. 35 (1999) (*LPFM Notice*); see also, *LPFM Order*, 15 FCC Rcd at 2250-51, para. 116.

<sup>151</sup> 47 CFR § 2.907(a).

<sup>152</sup> *LPFM Order*, 15 FCC Rcd at 2250-51, para. 116; *LPFM Notice*, 14 FCC Rcd at 2485, para. 35.

<sup>153</sup> See *Recon. Order*, 15 FCC Rcd at 19221, n.33.

<sup>154</sup> See, e.g., *Chinese Sound of Oriental and West Heritage*, Notice of Violation, File No. EB-FIELDWR-19-00028704 (EB rel. Oct. 3, 2019); *International Crusade of the Penny*, Notice of Violation, File No. EB-FIELDWR-19-0002904 (EB rel. Aug. 9, 2019).

<sup>155</sup> <https://www.fcc.gov/oet/ea/fccid> (search by FCC ID number); <https://apps.fcc.gov/oetcf/eas/reports/GenericSearch.cfm> (search by broader parameters);

### M. Call Signs

56. We decline to shorten LPFM call signs as suggested by REC.<sup>156</sup> The call signs of LPFM stations consist of four letters followed by the suffix “-LP”, *e.g.*, WABC-LP. REC argues that LPFM stations should not have to use the -LP suffix, provided that a full-power station either is not already using those call letters or grants permission.<sup>157</sup> REC contends that the -LP suffix is not necessary and that its removal would put LPFM on a more even playing field with full-power NCE and commercial stations.<sup>158</sup>

57. We find that the -LP suffix continues to be needed for official Commission purposes. Call letters are the primary method through which licensees, the public, and the Commission identify and communicate about broadcast stations in filings and correspondence. Stations must include their call signs in on-air announcements hourly and at the beginning and end of their broadcast day.<sup>159</sup> In this manner, anyone who wishes to contact the Commission about the station’s operations can readily ascertain the station’s identity, in a format that is unique to that facility, and that will generate information about the correct station when entered into the Commission’s online databases.<sup>160</sup> The uniform format of call letters and use of the -LP suffix, allows re-use of call letters while avoiding any confusion between LPFM and non-LPFM stations.<sup>161</sup>

58. We clarify, however, that in less formal circumstances where Commission rules do not specify or require call sign use, LPFM stations are able to use alternative identifiers. Broadcast stations can and do market themselves creatively through slogans and images only loosely associated with their call letters or frequencies.<sup>162</sup>

## IV. PROCEDURAL MATTERS

59. *Regulatory Flexibility Act.* As required by the Regulatory Flexibility Act of 1980 (RFA), as amended,<sup>163</sup> an Initial Regulatory Flexibility Certification was incorporated into the NPRM.<sup>164</sup> Pursuant to the RFA,<sup>165</sup> the Commission’s Final Regulatory Flexibility Certification relating to this Report and Order is attached as Appendix C.

60. *Paperwork Reduction Act.* This *Report and Order* contains new or modified information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13. The requirements will be submitted to the Office of Management and Budget (OMB) for review under section 3507(d) of the PRA. OMB, the general public, and other Federal agencies are invited to comment on the new or modified information collection requirements contained in this proceeding. In addition, we note

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<sup>156</sup> The NPRM, in proposing to authorize LPFM stations to use FM boosters, identified call letters for such boosters. REC, however, raises a different matter – the call sign to be used by the LPFM station itself.

<sup>157</sup> REC Comments at 60.

<sup>158</sup> *Id.*

<sup>159</sup> 47 CFR §§ 73.1201, 73.801.

<sup>160</sup> Even if a full-power station were to have no objection to an LPFM station using the same call sign, confusion would arise if an LPFM listener contacted the Commission. The agency’s databases would associate that call sign only with the full-power station.

<sup>161</sup> 47 CFR § 73.3550(f).

<sup>162</sup> For example, a hypothetical LPFM station, WFXV-LP on 101.1 MHz, might informally call itself “Foxy 101.”

<sup>163</sup> See 5 U.S.C. § 603. The RFA, *see* 5 U.S.C. 601, *et seq* has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Publ. L. No. 104-121, Title II, 110 Stat. 847 (1996). The SBREFA was enacted as Title II of the Contract with America Advancement Act of 1996 (CWAAA).

<sup>164</sup> NPRM, 34 FCC Rcd at 6555, Appendix B.

<sup>165</sup> See 5 U.S.C. § 604.



that pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, *see* 44 U.S.C. § 3506(c)(4), we previously sought specific comment on how the Commission might further reduce the information collection burden for small business concerns with fewer than 25 employees.

61. In this *Report and Order*, we adopt new rules and licensing procedures for LPFM stations, which are almost always small entities. We also have assessed the effects of the new rules on small business concerns. We find that the streamlined rules and procedures adopted here will minimize the information collection burden on affected applicants, permittees, and licensees, including small businesses.

62. *Congressional Review Act*. [The Commission will submit this draft Report & Order to the Administrator of the Office of Information and Regulatory Affairs, Office of Management and Budget, for concurrence as to whether this rule is “major” or “non-major” under the Congressional Review Act, 5 U.S.C. § 804(2).] The Commission will send a copy of this Report & Order to Congress and the Government Accountability Office pursuant to 5 U.S.C. § 801(a)(1)(A).

## V. ORDERING CLAUSES

63. Accordingly, **IT IS ORDERED** that, pursuant to the authority contained in sections 1, 4(i), 4(j), 301, 303, 307, 308, 309, 316, and 319 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i), 154(j), 301, 303, 307, 308, 309, 316, and 319, as well as the Local Community Radio Act of 2010, Pub. L. No. 111-371, 124 Stat. 4072 (2011), this Report and Order **IS ADOPTED** and **WILL BECOME EFFECTIVE** 30 days after publication in the Federal Register.

64. **IT IS FURTHER ORDERED** that Parts 11, 73, and 74 of the Commission's Rules ARE AMENDED as set forth in Appendix B and the rule changes to sections 11.52, 73.807, 73.810, 73.825, 73.860, 73.871, 74.1201, 74.1263, 74.1283, and 74.1290 adopted herein will become effective 30 days after the date of publication in the Federal Register.

65. **IT IS FURTHER ORDERED** that the rule changes to sections 73.816, 73.850, and 73.870, which contain new or modified information collection requirements that require approval by the Office of Management and Budget under the Paperwork Reduction Act, **WILL BECOME EFFECTIVE** on the date specified in a notice published in the Federal Register announcing such approval.

66. **IT IS FURTHER ORDERED** that, should no petitions for reconsideration or petitions for judicial review be timely filed, MB Docket No. 19-193 **SHALL BE TERMINATED**, and its docket **CLOSED**.

67. **IT IS FURTHER ORDERED** that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, **SHALL SEND** a copy of this Report and Order, including the Final Regulatory Flexibility Certification, to the Chief Counsel for Advocacy of the Small Business Administration.

68. **IT IS FURTHER ORDERED** that the Commission **SHALL SEND** a copy of this Report and Order in a report to be sent to Congress and the Government Accountability Office pursuant to the Congressional Review Act, *see* 5 U.S.C. § 801(a)(1)(A).

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch  
Secretary

**APPENDIX A**  
**List of Commenters**

**Comments**

Bridge of Hope, WKNZ-LP (Jeff Twilly and Bill Simmons)

City of Boston, Massachusetts (WBCA-LP)

California State University Long Beach Research Foundation (KKJZ)

Community Radio Engineer Advocates (Paul Bame, Clay Leander, Todd Urick, Albert Davis, Caitlin Reading)

Betsy Cortis (WXOJ-LP)

Len Doughty (KPGC-LP)

Educational Media Foundation

Kevin Fodor (WRPO-LP)

Four Rivers Community Broadcasting Corporation, Bux-Mont Educational Radio Association, Penn-Jersey Educational Radio Corporation

Jose Garcia

Peter Gray (KFZR-LP)

Andy Hansen-Smith

Hope Christian Church of Marlton, Inc.

Jersey Educational Radio Corporation

Inge Davidson Foundation, WZML-LP

Las Vegas Public Radio Inc.

Dean Middleton (KOCF-LP)

Bernardo J. Mora (KGCE-LP)

National Association of Broadcasters

National Public Radio, Inc.

New Jersey Broadcasters Association

Preserve Community Programming Coalition

Dana J. Puopolo

REC Networks

Peter Salisbury (KUZU-LP)

Sharon Scott (WXOX-LP)

Jeff Sibert (KPPS-LP)

Daniel E. Slentz

Alan W. Smith (WHMV-LP)

Thomas Snider (KWNK-LP)

SSR Communications, Inc.  
Steven L. White

**Reply Comments**

Community Radio Engineer Advocates (Paul Bame, Clay Leander, Todd Urick, Albert Davis, Caitlin Reading)

Brad Johnson (KGIG-LP)

Las Vegas Public Radio Inc.

Positive Hope, Inc. (Makeda Dread Cheatom, KVIB-LP)

National Public Radio, Inc.

Aaron Read

REC Networks

**Ex Parte Submissions**

ABC, Inc.

REC Networks

Dr. Kaylee Lynn Stein, Shannon Gager, Rick Greenhut

Sinclair Broadcast Group, Inc.

Gray Television, Inc.

**APPENDIX B**  
**Final Rules**

**Part 11 of Chapter 1 of Title 47 of the Code of Federal Regulations is amended as follows:**

1. The authority citation for part 11 continues to read as follows:  
Authority: 47 U.S.C. 151, 154(i) and (o), 303(r), 544(g), and 606.

2. Revise §11.52 by adding a new final sentence to paragraph (c) to read as follows:

**§11.52 EAS code and Attention Signal Monitoring requirements.**

\* \* \* \* \*

(c) EAS Participants that are co-owned and co-located with a combined studio or control facility (such as an AM and FM licensed to the same entity and at the same location or a cable headend serving more than one system) may comply with the EAS monitoring requirements contained in this section for the combined station or system with one EAS Decoder. The requirements of §11.33 must be met by the combined facilities. Co-located LPFM stations including those operating on a time-sharing basis but which, pursuant to ownership restrictions in §73.855 cannot be co-owned, may also comply with the EAS monitoring requirements with one EAS Decoder pursuant to a written agreement between the licensees ensuring that each licensee has access to the decoder; that the stations will jointly meet the requirements of §11.33; and that each licensee remains fully and individually responsible for compliance with all EAS rules and obligations applicable to LPFM EAS participants in Part 11 of the Commission's rules, and any EAS violations involving the shared, co-located equipment. Each LPFM licensee entering into such an arrangement remains fully and directly liable for enforcement actions involving the shared equipment as well as all other obligations attendant to LPFM EAS Participants in Part 11 of the Commission's rules, regardless of which party to the agreement took or failed to take the actions giving rise to the violation.

\* \* \* \* \*

**Part 73 of Chapter 1 of Title 47 of the Code of Federal Regulations is amended as follows:**

1. The authority citation for part 73 continues to read as follows:  
Authority: 47 U.S.C. 154, 155, 301, 303, 307, 309, 310, 334, 336, and 339.

2. Revise §73.512 by adding a new final sentence to paragraph (d) to read as follows:

**§73.512 Special procedures applicable to Class D noncommercial educational stations.**

\* \* \* \* \*

(d) \*\*\* With respect to Class D (secondary) applications on Channels 201 through 220 required to protect television stations operating on TV Channel 6, the preceding non-interference

requirements will apply unless the application is accompanied by a written agreement between the Class D (secondary) applicant and each affected TV Channel 6 broadcast station concurring with the proposed Class D facilities.

3. Revise §73.807 by adding a new paragraph (g)(5) to read as follows:

**§73.807 Minimum distance separation between stations.**

\* \* \* \* \*

(g) \* \* \*

(5)(i) LPFM stations located within 125 kilometers of the Mexican border are limited to 50 watts (0.05 kW) ERP, a 60 dBu service contour of 8.7 kilometers and a 34 dBu interfering contour of 32 kilometers in the direction of the Mexican border. LPFM stations may operate up to 100 watts in all other directions.

(ii) LPFM stations located between 125 kilometers and 320 kilometers from the Mexican border may operate in excess of 50 watts, up to a maximum ERP of 100 watts. However, in no event shall the location of the 60 dBu contour lie within 116.3 kilometers of the Mexican border.

(iii) Applications for LPFM stations within 320 kilometers of the Canadian border may employ an ERP of up to a maximum of 100 watts. The distance to the 34 dBu interfering contour may not exceed 60 kilometers in any direction.

4. Revise §73.810 to read as follows:

**§73.810 Interference.**

(a) \*\*\*

(1) Such an LPFM station will not be permitted to continue to operate if it causes any actual third-adjacent channel interference to:

\* \* \* \* \*

(iii) The direct reception by the public of the off-the-air signals of any full-service station or previously authorized secondary station. Interference will be considered to occur whenever reception of a regularly used signal on a third-adjacent channel is impaired by the signals radiated by the LPFM station, regardless of the quality of such reception, the strength of the signal so used, or the channel on which the protected signal is transmitted.

5. Revise §73.816 to read as follows:

**§73.816 Antennas.**

\* \* \* \* \*

(b) Permittees and licensees may employ directional antennas in the LPFM service, in accordance with paragraph (d) of this section.

(c) [reserved]

(d) Directional antennas.

(1) Composite antennas and antenna arrays may be used where the total ERP does not exceed the maximum determined in accordance with §73.811(a) of this subpart.

(2) Either horizontal, vertical, circular or elliptical polarization may be used provided that the supplemental vertically polarized ERP required for circular or elliptical polarization does not exceed the ERP otherwise authorized. Either clockwise or counterclockwise rotation may be used. Separate transmitting antennas are permitted if both horizontal and vertical polarization is to be provided.

(3) An application that specifies the use of a directional antenna must provide the information identified in §73.316(c) of this subpart.

6. Revise §73.825 by adding an introductory sentence before paragraph (a) to read as follows:

**§73.825 Protection to reception of TV channel 6.**

The following spacing requirements will apply to LPFM applications on Channels 201 through 220 unless the application is accompanied by a written agreement between the LPFM applicant and each affected TV Channel 6 broadcast station concurring with the proposed LPFM facilities.

\* \* \* \* \*

7. Revise §73.850 by adding a new paragraph (d) to read as follows:

**§73.850 Operating schedule.**

\* \* \* \* \*

(d) In the event that causes beyond the control of a permittee or licensee make it impossible to adhere to the operating schedule in paragraph (b) of this section or to continue operating, the station may limit or discontinue operation for a period not exceeding 30 days without further authority from the Commission provided that notification is sent to the Commission in Washington, DC, Attention: Audio Division, Media Bureau, no later than the 10<sup>th</sup> day of limited or discontinued operation. During such period, the permittee shall continue to adhere to the requirements of the station license pertaining to lighting of antenna structures. In the event normal operation is restored prior to the expiration of the 30 day period, the permittee or licensee will notify the FCC, Attention: Audio Division of the date that normal operations resumed. If causes beyond the control of the permittee or licensee make it impossible to comply within the allowed period, Special Temporary Authority (see §73.1635) must be requested to remain silent for such additional time as deemed necessary not to exceed, in total, 12 consecutive months (see §73.873(b)).

8. Revise §73.860 by amending paragraph (b) to read as follows:

**§73.860 Cross-ownership.**

\* \* \* \* \*

(b) A party that is not a Tribal Applicant, as defined in §73.853(c), may hold attributable interests in one LPFM station and no more than two FM translator stations, two FM booster stations, or one FM translator station and one FM booster station provided that the following requirements are met:

(1) The 60 dBu contour of the LPFM station overlaps the 60 dBu contour of the commonly-owned FM translator station(s) and entirely encompasses the 60 dBu service contour of the FM booster station(s);

(2) The FM translator and/or booster station(s), at all times, synchronously rebroadcasts the primary analog signal of the commonly-owned LPFM station or, if the commonly-owned LPFM station operates in hybrid mode, synchronously rebroadcasts the digital HD-1 version of the LPFM station's signal;

(3) The FM translator station receives the signal of the commonly-owned LPFM station over-the-air and directly from the commonly-owned LPFM station itself. The FM booster station receives the signal of the commonly-owned LPFM station by any means authorized in §74.1231(i); and

(4) The transmitting antenna of the FM translator and/or booster station(s) is located within 16.1 kilometers (10 miles) for LPFM stations located in the top 50 urban markets and 32.1 kilometers (20 miles) for LPFM stations outside the top 50 urban markets of either the transmitter site of the commonly-owned LPFM station or the reference coordinates for that station's community of license.

\* \* \* \* \*

9. Revise §73.870 by amending paragraph (a) to read as follows:

**§73.870 Processing of LPFM broadcast station applications.**

(a) A minor change for an LPFM station authorized under this subpart is limited to transmitter site relocations not exceeding 11.2 kilometers or where the 60 dBu contour of the authorized facility overlaps the 60 dBu contour of the proposed facility. These distance limitations do not apply to amendments or applications proposing transmitter site relocation to a common location filed by applicants that are parties to a voluntary time-sharing agreement with regard to their stations pursuant to § 73.872 paragraphs (c) and (e). These distance limitations also do not apply to an amendment or application proposing transmitter site relocation to a common location or a location very close to another station operating on a third-adjacent channel in order to remediate interference to the other station; provided, however, that the proposed relocation is consistent with all localism certifications made by the applicant in its original application for the LPFM station. Minor changes of LPFM stations may include:

(1) Changes in frequency to adjacent or IF frequencies (+/- 1, 2, 3, 53 or 54 channels) or, upon a technical showing of reduced interference, to any frequency;

and

(2) Amendments to time-sharing agreements, including universal agreements that supersede involuntary arrangements.

\* \* \* \* \*

10. Revise §73.871 by amending paragraphs (c) to read as follows:

**§73.871 Amendment of LPFM broadcast station applications.**

\* \* \* \* \*

(c) \* \* \* \* \*

- (1) Site relocations of 11.2 kilometers or less;
- (2) Site relocations that involve overlap between the 60 dBu service contours of the currently authorized and proposed facilities;

\* \* \* \* \*

**Part 74 of Title 47 of the U.S. Code of Federal Regulations is amended to read as follows:**

1. The authority citation for part 74 continues to read as follows:

Authority: 47 U.S.C. 154, 302a, 303, 307, 309, 310, 336, and 554.

2. Revise §74.1201 by amending paragraph (f) and adding a new paragraph (k) to read as follows:

**§74.1201 Definitions.**

\* \* \* \* \*

(f) FM broadcast booster station. A station in the broadcasting service operated for the sole purpose of retransmitting the signals of an FM radio broadcast station, by amplifying and reradiating such signals, without significantly altering any characteristic of the incoming signal other than its amplitude. Unless specified otherwise, this term includes LPFM boosters as defined in paragraph (k) of this section.

\* \* \* \* \*

(k) LPFM booster. An FM broadcast booster station as defined in paragraph (f) of this section that is commonly-owned by an LPFM station for the purpose of retransmitting the signals of the commonly-owned LPFM station.

3. Revise §74.1263 by amending paragraph (b) to read as follows:

**§74.1263 Time of operation.**

\* \* \* \* \*

(b) A booster station rebroadcasting the signal of an AM, FM or LPFM primary station shall not be permitted to radiate during extended periods when signals of the primary station are not being



retransmitted. Notwithstanding the foregoing, FM translators rebroadcasting Class D AM stations may continue to operate during nighttime hours only if the AM station has operated within the last 24 hours.

\* \* \* \* \*

64. Revise §74.1283 to read as follows:

**§74.1283 Station identification.**

\* \* \* \* \*

(b) The call sign of an FM booster station or LPFM booster will consist of the call sign of the primary station followed by the letters “FM” or “LP” and the number of the booster station being authorized, e.g., WFCCFM-1 or WFCCLP-1.

\* \* \* \* \*

5. Remove and Reserve §74.1290 as follows:

**§74.1290 [Reserved]**

## APPENDIX C

## Final Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA)<sup>1</sup> an Initial Regulatory Flexibility Analysis (IRFA) was incorporated in the *Notice of Proposed Rule Making (NPRM)* to this proceeding. The Commission sought written public comment on the proposals in the *NPRM*, including comment on the IRFA. The Commission received one comment referencing language in the IRFA. This Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.<sup>2</sup>

**A. Need For, and Objectives of, the Report and Order**

2. This *Report and Order* adopts several rule changes that are intended to improve the public's reception of Low Power FM (LPFM) broadcast station signals and to provide greater flexibility to LPFM broadcasters. Specifically, in the *Report and Order* the Commission adopts new rules and procedures to: (1) expand the class of LPFM licensees able to use directional antennas and allows LPFM use of antennas beyond off-the-shelf models; (2) allows LPFM and Class D stations to, like FM translators and full-service FM stations operating on Channels 201 to 220 (reserved band) not protect television stations operating on Television Channel 6 if they obtain concurrence from the TV6 station, or alternatively to request a waiver of the requirement; (3) redefine a "minor change" for LPFM stations as one which either: (a) does not exceed 11.2 kilometers (doubling the simple standard currently in use); or (b) involves overlapping 60 dBU contours<sup>3</sup> of the station's own existing and proposed facilities (a new standard that would generally be used by stations unable to meet the 11.2 kilometer distance and that would be more costly because it would require an engineering study); (4) permit LPFM stations to retransmit LPFM signals over booster stations (which amplify and reradiate the signal) as a substitute for currently permissible use of FM translators (which retransmits the signal on a different channel without amplification); (5) allow co-located LPFM stations to reduce operating costs by sharing a single Emergency Alert Service (EAS) decoder; (6) update LPFM-related rules in Parts 73 and 74 to make non-substantive changes to conform the rule governing LPFM third-adjacent channel interference,<sup>4</sup> remove repetitive language and outdated information; and (7) require that LPFM stations, like all other broadcast stations, must notify the Commission if they stop broadcasting for ten days and request authority to remain off-air for longer than 30 days. The new rules and procedures are designed to provide stations with more options to relocate and to improve their signals by having the opportunity to use more sophisticated equipment. These changes may improve the public's ability to receive signals from low-powered stations, especially in areas with irregular terrain and near international borders. The changes may also provide LPFM applicants greater flexibility in identifying initial and modified transmitter locations. The Commission's objectives are to improve LPFM reception and increase flexibility in LPFM siting while protecting primary stations and pre-existing secondary stations from interference and maintaining the core LPFM goals of diversity and localism.

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<sup>1</sup> See 5 U.S.C. § 603. The RFA, see 5 U.S.C. §§ 601-612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 847 (1996). The SBREFA was enacted as Title II of the Contract With America Advancement Act of 1996 (CWAAA).

<sup>2</sup> See 5 U.S.C. § 604.

<sup>3</sup> An LPFM station's 60 dBU contour is the area in which its signal would generally be of sufficient strength to serve the public without interference from other secondary stations.

<sup>4</sup> FM channels each use .2 MHz of spectrum. The terms first-adjacent, second-adjacent, and third-adjacent are used, respectively, to describe FM channels that are .2, .4, and .6 MHz apart. For example, a station at 90.1 MHz, would be first adjacent to another at 90.3 MHz, second-adjacent to 90.5 MHz, and third-adjacent to 90.7 MHz. Generally, the closer the adjacency between channels, the greater the required mileage separation to protect from potential interference.

**B. Summary of Significant Issues Raised by Public Comments in Response to the IRFA**

3. Las Vegas Public Radio Inc., (LVPR), licensee of KIOF-LP, Las Vegas, Nevada, filed comments citing to the IRFA's recognition that LPFM stations are small entities. LVPR's primary concern is that the Corporation for Public Broadcasting (CPB) has denied its yearly applications for Community Service Grant funding.<sup>5</sup> The Commission neither provides financial support for broadcasters nor participates in the CPB funding process. LVPR's concern is not related to how the Commission's proposed rules would affect small entities and, therefore, is beyond the scope of this proceeding. LVPR also argues that the Commission's tentative decision not to increase the 100-watt maximum EFR of LPFM stations will prevent business growth.<sup>6</sup> The reasoning behind the Commission's decision on this matter is fully discussed in section III(F) of the *Report and Order*.<sup>7</sup>

**C. Response to Comments by the Chief Counsel for Advocacy of the Small Business Administration**

4. Pursuant to the Small Business Jobs Act of 2010, which amended the RFA, the Commission is required to respond to any comments filed by the Chief Counsel for Advocacy of the Small Business Administration (SBA), and to provide a detailed statement of any change made to the proposed rules as a result of those comments.<sup>8</sup> The Chief Counsel did not file any comments in response to the proposed rules in this proceeding.

**D. Description and Estimate of the Number of Small Entities to Which the Rules Apply**

5. The RFA directs agencies to provide a description of and, where feasible, an estimate of the number of small entities that may be affected by the proposed rules, if adopted.<sup>9</sup> The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."<sup>10</sup> In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.<sup>11</sup> A small business concern is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.<sup>12</sup>

6. The new rules will apply primarily to applicants, permittees, and licensees within the LPFM service. Because LPFM stations operate on the same spectrum as FM translator stations but under

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<sup>5</sup> LVPR characterizes CPB's actions as "anti-competitive business practices" that favor "dominant" full-power NCE FM stations over smaller LPFM stations. LVPR contends that the IRFA's classification of LPFM stations as small businesses is consistent with that argument. *See* LVPR Comments at 2 (rec. Aug. 22, 2019); LVPR Reply at 2 (rec. Sept. 16, 2019); *see also* LVPR Further Comments at 1-2 (rec. Nov. 5, 2019).

<sup>6</sup> LVPR Comments at 2 (rec. Aug. 27, 2019); LCPR Comments at 2 (rec. Aug. 29, 2019).

<sup>7</sup> *See Report and Order, supra* at paras. 36-40.

<sup>8</sup> 5 U.S.C. § 604(a)(3).

<sup>9</sup> 5 U.S.C. § 603(b)(3).

<sup>10</sup> *Id.* § 601(6).

<sup>11</sup> *Id.* § 601(3) (incorporating by reference the definition of "small business concern" in 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register." *Id.* § 601(3).

<sup>12</sup> *Id.* § 632. Application of the statutory criteria of dominance in its field of operation and independence are sometimes difficult to apply in the context of broadcast television. Accordingly, the Commission's statistical account of television stations may be over-inclusive.

different technical requirements, the changes to the LPFM requirements could have a secondary impact on FM translator applicants and licensees. Specifically, the rule changes may enable LPFM stations to operate in more locations, making it necessary for subsequent FM translator applicants to protect those additional locations. Although the Commission is deferring action on a proposal to eliminate the requirement that radio stations in the FM reserved band protect adjacent television stations operating on Television Channel 6 (TV6), it is reducing the burden on small businesses by entertaining requests for waiver of this requirement. Below, we provide a description of these small entities, as well as an estimate of the number of such small entities, where feasible.

7. *Low Power FM Stations.* The *Report and Order* make relatively small rule adjustments that will primarily affect licensees and potential licensees of LPFM stations. LPFM stations are classified as radio broadcast stations. Business concerns included in this industry are those primarily engaged in broadcasting aural programs by radio to the public.<sup>13</sup> The SBA defines a radio broadcast station as a small business if such station has no more than \$41.5 million in annual receipts.<sup>14</sup> Given the nature of the LPFM service, in which eligibility is limited to non-profit organizations based in the community (typically small, volunteer-run groups), governments, and tribal applicants<sup>15</sup> we will presume that all LPFM licensees and applicants qualify as small entities under the SBA definition.

8. While the U.S. Census provides no specific data for these stations, the Commission has estimated the number of licensed low power FM stations to be 2,169.<sup>16</sup> This estimate may overstate the number of potentially affected licensees because existing LPFM stations that do not seek to modify their facilities would not be affected. The estimate may also be an overstatement because some of the proposals would affect only stations to be located in particular geographic regions (directional antenna use near borders with Canada and Mexico), in certain topography (booster station use to overcome terrain obstacles), or on certain channels (because TV6 protections do not apply to LPFM stations operating on spectrum other than FM Channels 201 to 220). With respect to applicants in future filing windows, we anticipate that we will receive a number of applications similar to past filing windows and that all applicants will qualify as small entities. The last LPFM filing window in 2013 generated approximately 2,827 applications.

9. *NCE FM Radio Stations.* The potential waiver of TV6 protection policies applies to reserved band NCE FM radio broadcast licensees, and potential licensees of NCE FM radio service. This Economic Census category “comprises establishments primarily engaged in broadcasting aural programs by radio to the public.”<sup>17</sup> The SBA has created the following small business size standard for this category: those having \$41.5 million or less in annual receipts.<sup>18</sup> Census data for 2012 show that 2,849 firms in this category operated in that year<sup>19</sup> Of this number, 2,806 firms had annual receipts of less than

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<sup>13</sup> See 13 CFR § 121.201, NAICS Code 515112.

<sup>14</sup> *Id.*

<sup>15</sup> 47 CFR. §§ 73.853, 73.860.

<sup>16</sup> *Broadcast Station Totals as of December 31, 2019*, FCC News Release (rel. Jan. 3, 2020) (*Broadcast Station Totals*), <https://docs.fcc.gov/public/attachments/DOC-361678A1.pdf>.

<sup>17</sup> U.S. Census Bureau, 2012 NAICS Definitions, “515112 Radio Stations,” at <http://www.census.gov/cgi-bin/sssd/naics/naicsrch>. This category description continues: “Programming may originate in their own studio, from an affiliated network, or from external sources.”

<sup>18</sup> 13 CFR § 121.201; NAICS code 515112.

<sup>19</sup> U.S. Census Bureau, Table No. EC0751SSSZ4, *Information: Subject Series – Establishment and Firm Size: Receipts Size of Firms for the United States: 2012* (515112), [http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN\\_2007\\_US\\_51SSSZ4&prodType=table](http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2007_US_51SSSZ4&prodType=table).

\$25 million, and 43 firms had annual receipts of \$25 million or more.<sup>20</sup> Because the Census has no additional classifications that could serve as a basis for determining the number of stations whose receipts exceeded \$41.5 million in that year, we conclude that the majority of radio broadcast stations were small entities under the applicable SBA size standard. In addition, the Commission has estimated the number of NCE FM radio stations to be 4,135.<sup>21</sup> Because NCE licensees must be non-profit, we will presume that all are small entities.

10. *FM Translator Stations.* The changes adopted herein will affect licensees of FM translator station, as well as potential licensees in these stations. The same SBA definition that applies to radio stations applies to FM Translator stations. As noted, the SBA has created the following small business size standard for this category: those having \$41.5 million or less in annual receipts.<sup>22</sup> In addition, as of December 31, 2019, there were a total of 8,182 FM translator and FM booster stations.<sup>23</sup> We anticipate that in future FM Translator filing windows we will receive a number of applications similar to past filing windows and that all applicants will qualify as small entities. The 2003 FM translator filing window generated approximately several hundred applications from NCE applicants.

11. *Channel 6 Television Stations.* The Report and Order modifies the LPFM rules to specify that LPFM and Class D (10 watt) FM stations can propose operations that do not fully protect TV6 stations if the TV6 station concurs. Such language already exists for other types of reserved band FM stations. Thus, the Report and Order would affect Television Broadcasting firms on TV6. This economic Census category “comprises establishments primarily engaged in broadcasting images together with sound. These establishments operate television broadcasting studios and facilities for the programming and transmission of programs to the public.”<sup>24</sup> The SBA defines Television Broadcasting firms as small businesses if they have \$41.5 million or less in annual receipts.<sup>25</sup> The 2012 economic Census reports that 751 television broadcasting firms operated during that year. Of that number, 656 had annual receipts of less than \$25 million per year. Based on that Census data we conclude that a majority of firms that operate television stations are small. Approximately nine full-power television stations and about 117 LPTV and TV translator stations (54 analog and 63 digital) currently operate on Channel 6. Ten additional low power television stations that were displaced by an Incentive Auction process hold permits to move to Channel 6 in the future, but those operations will be digital rather than analog. We will presume that all of these Channel 6 television stations are small businesses.

#### **E. Description of Projected Reporting, Record Keeping and Other Compliance Requirements**

12. The rule changes adopted in the *Report and Order* will, in some cases, impose different reporting requirements on LPFM applicants for new, modified, and/or licensed but silent facilities. Applicants seeking modifications will be able to demonstrate that their proposals are “minor” by submitting a different type of showing as an alternative to the current distance-based requirement, which will remain available. We expect that the alternative, while more costly, will enable more organizations to apply for authority to modify their facilities without having to wait for a filing window. LPFM stations that choose to operate co-owned FM boosters would include the booster on bi-annual ownership reports.

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<sup>20</sup> *Id.*

<sup>21</sup> *Broadcast Station Totals* at 1.

<sup>22</sup> 13 CFR § 121.201, NAICS Code 515112.

<sup>23</sup> *Broadcast Station Totals* at 1.

<sup>24</sup> U.S. Census Bureau, *2012 NAICS Code Economic Census Definitions*, <https://www.census.gov/cgi-bin/sssd/naics/naicsrch>.

<sup>25</sup> 13 CFR § 121.201; NAICS code 515120.

We expect this additional burden with respect to ownership reports to be minimal because LPFM station would generally not operate a booster unless they are experiencing unique terrain issues. An LPFM permittee choosing to use a directional antenna would submit a proof of performance study with its application for a covering license, a safeguard that ensure that the equipment is operating properly and would not cause interference. We expect this additional burden concerning directional antennas to be minimal because it will affect only a small portion of LPFM applicants, primarily those constructing stations near the borders with Canada and Mexico. Licensed LPFM stations that limit or discontinue operations would have to notify the Commission by the tenth day and request authority for the any limited or discontinued operations exceeding 30 days. The notification could be accomplished by a brief letter. The request for authority exceeding 30 days can be done by letter or brief electronic submission. We expect this additional burden concerning limited or discontinued operations to affect only a small portion of LPFM licensees, *i.e.*, those experiencing significant technical difficulties lasting at least ten or thirty days, respectively. LPFM stations generally already file such requests as a matter of practice, because such information is explicitly required for other broadcast stations.

**F. Steps Taken to Minimize Significant Impact on Small Entities, and Significant Alternatives Considered.**

13. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): (1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities.<sup>26</sup>

14. The rules adopted herein are intended to assist LPFM broadcast stations and applicants, which we presume are all small entities, by providing them with additional options that could increase coverage and choice of sites.<sup>27</sup> The rules enable LPFM organizations: (1) to use directional antennas including custom and composite antennas; (2) to double (from 5.6 kilometers to 11.2 kilometers) the distance that an LPFM station can move as a “minor change” without awaiting an application filing window or, alternatively, to demonstrate contour overlap between their existing and proposed facilities; (3) to retransmit LPFM signals over booster stations; and (4) to use a single EAS decoder with a co-located LPFM station. The Commission would relieve LPFM and Class D (10 watt) reserved band FM radio stations of the requirement to protect television stations operating on TV6 if the TV6 station concurs. The Commission recognizes that the TV6 stations are also small entities. We believe that there will not be any negative impact on such television stations because the option to concur would be voluntary. The Commission invited and has considered alternatives including alternatives to minimize the burden on small businesses. The majority of the commenters supported the Commission’s proposals. The Report and Order adopts one commenter-suggested alternative by doubling the distance that meets the definition of a “minor change” from 5.6 to 11.2 kilometers. That alternative will make it easier for small entities to benefit from the new definition by using a simple, enlarged distance standard that does not require a more costly engineering analysis. With respect to directional antennas the Commission considered, but did not adopt, a commenter suggestion to reduce costs by licensing directional LPFM facilities without requiring a proof of performance. However, the Commission found it preferable to require proof of performance studies to be sure that LPFM directional antennas are properly functioning before allowing them to operate. It also noted that requiring such proofs before licensure would have a

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<sup>26</sup> 5 U.S.C. § 603(c)(1)-(c)(4).

<sup>27</sup> For example, doubling the distance that a station can move from its existing site, as a “minor” change will allow the station to consider additional siting options. Allowing stations near international borders to use directional antennas could increase coverage in the direction away from the border while complying with international agreements that limit coverage close to the border.

benefit to LPFM applicants because it would be unnecessary for them to become involved in interference disputes.

**G. Report to Congress.**

15. The Commission will send a copy of this Report and Order, including this FRFA, in a report to Congress and the Government Accountability Office pursuant to the Small Business Regulatory Enforcement Fairness Act of 1996.<sup>28</sup> In addition, the Commission will send a copy of the *Report and Order*, including the FRFA, to the Chief Counsel for Advocacy of the Small Business Administration. A copy of the *Report and Order* and FRFA (or summaries thereof) will also be published in the *Federal Register*.<sup>29</sup>

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<sup>28</sup> See *id.* § 801(a)(1)(A).

<sup>29</sup> See *id.* § 604(b).