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

NOTICE OF PROPOSED RULEMAKING

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Comment Date: (30 days after date of publication in the Federal Register)
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By the Commission:

I. INTRODUCTION

1. We initiate this Notice of Proposed Rulemaking (NPRM) in response to a petition by REC Networks (REC) to amend the Commission’s rules (Rules) for the Low Power FM (LPFM) radio service.\(^1\) We seek comment on technical proposals to improve LPFM reception and to increase flexibility in siting while maintaining interference protection and the core LPFM goals of diversity and localism. We also seek comment on the costs and benefits of these proposals and any alternatives commenters may propose. Our action is consistent with our ongoing efforts to modernize media regulations and remove unnecessary requirements in the media marketplace.\(^2\)

II. BACKGROUND

2. The Commission established the LPFM service in 2000 as a secondary, noncommercial radio service with a community focus.\(^3\) The Commission designed LPFM engineering requirements 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.\(^4\) LPFM engineering specifications are, thus, more basic than those of full-service FM stations. In particular, LPFM stations operate with lower power and antenna heights; primarily use omnidirectional antennas;\(^5\) and protect co-channel and adjacent-channel stations from interference by complying with minimum

\(^4\) Id. at 2205, 2211, paras. 4, 13.
distance separations rather than by computing and avoiding contour overlap with such stations.\(^6\) An LPFM station that meets the minimum spacing requirements has generally satisfied its obligations and, unlike an FM translator, is not subject to claims of interference from listeners to pre-existing LPFM stations at greater distances and to FM and FM translator stations outside of those stations’ service contours.\(^7\) To ensure that LPFM stations provide adequate protection to other LPFM, FM, and FM translator stations under the distance separation method, the Commission built 20 kilometer buffer zones into the separation tables in section 73.807.\(^8\) The Commission has clarified, adjusted, and modified the LPFM Rules several times.\(^9\) In 2012, for example, the Commission adopted additional rules needed to implement requirements of the Local Community Radio Act of 2010 (LCRA).\(^10\)

3. In its petition, REC proposes rule changes to address difficulties LPFM stations may experience when trying to maximize coverage of their target communities.\(^11\) For example, it seeks more options in equipment used to transmit and re-transmit LPFM signals, increased power, greater flexibility in relocating LPFM facilities, and additional methods for demonstrating interference protection to other stations. In a February 2019 Notice of Proposed Rulemaking in the Comparative Standards proceeding,\(^12\) the Commission addressed several non-technical matters concerning LPFM stations that REC had raised (which it also raised separately in the instant Petition).\(^13\) Specifically, in that proceeding, the Commission proposed to adopt and invited comment on REC proposals to lengthen the LPFM construction period and

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\(^6\) The distance separation method, while loosely approximating the protection of a contour analysis, is less costly because it generally does not require the specialized expertise of a consulting engineer.

\(^7\) Compare 47 CFR §§ 74.1203(a), 74.1204 (FM translators) with 47 CFR §§ 73.209(c), 73.807(e), 73.809, 73.810, 73.827 (LPFM).

\(^8\) See 47 CFR § 73.807.


\(^10\) 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). Several provisions of the LCRA are relevant to REC’s proposals in the instant proceeding: (1) a requirement that the Commission “prescribe protection” for co-channel, first-adjacent, and second-adjacent stations; (2) a prohibition on reducing minimum distance separations to full-service-stations; (3) a requirement that LPFM stations protect radio reading services on third-adjacent channels; and (4) language recognizing that LPFM and FM translator stations are “equal in status” to one another. LCRA §§ 2, 3(b)(1), 4, 5.

\(^11\) The Commission announced REC’s petition by public notice in June 2018, thereby triggering a period for responsive filings. See Consumer & Governmental Affairs Bureau (CGB) Reference Information Center Petition for Rulemaking Filed, Public Notice, Rep. No. 3094 (CGB June 20, 2018). We received responses from licensees, listeners, and LPFM advocacy groups as well as from representatives of non-LPFM stations that share the FM spectrum.


to remove restrictions on the transferability of LPFM authorizations. The matters already discussed in the Comparative Standards proceeding will remain under consideration there. We will address in the current docket other proposals in the Petition concerning the LPFM technical rules that do not duplicate those in the Comparative Standards proceeding. We limit our discussion to matters which we believe can be resolved at the present time and tentatively reject the other suggestions raised in the REC petition and seek comment on this decision.

III. DISCUSSION

A. Directional Antennas

4. We propose, as suggested by REC, to allow LPFM licensees expanded use of directional antennas and to use custom models. The Commission does not currently permit LPFM licensees to use

14 See Comparative Standards at paras. 80-85. REC proposed to amend section 73.3598(a) to extend the LPFM construction period from 18-months to three years (36 months). 2017 Comments at 43-45. REC also proposed to amend section 73.865 to permit the assignment and transfer of LPFM authorizations after a shorter holding period so that local organizations capable of constructing and operating an LPFM station can “rescue” organizations that obtain an LPFM license but are not able to construct. Id. at 41-42; See also Petition at 34-35.

15 We tentatively reject, for example, REC’s proposals to increase the power of LPFM stations, to modify LPFM/FM translator cross-ownership restrictions, and to provide LPFM stations with an option to use a contour analysis rather than distance separations to evaluate potential interference to other stations (except for the TV6 waiver process at para. 11 infra). Petition at 14-21, 30-31; See also REC, Notice of Ex Parte Communications, MB Docket No. 19-193 (July 17, 2019) (REC Ex Parte Filing). Such changes would alter the simplicity of LPFM licensing, and REC provides insufficient support for adding such complexities to the LPFM licensing process. In addition, the Commission has previously declined to authorize LPFM stations with powers exceeding 100 watts, and REC does not present evidence that those decisions were incorrect, nor does it cite to those decisions warranting a different result. See Sixth R&O, 27 FCC Rcd at 15479, paras. 205-06 (denying to authorize 250-watt stations); LPFM Order, 15 FCC Rcd at 2220, 2213, paras. 4, 8, 12, 17-18 (declining to establish an LP1000 service). We also are not convinced that REC’s proposed use of a contour analysis method, which the Petition refers to as the “Section 73.815 Regime”, is compatible with an LCRA prohibition on reducing minimum distance separations between LPFM and full-service stations. Petition at 1, 14-19; See LCRA, section 3(b)(1). REC attempts to comply with that requirement by using a spacing table in effect when the LCRA was adopted, but the smaller separations in that table were intended for 10-watt (LP10) stations whereas REC seeks to apply it to 100-watt (LP100) stations. We do not accept REC’s premise that such a result is permissible. Further, we do not here entertain commenter proposals to alter the noncommercial nature or classification of LPFM stations, as these suggestions are outside the scope of the Petition. See Mike Friend (Friend) Comments at 4; Las Vegas Public Radio, Inc. Comments at 1 (LVPR Comments). Nor will we, as another commenter suggests, commit to opening a new LPFM window upon an LPFM station’s ceasing operation so that others can apply to replace stations that have discontinued service. Comments of Jeff Sibert (Sibert) at 11-12. Filing windows are resource-intensive events that must be scheduled in coordination with other Commission activities. Accordingly, the Commission generally does not open a window for spectrum in a single community. We decline to commit to specific timing of future LPFM filing windows. Finally, we do not revisit the Commission’s prior conclusions about LCRA language describing LPFM stations and FM translator stations as “equal in status.” See LCRA § 5. See Petition at 1-2, 12, 15, 20, 26; see, e.g., Prometheus Comments at 2; LVPR Comments at 1; LPRM-AG Comments at 3-4. The Commission has understood this language as limited in scope, simply requiring priority neither to new LPFM stations nor to new FM translators when making spectrum available for initial licensing. See Sixth R&O, 27 FCC Rcd at 15422, para. 59. In this way, applications in one service will not foreclose or unduly preclude opportunities to file applications in the other. Id. As the Commission has stated, however, nothing in the LCRA’s “equal in status” language requires licensed LPFM and FM translator stations to operate under identical rules. Id. at 15426, n.139. REC and commenters in the present proceeding contend that the statutory language is subject to interpretation and would support broader actions to bring about further “equality” between LPFM and FM translators but provide no evidence that the Commission’s stated understanding of the “equal in status” language differs from Congressional intent or is unreasonable. E.g., Petition at 10-14; LPFM-AG Comments at 3.

16 Petition at 26. REC proposes that directional antennas be permitted if needed: (1) to comply with international agreements; or (2) to protect other LPFM stations and/or television stations operating on TV channel 6. Id.
directional antennas except for: (1) public safety and transportation permittees and licensees operating in the Travelers Information Service (TIS); and (2) LPFM permittees and licensees that receive waivers of second-adjacent channel spacing requirements, solely to the extent that the directional antenna is needed to justify the waiver. Certain stations covered by those exceptions are limited to using “off-the-shelf” antennas with pattern characteristics pre-set by the manufacturer. LPFM stations may not use composite antennas (consisting of more than one antenna mounted together) or other custom directional patterns because the Commission has considered such equipment too complex for the LPFM service.18

5. REC states that although omnidirectional antennas meet the needs of most LPFM licensees, there are locations and circumstances in which directional antennas could significantly improve LPFM service.19 REC argues that directional antennas could improve the service of LPFM stations in areas like northern San Diego County, California, and Tucson, Arizona by allowing them to reach more people domestically while complying with international requirements. In addition, REC asks that the Commission no longer restrict directional LPFM stations to off-the-shelf antenna models, arguing that such antennas generally have very narrow beam widths that limit the population served no matter how the antenna is oriented.21 REC contends that custom patterns would allow stations to reach more potential listeners while still protecting full-service stations.22 REC suggests that LPFM applicants using directional antennas be required to submit certifications and a proof of performance to ensure proper construction.23

6. We believe that directional antennas, whether off-the-shelf or custom models, will not be used widely in the LPFM service due to their higher cost and limited necessity. Nevertheless, the use of such antennas could, if properly engineered, provide significant flexibility to LPFM licensees subject to international agreements and to those that must relocate in areas with few available transmitter sites. Therefore, we propose to revise section 73.816 to permit directional LPFM facilities, using either off-the-shelf or composite antennas, upon a satisfactory engineering showing. We believe such a showing should include the same elements required of full service FM stations in section 73.316(c). We seek comment on this proposal, including on the required engineering showing.

7. In making the above proposal, we are mindful that commenters, while generally supporting LPFM use of directional antennas, stress the importance of safeguards to ensure their proper  

17 See 47 CFR § 73.816(c).


19 For example, under a bilateral agreement with Mexico, LPFM stations within 125 kilometers of the U.S. border with Mexico are limited to 50 watts effective radiated power (ERP). Petition at 22, citing Agreement Between the Government of the USA and the Government of the United Mexican States Relating to the FM Broad. Service in the Band 88-108 MHz at Annex 1, 2.1.1, 2.1.3. A non-directional LPFM facility in the border region is, thus, limited to 50 watts in all directions. In contrast, FM translators using directional antennas can reduce ERP toward Mexico but operate at full power on other headings.

20 Petition at 22.

21 Id. at 23.

22 REC presents a hypothetical example comparing an LPFM station’s use of: (1) various off-the-shelf directional antenna models and (2) a custom pattern of two directional antennas in a skewed configuration. See Petition at 23-24. It concludes from this example that off-the-shelf equipment reaches fewer people. Id.

23 Specifically, the Petition proposes that an application specifying a directional antenna must certify that the antenna will be: (1) mounted in accordance with the specific instructions provided by the antenna manufacturer; and (2) in the proper orientation. Permits for directional antennas providing protection to another facility would include a condition requiring that before program tests the permittee: (1) submit the results of a complete proof of performance to establish the horizontal plane radiation patterns for both the horizontally and vertically polarized radiation components, the relative field strength of which (2) shall not exceed at any azimuth the value on the composite radiation pattern authorized by the construction permit. Petition at App. A.
functioning.\(^\text{24}\) For example, when a full-service FM applicant uses a custom directional antenna it must submit measurement data allowing Commission staff to evaluate and verify the radiation characteristics of the antenna, as installed.\(^\text{25}\) FM translators including those with directional operations, must remediate any interference caused.\(^\text{26}\) Some commenters, however, raise questions about the viability of the cost of such safeguards for LPFM stations;\(^\text{27}\) potential crowding of the spectrum;\(^\text{28}\) and compatibility of directional antennas with the simple, locally-focused nature of the LPFM service.\(^\text{29}\) We seek comment on whether, as REC advocates, to delineate specific circumstances in which LPFM directional antennas are permissible or, alternatively, to leave decisions about antenna use to the applicant’s discretion. Would the safeguards suggested by Hall\(^\text{30}\) be an appropriate substitute for a proof of performance, either in some situations or in all situations? Should we, in lieu of a required proof, accept the alternative offered by Prometheus requiring LPFM stations with directional antennas to solve any actual interference? Do LPFM licensees have the technical and financial abilities needed to design, construct, and maintain off-the-shelf and/or custom directional facilities? Would they be able to adjust those facilities quickly if interference occurs? Are there any other considerations that the Commission should take into account?

B. Protecting Channel 6 Television Stations

8. Based upon REC’s suggestion that we provide LPFM stations relief from Television Channel 6 (TV6) protection rules,\(^\text{31}\) we propose to eliminate TV6 protections entirely on July 13, 2021, and we propose to institute a waiver process in the interim, i.e., as of the effective date of any new rule adopted in this proceeding and before July 13, 2021. Since 1985, the Commission has required stations proposing operations on FM reserved band channels 201 through 220 to protect full service television, Low Power Television (LPTV), Class A, and television translator stations operating on TV6.\(^\text{32}\) The TV6 spectrum is located at 82 to 88 MHz, immediately adjacent to the FM band. Most full power television TV6 stations, however, moved to different spectrum following the 2009 full power television digital transition.\(^\text{33}\) As of the release of this Notice, only nine digital full power television stations, and 117

\(^\text{24}\) E.g., John Hall (Hall) Comments at 1 (suggesting: (1) verification by a licensed engineer that the antenna has been installed at the proper location and direction on the tower; (2) use of a multipoint mount to prevent the position from changing; and (3) submission of photos to allow Commission staff to verify proper installation as part of their review of the license application).

\(^\text{25}\) See 47 CFR § 73.316(c).

\(^\text{26}\) Id. § 74.1203.

\(^\text{27}\) See Prometheus Comments at 8 (because engineering proofs can cost upwards of $10,000, Commission should permit off-the-shelf directional antennas without a custom proof or require LPFM stations with directional antennas to solve any actual interference, similar to FM translators).

\(^\text{28}\) See EMF Comments at 9-10 (LPFM use of directional antennas would allow LPFM stations to be “crammed into” high-interference urban environments).

\(^\text{29}\) See NAB Comments at 8, n.31 (generally opposing LPFM use of composite design antennas because they will not function properly if not installed precisely as engineered but making an exception or local governments with TIS stations based on a belief that governments are more likely to have the funds to employ qualified technicians).

\(^\text{30}\) See supra, note 24.

\(^\text{31}\) Petition at 27 (suggesting a process to allow short-spacing of minimum distance separations between LPFM and TV6 stations).


\(^\text{33}\) The full power television digital transition was completed on June 12, 2009. Class A television stations completed their transition to digital on September 1, 2015, and low power television (LPTV) and TV translator stations will be completing their transition to digital on 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
LPTV and TV translator stations (54 analog and 63 digital) (collectively LPTV) currently operate on TV6. The Commission granted construction permits to 10 additional LPTV stations that will at a future date move to digital TV6 because they were displaced as a result of an incentive auction repacking process. LPFM stations must currently protect these TV6 stations using distance separation charts published in section 73.825 of the Rules.

9. In the instant Petition, REC does not specifically address the full power television stations that remain on channel 6. REC states that it has, however, analyzed the operating parameters of the LPTV TV6 stations and has determined that all but six have service areas smaller than those upon which LPFM/TV6 distance separations are based. REC thus concludes that the LPFM Rules significantly overprotect TV6 stations and could be reduced with little impact. REC states that it would support, but is not proposing, a complete repeal of TV6 protection requirements for LPFM stations as well as for FM translator and full-service FM stations. In an attempt to achieve faster relief, REC offers a solution that it believes can be implemented more quickly, i.e., allowing LPFM applicants to short-space to TV6 stations if there would be no resulting contour overlap. Alternatively, REC would allow LPFM applicants to reach short-spacing agreements with TV6 stations, as the rules allow for NCE FM stations and FM translators.

10. We tentatively conclude that we should, upon the July 13, 2021, required completion of the LPTV digital transition, eliminate the distance separation requirement between LPFM stations and all television stations operating on TV6. Our proposal is consistent with several comments supporting elimination of TV6 protections. Prometheus argues, for example, that the current TV6 protections are based on outdated technology. It claims that today’s digital equipment is far superior to the analog technology that existed when the requirements were adopted in 1985 and that even analog televisions manufactured after that date have better filters and synchronous detection to reject unwanted FM

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34 These numbers are based on the Commission’s records of the current number of TV6 stations rather than the slightly different numbers REC references in the Petition.


36 See 47 CFR § 73.825.

37 See Petition at 27-28. Specifically, REC states that LPTV stations are considered to be non-directional facilities operating with 3 kW ERP at 610 meters HAAT, thus creating a 47 dBu protected contour of 87 kilometers. Id. However, REC states that only six of approximately 130 LPTV stations remaining on TV6 at the time of REC’s study have a 47 dBu service contour of 87 kilometers or more, and that the vast majority of the other stations have a 47 dBu contour between 10 and 60 kilometers. Id.

38 Id. at 27. See 47 CFR § 73.525(NCE FM), 73.825(LPFM), 74.1205 (FM translators). REC has also submitted a map purporting to show significant opportunities for establishment of new reserved band radio stations if stations were no longer required to protect TV6 stations. See REC Ex Parte Filing.

39 Petition at 28.

40 See 47 CFR §§ 73.525, 74.1205.

41 E.g., Prometheus Comments at 8-9; Sibert Comments at 8. One commenter suggests that we terminate television use of analog Channel 6 (and Channel 5) entirely and make channels in the 76 to 88 MHz range available instead for FM licensing. See Friend Comments at 4. We will not consider that proposal because spectrum reallocation is beyond the scope of this proceeding.
Prometheus’s claims are consistent with studies by National Public Radio (NPR) submitted to us in different proceedings in 2008, in preparation for the 2009 Digital Television Transition.\textsuperscript{43} We tentatively accept NPR’s conclusion that digital television receivers including digital-to-analog converter boxes are substantially less vulnerable to FM-induced TV6 interference than analog sets, but we seek comment on whether this conclusion is still valid after so many additional years of experience with digital broadcasts.\textsuperscript{44} Moreover, we note that the TV6 stations that will remain after July 13, 2021 will be transmitting digital signals, whereas TV6 protection requirements were put in place to address potential interference to analog transmissions. Accordingly, we do not expect that the proposed elimination of LPFM/TV6 spacing requirements will result in any interference to TV6 stations. We seek comment on this expectation and the overall proposal to sunset the current requirements. Should we be concerned that an existing TV6 station might subsequently modify its license and that the increased contours would cause a corresponding decrease in the distance to a reserved band radio station? Would such a change matter if the TV6 station was transmitting with digital facilities? Are there any alternatives that commenters believe would be better to those proposed? We seek comment on the costs and benefits of the proposals and of any alternatives.

11. In the intervening time between the effective date of final rules and July 13, 2021, we propose to accommodate LPFM proposals at locations that do not satisfy the spacings in section 73.825 with a waiver process. Specifically, we would allow reserved channel LPFM applicants to use the FM translator TV6 contour protection requirements of section 74.1205(c) to demonstrate that there would be no interference caused to a nearby TV6 station.\textsuperscript{45} We would review these exhibits on a case-by-case basis to determine whether the short-spaced analog TV6 station is adequately protected. We seek comment on this proposal.

12. Because this precise issue also affects all noncommercial educational (NCE), Class D (10 watt), and FM translator stations operating on reserved band FM Channels 201 to 220, we also propose, as of that same date, to eliminate the need for those stations to protect TV6 stations.\textsuperscript{46} Full power TV6 stations have transitioned to digital operations and we expect that most of the remaining LPTV stations on TV6 will transition by July 13, 2021. The transition to digital and the use of digital receivers with improved selectivity reduces the need for radio stations to provide protection to TV6 stations. Given these circumstances, we propose a July 13, 2021 sunset date for the distance separation requirements between all reserved band radio stations and TV6 stations. We propose, until that date (as of the effective date of a final rule adopting this proposal), to retain the TV6 distance separations and to accommodate

\textsuperscript{42}Prometheus Comments at 8-9. Sibert also suggests that we update the existing TV6 requirements or remove them altogether. Sibert Comments at 8.


\textsuperscript{44}The 2007-08 NPR studies concluded that potential interference to TV6 reception using digital technology was substantially smaller than that to the NTSC analog sets that the Commission studied in 1979 (and upon which it based the TV6 protections adopted in 1985). See NPR 2008 Report at 1,8; NPR 2007 Report at 5, 10. The difference is most pronounced at the upper portion of the FM reserved band, which is furthest from the TV6 spectrum. On FM channel 201, the lowest FM channel, NPR measured a digital interference area 45 percent the size of that for analog equipment (2531 square kilometers versus 5601 square kilometers). Toward the top of the FM band on channel 219, NPR calculated a digital interference area that was only seven percent of that for analog sets (seven square kilometers versus 106 square kilometers). See NPR 2008 Report at 8.

\textsuperscript{45}We note that this interim procedure would be consistent with a suggestion by EMF to allow LPFM use of section 74.1205(c) standards. See 47 CFR § 74.1205(c).

\textsuperscript{46}See Appendix A, Proposed Rules, Sections 73.525 and 74.1205.
proposals at locations that do not satisfy the distance separation requirements through a waiver process similar to the waiver process described above pursuant to which NCE, Class D (10 watt) and FM translator stations would submit exhibits demonstrating no interference caused to the TV6 station. We would review these requests on a case-by-case basis. We invite comment on the proposal.

13. We are aware that approximately 26 LPTV stations currently supplement their analog TV6 signals with audio programming on 87.7 FM and wish to continue doing so after they transition their video signal to digital in 2021. Many of those LPTV stations operate their FM radio-type audio with formats specifically designed to serve diverse audiences. In 2014, the Commission sought comment on the ability of LPTV stations to provide FM radio-type service on an ancillary or supplementary basis but decided in 2015 to address the issue at a later date. We ask commenters in the instant proceeding whether the proposed elimination of TV6 protection by LPFM and other radio stations would be compatible with LPTV audio operations on 87.7 MHz if such operations were allowed to continue.

C. Redefine “Minor” Changes

14. We propose to redefine a “minor change” for LPFM station relocations, as requested by REC. An LPFM station may relocate its transmitter site without awaiting the opening of a filing window if the change is “minor,” currently defined as a move of 5.6 kilometers or less. The Commission has granted waivers to allow stations to relocate greater distances when the applicants demonstrated a lack of viable sites within 5.6 kilometers. Such waiver grants involved sites from which the station’s existing 60 dBu service contour would overlap with that of its relocated facility.

15. We propose to amend the Rules to allow LPFM stations to move to any rule-compliant location provided that the current and proposed service contours overlap. Southwestern Ohio Public Radio (SWOPR), one of the few commenters to address this issue, believes that the proposal would help

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47 See supra, para. 11.
48 See Wiley Rein, LLP, Notice of Ex Parte Communications, MB Docket No. 03-185 (June 10, 2019) (Wiley Ex Parte Filing), citing 47 CFR §§ 73.624, 73.653, 74.790(i) (supplemental communications and use of separate aural and visual signals); Comments of Preserve Community Programming Coalition (rec. July 3, 2019 in MB Docket No. 03-185; GN Docket No. 12-268; ET Docket No. 14-165). The spectrum at 87.7 MHz is adjacent to an FM frequency at 88.1 MHz.
49 See Wiley Ex Parte Filing at 10.
51 Petition at 38-39.
52 See 47 CFR § 73.870(a). Cf. LPFM Order at 2264, para. 47 (original 2-kilometer definition).
54 FM translators, in contrast, can 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) (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).
55 See Petition at 38-39. The facilities proposed in the LPFM minor change application would need to comply with all other rules at the new location, such as required distance separations to protect other stations.
permittees and licensees needing to relocate but faced with zoning and land use issues.\footnote{See SWOPR Comments at 1. See also Sibert Comments at 8.} We agree with giving additional flexibility for station relocations and propose to change the definition of minor change to one which either: (1) does not exceed 5.6 kilometers; or (2) involves overlapping 60 dBu contours of the existing and proposed facilities.\footnote{See Appendix A, Proposed Rules, Section 73.870.} Although the Petition did not propose to retain the existing 5.6 kilometer standard as an option, we believe that a distance standard remains useful. Specifically, LPFM applicants could continue making simple site moves within readily ascertainable distances of 5.6 kilometers or less without increased engineering costs. Applicants would not incur the expense of contour-based engineering studies unless they choose the alternative of moving greater distances. Should the new LPFM minor change analysis focus, as with FM translators, solely on whether the contours of the current and proposed facilities overlap, or should we adopt a threshold requirement that LPFM stations also show a lack of viable fully-spaced sites, similar to, the current waiver standard? We seek comment on these issues.

D. Cross-ownership of FM Booster Stations

16. We propose, as suggested by REC, to permit LPFM/FM booster cross-ownership subject to guidelines similar to those currently applicable to LPFM/FM translator cross-ownership.\footnote{An FM booster station operates “for the sole purpose of retransmitting the signals of an FM radio broadcast station, by amplifying and re-radiating such signals.” 47 CFR § 74.1201(f). REC states that a few LPFM station have used boosters successfully on a waiver basis and believes that LPFM boosters, like boosters for other FM stations, should be permitted to receive signals of the primary station either directly over the air or by alternative means such as over the Internet. See REC Ex Parte Filing: 47 CFR § 74.1231(i).} Generally, LPFM licensees may not own non-LPFM stations.\footnote{47 CFR § 73.860(a).} There is, however, a limited exception allowing non-Tribal LPFM licensees to operate up to two FM translator stations if they meet certain requirements.\footnote{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).} REC acknowledges that LPFM use of FM boosters would be rare but believes nevertheless that boosters could be quite helpful to LPFM stations facing unique terrain challenges.\footnote{See Petition at 32-34.} REC suggests that: (1) the contour of the booster must be fully inside the service contour of the primary LPFM station and the ERP must be no more than 50 watts; (2) the LPFM station must be licensed (not an unbuilt construction permit); (3) in the top 50 Nielsen rated markets, the proposed FM booster location must be within 10 miles (16.1 kilometers) of the LPFM station’s transmitter site; (4) the booster must run on the same channel and carry the same programming as the LPFM station; and (5) the LPFM station must currently meet the distance separation requirements of 47 CFR § 73.807(a) to all full-service stations on co-channel and first-adjacent channels.\footnote{Id. § 73.860(b).} REC also proposes to establish prohibited levels of contour overlap for co-channel, first-adjacent, second-adjacent, and third-adjacent stations.\footnote{Compare 47 CFR § 73.860(b).} For example, REC would specify that the (40/37/34 dBu) interfering contour of the booster cannot overlap the (60/57/54 dBu) protected contour of co-channel full power, Class D, and FM translators. Under REC’s proposal, facilities near Canada and Mexico would have unspecified additional requirements as may be necessary to be consistent with international agreements.\footnote{Id. at 33-34. Thus, if any provision applicable to LPFM boosters in general would be inconsistent with an international agreement relevant to a particular station, the more specific international requirement would apply to that station.}
17. The Commission has occasionally granted waivers\(^{65}\) to allow LPFM stations to fill in terrain-associated gaps in service by using FM booster stations.\(^ {66}\) Such waivers have permitted an LPFM station to substitute an FM booster for one of its permitted FM translators. In 2012, the Commission considered but declined to authorize LPFM cross-ownership of FM booster stations on a non-waiver basis.\(^ {67}\) The Commission reasoned that there would be few situations in which an LPFM station could operate a booster without causing interference to its own signal.\(^ {68}\) Commenters generally favor an option for LPFM stations to use boosters but qualify that support.\(^ {69}\)

18. We propose to amend section 73.860 to incorporate guidelines for potential booster use by LPFM stations in lieu of use of an FM translator. Under our proposed rule, such booster stations could receive the signal of the commonly-owned LPFM station by any means authorized in section 74.1231(i), the rule that applies to all FM booster stations. While such a rule would likely affect only a limited number of LPFM stations and such stations could otherwise seek the same relief on a waiver basis, we tentatively accept REC’s point that a rule permitting FM boosters may improve LPFM reception in areas with irregular terrain and that in such situations we should not require the filing of a waiver request. REC suggests that we establish the permissibility of LPFM boosters by adding the phrase “LPFM booster” to various rule provisions applicable to boosters for other FM stations.\(^ {70}\) We believe, however, that we can achieve the same objective by simply defining the term FM booster to include LPFM boosters.\(^ {71}\) Modifying the definition in this manner should provide clarity about possible use of boosters and the relevant standards. We seek comment on this analysis.

E. Miscellaneous Issues

19. As an initial matter, we propose, on our own motion, to make a non-substantive change to section 73.810, the rule governing LPFM third-adjacent channel interference. The current language of section 73.810 is virtually identical to that which we recently modified for FM translators in sections 74.1203(a)(3) and 74.1204(f) of the Rules.\(^ {72}\) Specifically, in Docket 18-119, we deleted two clauses which enumerated specific services that FM translators must protect from interference. We stated that the list of protected stations was incomplete and found it preferable to, instead, adopt language that FM translators must protect all full-service stations and previously authorized secondary service stations. Likewise, LPFM stations must not cause either predicted or actual interference to any other broadcast station, including previously authorized secondary services. The LPFM interference provision in section 73.810, while not incomplete with respect to secondary services, does not enumerate the range of protected full service stations. To foster consistency and to clarify that LPFM stations and FM translator stations must protect the same stations, we propose to alter section 73.810 in the same manner. We note that section 73.810(a)(1)(iii) currently requires protection of “previously authorized and operating LPFM

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\(^{66}\) See 47 CFR § 74.1201(h).

\(^{67}\) See Sixth R&O, 27 FCC Rcd at 15452, n.333.

\(^{68}\) Id.

\(^{69}\) Prometheus believes that use of boosters could assist a “handful of stations with terrain issues” but argues that boosters would be unnecessary if we adopted a contour overlap standard of interference protection for LPFM stations – a proposal that we tentatively reject. See supra, note 15. EMF argues that if the Commission authorizes LPFM use of boosters, it is crucial to require that the booster cause no predicted or actual interference to pre-existing stations, as it contends can likely occur in certain types of terrain. See EMF Comments at 8-9.

\(^{70}\) Petition at 33.

\(^{71}\) See Appendix A, Proposed Rules, Sections 74.1201, 74.1231, 74.1263, and 74.1283.

\(^{72}\) 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).
stations,” whereas the recently modified FM translator rules reference “previously authorized” stations without specifying an operational status.73 We propose to adopt the same language for LPFM stations as we did for FM translator stations, but seek comment on whether there is a reason to retain the “operating” language specifically for the LPFM service.

20. Next, we address several additional proposals made by REC and other commenters to clarify LPFM rules and/or assist LPFM applicants. As suggested by REC, we propose changes to correct small typographical errors and out-of-date information in the LPFM Rules. Specifically, we propose removing 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).74 We also propose a change to the same rule not suggested by REC but involving similarly superfluous language, i.e., removing paragraph (c)(1)’s statement that paragraph (c)(5) is included in the definition of “minor” amendments because that statement duplicates paragraph (c)(5) itself. Finally, we propose to delete section 74.1290 of the Rules which contains an outdated address for a Media Bureau web page concerning FM translator and FM booster stations.75

21. We decline REC’s suggestion that the Commission publish information to assist LPFM applicants in protecting third-adjacent channel stations carrying radio reading services for the blind and visually impaired, which those entities are required to do under the LCRA.76 REC notes that, in 2000, the Commission published a list of radio reading services which existed at that time.77 REC is concerned that the list has become out of date. It suggests that the Commission publish a revised list because LPFM applicants may be unaware that some formerly protected spectrum is now available whereas some previously available spectrum is now protected due to changes in stations offering reading services.78 We decline to publish a new Commission-issued list of radio reading services because it would be of limited utility in comparison to other available tools. The Commission does not require stations providing reading services to report that activity to us. The list of approximately 200 stations that the Commission published in 2000 was based entirely upon public information then available from National Public Radio and the International Association of Audio Information Services (IAAIS). Although we continue to recognize that it is vital for LPFM applicants to protect radio reading services, they may readily do so by identifying any stations on Channels 200 to 220 within the applicable mileage limits/adjacencies and ascertaining from the stations themselves or from other available sources whether any provides a reading service. For example, IAAIS publishes an online, state-by-state directory of reading services.79 Any revised list that the Commission might publish would have very limited longevity unless we were to require stations to file periodic status reports about their reading services. We believe that the burden of such a requirement on the stations would far outweigh the benefit to potential LPFM applicants.

22. In response to REC’s Petition, a few commenters submitted suggestions for Commission consideration of a matter that REC did not raise: emergency alert service (EAS) requirements for LPFM stations.80 Sibert, for example, asks the Commission to eliminate EAS requirements because he views

73 47 CFR §§ 73.810(a)(1)(iii), 74.1203(a)(3), 74.1204(f).
74 Id. § 73.871(c)(1)-(2).
75 Id. § 74.1290.
76 The LCRA eliminated LPFM protection of stations on third-adjacent channels except for those providing radio reading services. See LCRA §§ 3, 4. See also 47 CFR § 73.807(a)(2). Radio reading services operate as subsidiary communications services on FM sub-channels and can be heard on special equipment designed to receive such signals. NCE FM licensees are permitted, but not required, to use their subcarrier capacity. See 47 CFR § 73.593.
77 See Petition at 9-10, n. 19, citing Recon. Order, 15 FCC Rcd at 19272, App. D.
78 Id. at 10.
80 See Sibert Comments at 10.
EAS participation as costly, burdensome, and unnecessary for LPFM stations. He contends listeners will likely turn to full service broadcast stations for news about national emergencies.\textsuperscript{81} Jim Knybel, while supporting EAS participation if LPFM stations can increase power, argues that currently “[a]n emergency alert system on an unlistenable channel serves no purpose.”\textsuperscript{82}

23. We do not agree that it is appropriate to eliminate EAS requirements for LPFM stations. When there is a serious matter warranting EAS activation, members of the public should receive alerts from the station to which they are listening at that time. Listeners can then, if appropriate, tune to larger broadcasters for more comprehensive information.\textsuperscript{83} The Commission already has fewer EAS requirements for LPFM stations than for full service stations and, for example, exempts LPFM stations from having equipment to encode EAS messages.\textsuperscript{84} Moreover, Sibert did not provide evidence to show that EAS requirements for LPFM stations are unduly burdensome. We note, however, as NAB points out, that LPFM stations have not always participated fully in EAS testing. Accordingly, we seek comment on how to increase LPFM involvement in EAS testing.\textsuperscript{85}

24. Other issues. We encourage commenters to submit any additional technical proposals that follow logically from the proposals herein, excluding any proposals tentatively rejected above.

IV. PROCEDURAL MATTERS

25. Initial Regulatory Flexibility Act Analysis. With respect to this NPRM, an Initial Regulatory Flexibility Analysis (IRFA) is contained in Appendix B. As required by section 603 of the Regulatory Flexibility Act of 1980, as amended,\textsuperscript{86} the Commission has prepared an IRFA of the expected impact on small entities of the proposals contained in the NPRM. Written public comments are required on the IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the NPRM. The Commission will send a copy of the NPRM, including the IRFA, to the Chief Counsel for Advocacy of the Small Business Administration.\textsuperscript{87}

26. Paperwork Reduction Act. The NPRM contains either new or modified information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA).\textsuperscript{88} It will be submitted to

\textsuperscript{81} Id.

\textsuperscript{82} Knybel Comments at 3.

\textsuperscript{83} We reject Sibert’s comparison of LPFM stations to FM translators for EAS purposes. All LPFM stations originate programming whereas FM translators do not originate programming except in very limited circumstances (primarily AM daytime-only stations that are permitted to originate programming on their FM translator stations at night). FM translator listeners will, thus, generally hear a primary FM station’s EAS alert even if the translator does not have its own EAS equipment. The same is not true for LPFM stations.

\textsuperscript{84} See 47 CFR § 11.11, Table 1 (LPFM stations must decode but not encode). \textit{See also} 47 CFR § 11.51(e) (LPFM stations not required to have equipment to generate certain EAS codes and signals).


\textsuperscript{86} See 5 U.S.C. § 603.

\textsuperscript{87} 44 U.S.C. § 3506(c)(4).

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, pursuant to the Small Business Paperwork Relief Act of 2002,\textsuperscript{89} we seek specific comment on how we might “further reduce the -information collection burden for small business concerns with fewer than 25 employees.”\textsuperscript{90}

27. **Ex Parte Rules --- Permit-But-Disclose.** The proceeding this NPRM initiates shall be treated as a “permit-but-disclose” proceeding in accordance with the Commission’s *ex parte* rules.\textsuperscript{91} Persons making *ex parte* presentations must file a copy of any written presentation or memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the *ex parte* presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter’s written comments, memoranda or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to the Commission staff during *ex parte* meetings are deemed to be written *ex parte* presentations and must be filed consistent with rule 1.1206(b). In proceedings governed by rule 1.49(f) or for which the Commission has made available a method of electronic filing, written *ex parte* presentations and memoranda summarizing oral *ex parte* presentations and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding, and must be filed in their native format (e.g., .doc, .xml, .ppl, searchable .ppl). Participants in this proceeding should familiarize themselves with the Commission’s *ex parte* rules.

28. **Filing Requirements --- Comments and Replies.** Pursuant to sections 1.415 and 1.419 of the Commission’s rules, 47 CFR §§ 1.415, 1.419, interested parties may file comments and reply comments on or before the dates indicated on the first page of this document. Comments may be filed using the Commission’s Electronic Comment Filing System (ECFS). *See Electronic Filing of Documents in Rulemaking Proceedings*, 63 FR 24121 (1998).

- **Electronic Filers:** Comments may be filed electronically using the Internet by accessing the ECFS: http://apps.fcc.gov/ecfs/.

- **Paper Filers:** Parties who choose to file by paper must file an original and one copy of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, filers must submit two additional copies for each additional docket or rulemaking number.

- **Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission’s Secretary, Office of the Secretary, Federal Communications Commission.**

- **All hand-delivered or messenger-delivered paper filings for the Commission’s Secretary must be delivered to FCC Headquarters at 445 12th St., SW, Room TW-A325, Washington, DC 20554. The filing hours are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes and boxes must be disposed of before entering the building.**

\textsuperscript{89} Pub. L. No. 107-198.

\textsuperscript{90} 44 U.S.C. § 3506(c)(4).

\textsuperscript{91} 47 CFR §§ 1.2000 et seq.
• Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20743.

• U.S. postal first class service, Express, and Priority mail must be addressed to 445 12th Street, SW, Washington, DC 20554.

29. People with Disabilities. To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer & Government Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (tty).

30. Availability of Documents. Comments, reply comments, and ex parte submissions will be available for public inspection during regular business hours in the FCC Reference Center, Federal Communications Commission, 445 12th Street, S.W., CY-A257, Washington, DC 20554. These documents will also be available via ECFS. Documents will be available electronically in ASCII.

31. Additional Information. For additional information on this proceeding, please contact Irene Bleiweiss, Irene.Bleiweiss@fcc.gov of the Media Bureau, Audio Division.

V. ORDERING CLAUSES

32. Accordingly, IT IS ORDERED that, pursuant to sections 1, 2, 4(i), 301, 303, 307, 316, and 403 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 152, 154(i), 301, 303, 307, 316, and 403, and Sections 1.407 and 1.411-19 of the Commission’s rules, 47 CFR §§1.407, 1.411-19, the Petition for Rulemaking filed by REC Networks IS GRANTED TO THE EXTENT DISCUSSED HEREIN and this Notice of Proposed Rule Making IS ADOPTED.

33. IT IS FURTHER ORDERED that the proceeding in RM No. 11810 IS TERMINATED.

34. IT IS FURTHER ORDERED that the Consumer and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this Notice of Proposed Rulemaking, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration, and shall cause it to be published in the Federal Register.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary
APPENDIX A

Proposed Rule Changes

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

1. The authority citation for part 73 continues to read as follows:

2. Revise §73.525 by adding a sunset date to the first sentence to read as follows:

   §73.525 TV Channel 6 protection.
   The requirements of this section will sunset on July 13, 2021. Until that date, the provision of this section will apply to all applications for construction permits for new or modified facilities for an NCE-FM station on Channels 200-220, unless the application is accompanied by a written agreement between the NCE-FM applicant and each affected TV Channel 6 broadcast station concurring with the proposed NCE-FM 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) Directional antennas generally will not be authorized and may not be utilized in the LPFM service, except as provided in paragraphs (c) and (d) of this section.

(c) The following may use directional antennas in the LPFM service:
(1) Public safety and transportation permittees and licensees, eligible pursuant to §73.853(a)(2), in connection with the operation of a Travelers’ Information Service (TIS).
(2) LPFM permittees and licensees proposing a waiver of the second-adjacent channel spacing requirements of §73.807 may utilize directional antennas for the sole purpose of justifying such a waiver.
(3) LPFM permittees and licensees proposing operation within 320 kilometers of the Mexican or Canadian border in accordance with §73.807(g)(5) of this subpart.

(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) All applications must comply with §73.316, paragraphs (d) and (e) of this chapter.
(4) 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 requirements of this section will sunset on July 13, 2021.
* * * * *

7. 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 and 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);
(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; and
(5) The 60 dBu service contour of the FM booster station(s) must remain entirely within the 60 dBu service contour of the commonly-owned LPFM station.

8. 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 5.6 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.

9. Revise §73.871 by amending paragraph (c)(1), and removing and reserving paragraph (c) (2) to read as follows:

§73.871 Amendment of LPFM broadcast station applications.

(c) Site relocations of 5.6 kilometers or less, and site relocations that involve overlap between the 60 dBu service contours of the currently authorized and proposed facilities;

(2) [reserved]

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

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


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 §74.1205 by adding a sunset date to read as follows:

§74.1205 Protection of channel 6 TV broadcast stations.

The requirements of this section will sunset on July 13, 2021. Until that date, the provisions of this section apply to all applications for construction permits for construction permits for new or modified facilities for a noncommercial educational FM translator station on Channels 201-220, unless the application is accompanied by a written agreement between the NCE-FM translator applicant and each affected TV Channel 6 broadcast station licensee or permittee concurring with the proposed NCE-FM translator facility.

5. 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.

6. 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.

7. Remove and Reserve §74.1290 as follows:

§74.1290 [Reserved]
APPENDIX B

Initial Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA), the Commission has prepared this Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on a substantial number of small entities by the policies proposed in the Notice of Proposed Rulemaking (NPRM). Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the NPRM provided in paragraph 28. The Commission will send a copy of this entire NPRM, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA). In addition, the NPRM and the IRFA (or summaries thereof) will be published in the Federal Register.

2. Need For, and Objectives of, the Proposed Rules. The Commission initiates this rulemaking proceeding to seek comment on certain proposals designed to improve the public’s reception of Low Power FM (LPFM) broadcast station signals and to provide greater flexibility to LPFM broadcasters. Specifically, the Commission seeks comment on the following: (1) whether to expand the class of LPFM licensees able to use directional antennas and to allow LPFM use of antennas beyond off-the-shelf models; (2) whether to eliminate or modify the requirement that LPFM stations operating on Channels 201 to 220 (reserved band) protect television stations still operating on television channel 6; (3) whether to redefine a “minor change” for LPFM stations as one which either: (a) does not exceed 5.6 kilometers (the simple standard currently in use); or (b) involves overlapping 60 dBu contours of the station’s own existing and proposed facilities (a new standard that would generally be used by stations unable to meet the current 5.6 kilometer distance but that would be more complex and costly because it would require an engineering study); (4) whether to 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); and (5) whether to update LPFM-related rules in Parts 73 and 74 to make a non-substantive change to conform the rule governing LPFM third-adjacent channel interference, correct typographical errors (repetitive language in 47 CFR § 73.871), and remove outdated information. With respect to the proposed changes to Channel 6 protection, the Commission also asks whether it should eliminate or modify the requirement for all stations operating in the FM reserved band, not only LPFM stations in that band. The Commission also seeks any additional suggestions designed to enhance LPFM service to the public that would follow logically from the proposals in this proceeding.

3. These proposed changes may be needed to improve the public’s ability to receive signals from low-powered stations, especially in areas with irregular terrain and near international borders. The proposed changes may also be needed to 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.

4. Legal Basis. The authority for this proposed rulemaking is contained in Sections 1, 2, 4(i), 301, 303, 307, 316, and 403 of the Communications Act of 1934, 47 U.S.C. §§ 151, 152, 154(i), 301, 303, 307, 316, and 403.

5. Description and Estimate of the Number of Small Entities to Which the Proposed Rules Will Apply. The RFA directs the Commission to provide a description of and, where feasible, an

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3 See id.
estimate of the number of small entities that will be affected by the proposed rules.\footnote{5 U.S.C. § 603(b)(3).} The RFA generally defines the term "small entity" as encompassing the terms "small business," "small organization," and "small governmental entity."\footnote{Id. § 601(3) (incorporating by reference the definition of “small business concern” in the Small Business Act, 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.”} In addition, the term “small business” has the same meaning as the term “small business concern” under the Small Business Act.\footnote{15 U.S.C. § 632.} 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 Small Business Administration (SBA).\footnote{See 13 CFR § 121.201, NAICS Code 515112.} The proposed rules will apply to applicants, permittees, and licensees within the LPFM service. The proposal to eliminate required protection of television stations remaining on television channel 6 will also affect such television stations and potentially NCE FM full power radio stations, Class D radio stations, and FM translators licensed to operate within the reserved band of the FM spectrum. Because LPFM stations operate on the same spectrum as FM translator stations but under different technical requirements, the proposed changes to the LPFM requirements could have a secondary impact on FM translator applicants and licensees. Specifically, if the proposed changes enable LPFM stations to operate in more locations, subsequent FM translator applicants will need to protect those additional locations.

6. **Low Power FM Stations.** The proposed policies 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.\footnote{See 13 CFR § 121.201, NAICS Code 515112.} The SBA defines a radio broadcast station as a small business if such station has no more than $38.5 million in annual receipts.\footnote{Id.} Given the nature of the LPFM service, in which parties are generally not permitted to have other broadcast interests and eligibility is limited to non-profit organizations, governments, and tribal applicants,\footnote{47 CFR. §§ 73.853, 73.860.} we will presume that all LPFM licensees and applicants qualify as small entities under the SBA definition. As of June 30, 2019, there are 2,178 licensed LPFM stations.\footnote{See FCC, Broadcast Station Totals as of June 30, 2019, News Release (July 9, 2019), https://apps.fcc.gov/edocs_public/attachmatch/DOC-35835A1.pdf (Broadcast Totals).} In addition, there is one pending application from the 2013 LPFM filing window. 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 television Channel 6 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.

7. **NCE FM Radio Stations.** The proposed elimination of Channel 6 protection policies could apply to NCE FM radio broadcast licensees, and potential licensees of NCE FM radio service. The
same SBA definition of $38.5 million in annual receipts applies to NCE FM stations. Radio stations that the Commission would consider commercial, as well as those it would consider NCE stations, are included in this industry. A Commission staff review of the BIA Publications, Inc., Master Access Radio Analyzer Database reflects that as of June 8, 2017, all 4,404 (100 percent) of radio stations operating as noncommercial have revenues of $38.5 million or less and thus qualify as small entities under the SBA definition. Of these, no more than 4,139 authorized stations are potentially affected by the proposals because they are licensed as NCE stations, whereas BIA data also includes stations that are not licensed as NCE stations but choose to operate with a noncommercial format. The estimate may overstate the number of potentially affected licensees because Channel 6 protections apply only to stations operating in the reserved band (Channels 201 through 220), whereas the numbers include non-reserved band stations that would not be affected. The estimate may also overstate the number of small entities because in assessing whether a business concern qualifies as small under the above definition, business (control) affiliations must be included. Our estimate considers each station separately and does not include or aggregate revenues from affiliated organizations or from commonly controlled stations.

8. An additional element of the definition of “small business” is that the entity not be dominant in its field of operation. We are unable at this time to define or quantify the criteria that would establish whether a specific radio station is dominant in its field of operation. Accordingly, the estimate of small businesses to which the proposed rules may apply does not exclude any radio station from the definition of a small business on this basis and therefore may be over-inclusive to that extent. Also, as noted, an additional element of the definition of “small business” is that the entity must be independently owned and operated. We note that it is difficult at times to assess these criteria in the context of media entities, and our estimates of small businesses to which they apply may be over-inclusive to this extent.

9. **Channel 6 Television Stations.** The proposed elimination of Channel 6 protection would affect Television Broadcasting firms that continue to operate on analog Channel 6. 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.” The SBA defines Television Broadcasting firms as small businesses if they have $38.5 million or less in annual receipts. 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. The proposal would affect only television stations that operate on Channel 6 and that have not transitioned to digital operations. Approximately nine full-power television stations and about 117 LPTV and TV translator stations (54 analog and 63 digital) currently operate on Channel 6. The lower powered television stations are scheduled to transition to digital by July 13, 2021. 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 remaining Channel 6 television stations are small businesses.

10. **FM Translator Stations.** FM translator stations operating in the reserved band would be affected by the proposed elimination of their protection to television stations operating on Channel 6. FM translator stations operating in the reserved band would be affected by the proposed elimination of their protection to television stations operating on Channel 6. FM translator stations operating in the reserved band would be affected by the proposed elimination of their protection to television stations operating on Channel 6.
translators would continue to protect previously-filed LPFM applications and previously authorized LPFM stations. To the extent that proposals other than Channel 6 may alter the numbers and locations of LPFM facilities that FM translator licensees and proposed licensees must protect, the proposals could affect FM translator stations. The same $38.5 million SBA definition that applies to radio broadcast licensees applies to FM translator stations. There are 8,126 licensed FM translator and booster stations and we will presume that each is a small business.\textsuperscript{17} There are no remaining FM translator applications from the 2003 filing window, but there are eight applications from that window which were disposed but remain under appeal. There are six pending FM translator applications from the 2017 Auction 99 window as well as three application from that window which were disposed but are under appeal. There are 26 pending FM translator applications from the 2018 Auction 100 window. Seven others from that window were disposed and are under appeal. We will presume that each applicant with an unresolved application is a small entity.

11. The proposals could also affect future FM translator applicants. We anticipate that in future 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 13,303 applications. The 2017 Auction 99 and 2018 Auction 100 windows, which were limited to applicants that are also licensees of AM radio stations, generated 1081 and 874 applications respectively.

12. The above-referenced estimates of licensed and future FM translator stations may overstate the number of small entities affected. The number of licensed stations includes boosters, which will not be affected. It may also be an overstatement because the proposals will only affect an existing FM translator if it must protect a previously LPFM station as part of a modification of the translator’s facilities. The estimate may also overstate the number of small entities because in assessing whether a business concern qualifies as small under the above definition, business (control) affiliations\textsuperscript{18} must be included. Our estimate considers each station separately and does not include or aggregate revenues from affiliated organizations or from commonly controlled stations.

13. An additional element of the definition of “small business” is that the entity not be dominant in its field of operation. We are unable at this time to define or quantify the criteria that would establish whether a specific radio station is dominant in its field of operation. Accordingly, the estimate of small businesses to which the proposed rules may apply does not exclude any radio station from the definition of a small business on this basis and therefore may be over-inclusive to that extent. Also, as noted, an additional element of the definition of “small business” is that the entity must be independently owned and operated. We note that it is difficult at times to assess these criteria in the context of media entities, and our estimates of small businesses to which they apply may be over-inclusive to this extent.

14. **Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements.** The proposed rule and procedural changes may, in some cases, impose different reporting requirements on LPFM applicants for new and modified facilities. Applicants will be able to demonstrate that their proposals are “minor” by submitting a different type of showing as an alternative to the current requirement. The NPRM also proposes to allow cross-ownership of LPFM stations and FM boosters. Stations choosing to own boosters would include the booster on bi-annual ownership reports. 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. The NPRM proposes that LPFM applicants authorized to use directional antennas implement safeguards to prevent interference and submit that information to the Commission. 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.


\textsuperscript{18} “[Business concerns] are affiliates of each other when one concern controls or has the power to control the other or a third party or parties controls or has to power to control both.” 13 CFR § 121.103(a)(1).
15. **Steps Taken to Minimize Significant Impact on Small Entities, and Significant Alternatives Considered.** 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.  

16. In the NPRM, the Commission seeks to assist LPFM broadcast stations and applicants by providing them with additional options that could increase coverage and choice of sites. The proposals, if adopted, would enable LPFM organizations: (1) to use directional antennas including custom and composite antennas; (2) to eliminate or modify protection of television stations operating on analog channel 6; (3) to use lack of contour overlap as an additional way to demonstrate that a proposed LPFM modification qualifies as a “minor change” that does not require awaiting an application filing window; and (4) to retransmit LPFM signals over booster stations. The Commission seeks comment as to whether its goals of improving LPFM service to the public without negative impact on other FM listeners can be accomplished effectively through these means. The Commission recognizes that the TV6 proposal, which seeks to assist LPFM, NCE, and FM translator stations, also eliminates or modifies a current protection for television stations operating on Channel 6 which are also small entities. We believe that any potential negative impact on such television stations is minimal because full power TV6 stations transitioned to digital operations in 2009; there has been a lack of interference complaints from current full power digital TV6 stations since the transition; and low power television stations on TV6 are scheduled to transition by July 13, 2021. Further, digital television receivers are more selective than the analog equipment that existed when the Commission adopted the TV6 protection requirement. Nevertheless, the Commission does not propose complete elimination of TV6 protections until July 13, 2021, the date by which the remaining stations are scheduled to transition to digital. In the interim, the Commission would provide alternative protections such as allowing FM applicants to demonstrate no contour overlap with TV6 television station (and, thus, no likely interference) or to reach agreements with TV6 television stations without regard to any contour overlap. The Commission is open to consideration of alternatives to the proposals under consideration, as set forth herein, including but not limited to alternatives that will minimize the burden on LPFM broadcasters, virtually all of whom are small businesses, as well as TV6 broadcasters that are small entities. There may be unique circumstances these entities may face, and we will consider appropriate action for small broadcasters when preparing a Report and Order in this matter.

17. **Federal Rules Which Duplicate, Overlap, or Conflict With, the Commission’s Proposals.** None.

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19 5 U.S.C. § 603(b).