

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

In the matter of:)
)
)
 Amendments of Parts 73 and 74 of the) RM-11909
 Commission's Rules to create a second class of)
 service for Low Power FM broadcast Stations.)
)

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COMMENTS OF REC NETWORKS

I. INTRODUCTION

1. REC Networks ("REC") is a leading advocate for a citizen's access to spectrum with a heavy focus on Low Power FM (LPFM) broadcast stations and the author of the above captioned *Petition for Rulemaking* ("Petition").¹

2. REC continues to support the changes as proposed in the *Petition* as it would allow for a considerable number of LPFM stations, especially those in rural and suburban areas to increase their service areas from 5.6 kilometers to 7.1 kilometers.² As stated in the *Petition*, this proposal would permit

¹ See also *Petitions for Rulemakings Filed*, Public Notice, Report No. 3175 (rel. May 24, 2021).

² See *Petition* at 5.

existing LPFM stations, including new LP100 stations that will be granted in the next filing window, that meet more stringent distance separation requirements beyond that of the current LP100 service class to specify operation at the equivalent of 250 watts (0.25 kW) at 30 meters height above average terrain (HAAT) through a subsequent upgrade.³ This *Petition* amounts to nearly a decade of hard work that has been conducted by REC, other advocates, station stakeholders and listeners in order to bring this LP250 service class to fruition and along the way, many stations have told their stories about how an increased service class would help their stations reach their true hyperlocal audiences, which for rural and suburban areas, expand well past the current 3 ½-mile service area of the LP100 service class.⁴

3. It is important to remember that there are many people who have a passion for radio and who still believe that terrestrial radio is still the best method of reaching local communities, even in the face of “non-radio” (such a streaming services) competing for the listener’s ear and the dashboard. Over the past decade, the Commission has heard from thousands of people who are deeply passionate about this subject and only wants the best for their own community and for communities across the country. REC embraces this passion, and we thank everyone who has participated so far in this and past LP250 related proceedings. LPFM is for the people, not the corporations or even the institutional nonprofits. The people have spoken, and they will continue to speak. The *Petition* will help people all-across our Nation speak just a little louder.

II. THE COMMISSION SPOKE, WE HEARD YOU!

4. The nature of the service proposed is in direct response to the major concerns expressed by the Commission in the LPFM *Tech Order*.⁵

A. Keeping LPFM “simple”

5. Specifically, this version of LP250, which we refer to as “Simple250”, addresses the Commission’s desire to keep the LPFM service as simple as possible.⁶ Even though it is a fact that more

³ See *Id.*

⁴ See also the records of the *Fourth Notice of Proposed Rulemaking* in MM Docket 99-25, RM-11749, RM-11810 and MB Docket 19-193.

⁵ See *Amendments of Parts 73 and 74 to Improve the Low Power FM Service Technical Rules*, Report and Order, 35 FCC Rcd. 4115 (2020) (“Tech Order”) at ¶¶ 36-41. See also Notice of Proposed Rulemaking, 34 FCC Rcd. 6537 (2019) (“Tech NPRM”) at note 15.

⁶ See *Tech Order* at ¶ 39.

than half of the applications filed in the 2013 filing window were prepared by professionals who have the necessary tools to conduct contour studies and even though the previous proposals still had a “simple” option to them (LP100), REC has made the Simple250 a very simple overlay of a second class of service for LPFM, no different than how Class C3 is an overlay for Class A in the full service. This was done through the increase in distance separation requirements across the board.⁷ The option to go to LP250 will not require any new contour studies, other than what is required for the existing LP100 service such as for waivers of the second-adjacent channel distance separation rules.⁸

B. Addressing the LCRA concern with the “buffer zone”

6. REC has also addressed the other concern expressed by the Commission regarding compliance with the Local Community Radio Act of 2010.⁹ We did this by respecting and retaining the full 20-kilometer buffer zone as a part of the interference criteria.¹⁰ While this increase in the distance separation requirements foreclosed on many, but not all opportunities for urban LPFM stations to upgrade to the new service class. Opportunities for upgrades in the suburban, rural and deep rural areas remain quite spectacular.¹¹ In this filing, we have prepared new statistical information that quantifies the potential upgrade opportunities for existing LP100 stations in a way that allows these stations to grow while preventing interference to other broadcast facilities and achieve the goals of improving the rural quality of life. We will include our latest benefit reports with this pleading to quantify the potential for the new class of service.¹²

III. IMPROVING THE RURAL QUALITY OF LIFE

7. As we have stated throughout the *Petition*, Simple250 is mainly about improving the rural quality of life, by connecting more people in the United States to more localized voices.¹³ As our

⁷ See *Petition* at ¶ 34.

⁸ See *Petition* at ¶ 22 (“REC will propose only distance separation methodology without any requirement of a contour study for LPFM stations, thus keeping LPFM a ‘simple’ service.”)

⁹ See *Tech Order* at ¶¶ 38-39. See also *Local Community Radio Act of 2010*, Pub L. 111-371, 124 Stat 4072 (2011) (“LCRA”).

¹⁰ See *Petition* at ¶¶ 17-18.

¹¹ See Appendices A and B.

¹² See *Id.*

¹³ See *Petition* at ¶ 8 and 16.

revised *Upgrade Availability Report Summary* states, LPFM stations in rural areas (those with a service contour of 25,000 persons or less) account for 45 percent of all stations and 92 percent of those stations have a path to upgrade to LP250 either on their own channel or with a channel change.¹⁴ Deep Rural stations (those with a service contour of 10,000 persons or less) account for one quarter of all LPFM stations and has an upgrade potential of of near 95 percent.¹⁵ Of those Deep Rural stations that can upgrade, the population gains can be as much as 270 percent.¹⁶ This further demonstrates that “hyperlocal” does not stop at 3 ½ miles out here in the rurals. With the many Commission initiatives that are promoting the quality in life in rural areas, especially where it comes to filling in the digital divide in the broadband arena, bringing local radio further out should be part of that equation.¹⁷

IV. THE INTERFERENCE MYTH AND THE TRUTH

8. One of the major points of opposition to LP250 in the past has been the theories that such stations would cause so much interference, that it would destroy the existing broadcast infrastructure. We look to the relationship between FM Translators and full-service FM stations, especially following all of the modifications made as a result of *AM Revitalization*. When looked at as a whole, the number of interference complaints, especially since the adoption of the new remediation rules in MB Docket 18-119, have been substantially low.¹⁸ It is important to remember that FM Translators are permitted to engineer interfering contours right up to the protected contours of primary FM facilities.¹⁹ In the translator world, there is no “buffer zone”.

9. With the increased distance separation requirements, which naturally prevent LPFM stations in the most spectrum crowded areas from being able to upgrade, the chances of interference by contours is *de minimis*. As a matter of transparency, the *Petition* details four potential cases where an upgrading LPFM station would place their interfering contour into the protected contour of a full-service

¹⁴ See Appendix A.

¹⁵ See *Id.*

¹⁶ See *Id.*

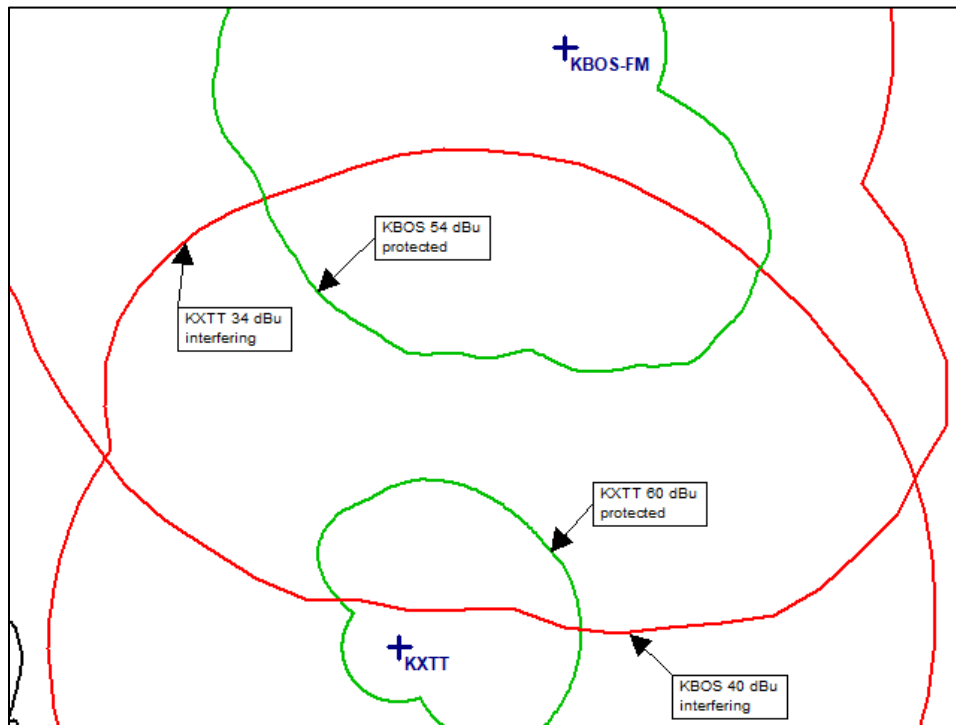
¹⁷ See *Petition* at ¶ 16 and note 21.

¹⁸ See *Amendment of Part 74 of the Commission’s Rules Regarding FM Translator Interference*, Report and Order, 34 FCC Rcd. 3457 (2019).

¹⁹ 47 C.F.R. § 74.1204(a).

station.²⁰ This constitutes about 0.2 percent of all LPFM stations currently licensed. This is caused by the “*Foothill Effect*”, that gives stations located midway up a mountain a contour advantage in a particular direction while maintaining a lower HAAT.²¹

10. *Foothill Effect* even exists in the full-service world, especially in California’s Central Valley. Take a station like KXTT, Maricopa, California (Facility ID # 164119). This is a Class A station that provides a “rim shot” over the Bakersfield area. While this station has negative HAATs towards the mountains, it also has as much as a 420-meter HAAT to the valley below. In some directions, the 60 dBu protected contour extends to 52.4 km, nearly two times the standard service contour of the standard class maximum (28.3 kilometers). Nobody is complaining about that. In fact, they are co-channel with KBOS-FM, Tulare, California (Facility ID # 9748) with substantially overlapping contours. Based on the record, no one ever complained about that either.²²

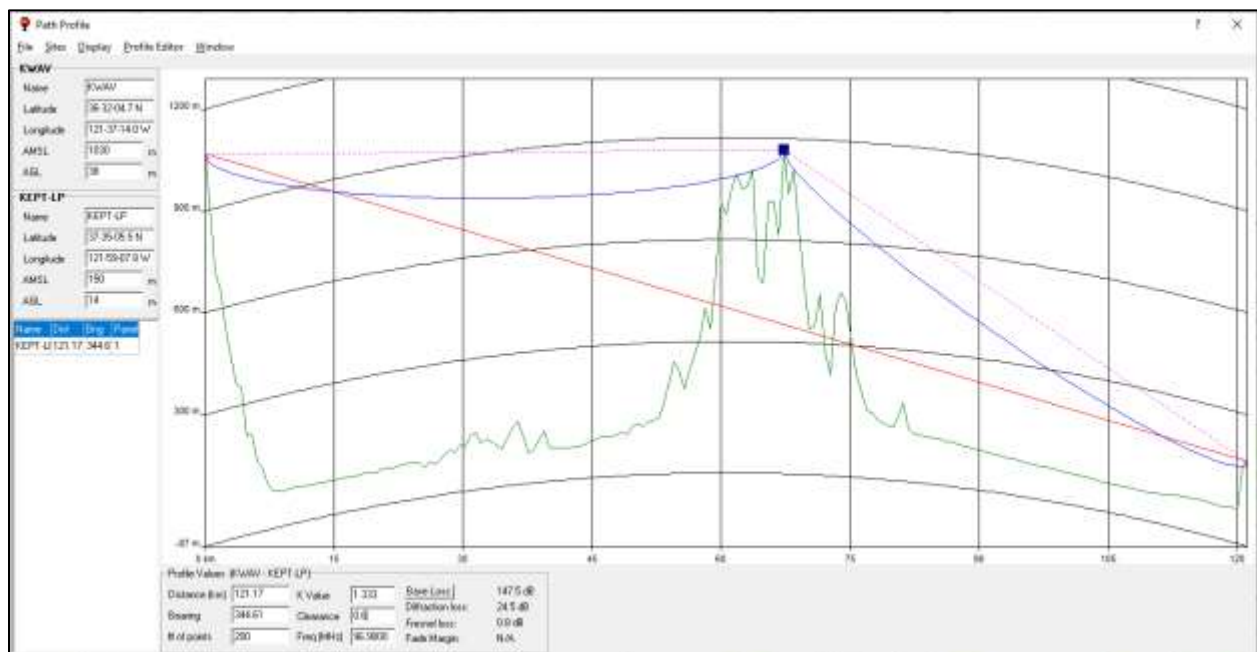


²⁰ See *Petition* at ¶ 22.

²¹ See *Petition* at note 123 for an explanation of *Foothill Effect*.

²² KBOS has been on their licensed facility since 1982. See File No. BLH-811013AH (Granted Oct. 27, 1982). In 2008, KXTT filed a modification to move to their current site. See File No. BPH-20080403AAK (Granted Nov. 5, 2008). We are not aware of any objections filed by KBOS or any other facility to that modification. In 2013, KBOS filed a modification for a coordinate correction, resulting in a *de minimis* short-spacing for which a waiver was requested. See File No. BPH-20130207ABM (Granted May 24, 2013). No objections were filed in that case.

11. One of the four LPFM stations we identified as having overlapped contours at LP250 was KEPT-LP, Hayward, California (Facility ID # 193012). An LP250 facility for this station would have a 34 dBu interfering contour that would overlap the 54 dBu service contour of KWAV, Monterey, California (Facility ID #7714). In this case, a substantial mountain range blocks the signal of KWAV from being heard in the Santa Clara Valley area where KEPT-LP is heard. If the tables were turned and if KWAV made a modification to their current facility, there would still be no legal case of displacement of the LPFM, pursuant to §73.809(a), because the LPFM's interfering contour does not overlap the 70 dBu community coverage contour of KWAV.²³ What may look bad on a contour map, may actually look good in reality.



KWAV is on the left and KEPT-LP is on the right.

12. The bottom line is that the interference trope that is being raised by the opposition in past proceedings is purely speculation and conspiracy. We attempted to address this issue in previous petitions, but the public interest dictates simplicity. As we have also demonstrated, overlapping contours also takes place in the commercial world. It is the reality using distance separation as opposed to contours. Despite less than a handful of cases, respecting the buffer zone and increasing the minimum separations will prevent interference in virtually all cases.

²³ 47 C.F.R. §73.809(a) (considers interference subject to displacement of an LPFM station where a subsequent application is filed by a full-service station resulting in a co-channel or first adjacent channel LPFM interfering contour overlapping (1) the full-service station's 70 dBu community coverage contour, (2) the community of license of such full-service station or (3) any area of the community of such a full-service station that is predicted to receive at least a 1 mV/m (60 dBu) signal.)

V. IMPLEMENTING LP250

A. The initial “rush” of upgrade applications.

13. As with any new service offering, especially one that has garnered the excitement that LP250 has, there will obviously be a rush of applications at first to file their application to be one of the first to upgrade in order to better serve their listeners. As we have proposed that LPFM stations that are subject to a second-adjacent channel waiver at LP100 would have to make a new second-adjacent showing at LP250, this will require some additional work on the part of those stations, but even with that, we do predict a short term “rush” to file.²⁴ In the past, we had discussed concepts like Automatic Upgrade Authority where LPFM stations with no other impediment to upgrading, such as second-adjacent channel waivers, reserved band TV Channel 6 issues or international considerations would be granted blanket authority to start their upgrades and then cover the license once completed.²⁵ This method is similar to how the Commission handled the increase of Class A from 3kW to 6kW. We are not necessarily proposing this for Simple250. Instead, we will leave it to staff to determine the best means of implementation.²⁶

B. Potential mutually exclusive upgrade applications.

14. In past proposals, we discussed the potential that two LPFM stations that are located at 29 or 30 rounded kilometers apart on co-channel or 16 rounded kilometers on first-adjacent channel, which are otherwise upgrade eligible would experience mutual exclusivity if both stations were to request upgrades at the same time.²⁷ The instances of this type of conflict are far fewer now with the increased distance separation requirements of Simple250 as many LPFM stations in this situation in the past would not be able to upgrade under the revised distance separation criteria.

15. In our evaluation conducted on May 24, 2021, we identified 28 LPFM stations that are spaced to other LPFM stations using the distance criteria discussed *supra*.²⁸ Of those 28 LPFM stations,

²⁴ See *Petition* at ¶¶ 41-42.

²⁵ See *Petition* at ¶ 50.

²⁶ See *Petition* at ¶ 49. (“[W]e would leave it up to the Commission staff to determine the best course of process in the implementation of the new LP250 service class.”)

²⁷ Distances are rounded to the nearest kilometer. See 47 C.F.R. §§ 73.808, 73.208(c).

²⁸ See Appendix C.

13 of those stations are near another LPFM station that would not be able to upgrade to LP250 because they would not meet the minimum distance separation with other facilities.²⁹ The remaining 15 LPFM stations do meet all other non-LPFM minimum distance separation requirements. The remaining 15 LPFM stations have been placed into 7 groups (6 groups of two and one group of three).³⁰ We have evaluated some of these situations using Longley/Rice terrain predictions and have found in some cases, both stations upgrading would result in harmful interference between these stations. However, in some cases, such as between KWSV-LP, Simi Valley, California and KBUU-LP, Malibu California, a substantial amount of intervening terrain would separate the two stations thus resulting in no harmful interference between the two facilities.

16. To address these potential conflicts, we had previously proposed a “launch window”, where during a certain period of time, LPFM stations can only upgrade if they meet the “LP250 to LP250” minimum distance separation standards.³¹ However, due to the potential that some “short spaced” LP250 stations can safely co-exist and considering the very low number of LPFM stations in this situation (about one-half of one percent of all LPFM stations), we would suggest the ability for these LPFM stations to be able to jointly apply to consent to this mutual short-spacing. Likewise, we would propose the following conditions:

- Either station, at any time, can claim interference where at that time, both stations must reduce power to their LP100 levels.
- If post-upgrade interference is claimed, both stations could reach another mutual agreement to resume LP250 operations through a reduction in power from the LP250 maximum, or through the use of directional antennas. Also, both stations can reach an agreement where one station remains at LP100 while the other station upgrades to LP250. In which case, normal rules apply and no further remediation is warranted.
- Short-spaced LPFM stations may file modifications that do not reduce the spacing between stations and must remain at 29 or 30 km on co-channel or 16 km on first-adjacent channel unless moving a fully-spaced distance (see next bullet).

²⁹ See Appendix C, Part 2.

³⁰ See Appendix C, Part 1.

³¹ See *Petition* at ¶ 51.

- Modifications that propose a full LP250 to LP250 spacing (31 km co-channel and 17 km first-adjacent) or modifications that involve a channel change would relieve both stations from the agreement and they would not be able to modify in the future to short-space.
- If a directional antenna is utilized by either or both stations, since there is a remediation process for this nature of directional antenna usage, a proof of performance on the antenna should not be required as the LPFM station will continue to protect all other stations as a nondirectional facility based on distance separation.³²
- This process should only be available to the stations that are subsequently identified as falling into this specific spacing situation where if it was to happen today, would be the stations identified in Appendix C, Part 1.

Under this concept, both stations would agree to accept each other's potential interference. In addition, a process can be put in place where either party can back out of the arrangement, thus moving both stations back to LP100 at a later time if it is determined that interference is actually taking place inside the protected service contour of one of the stations. Such an exceptional arrangement would allow these stations to better serve their audiences, especially in the case of KWSV-LP and KBUU-LP, where both stations are located in areas that are very prone to brush fires and natural disasters. Since the maximum number of these arrangements nationwide would be limited to seven, we would ask the Commission to consider these proposals for this *de minimis* number of LPFM stations on a case-by-case basis as we deploy the new LP250 service class.

V. CONCLUSION

17. The Commission made it clear that they wanted to keep this simple, we made it simple. The Commission expressed concerns about the LCRA, we addressed it. This proposal simply adds a second service class in a manner which is pretty much like adding a new service class in the commercial FM arena. Nearly ten years of record on this topic shows overwhelming support of this new service class by LPFM stations (including those that cannot upgrade), listeners, public officials and even full-service broadcast stations. They all agree that the time is right to help LPFM stations, especially those in rural areas to better serve their hyperlocal service areas by extending their reach. LPFM stations did play a significant role during the recent pandemic by stepping up and providing truthful information, debunking the rumors and misinformation as well as provide other public health information. Public sector stations,

³² See *Tech Order* at ¶¶ 11-12.

such as WBCA-LP in Boston were authorized to temporarily increase power to better reach their audiences.³³ Isolated LPFM stations like KBUU-LP teamed up with full-service FM stations to assure that public health information was provided in a consistent manner.³⁴

18. The Commission has recognized that any improvements to the rural quality of life are in the public interest. For those of us in rural areas, 3 ½ miles is not hyperlocal, unless it is 3 ½ country miles. Simple250 will be a substantial benefit to rural areas, which are normally ignored by larger commercial and noncommercial stations, which only have enough hours in a day to address the needs of a much wider audience. Likewise, LP250 should not be limited to the rural areas only. There will be many opportunities for stations in suburban areas and even some opportunities in urban areas. We must not limit the availability of upgrade to anything other than distance separation. If it can fit, it should be able to upgrade. In the past 20 years, LPFM stations have already demonstrated their utility and purpose in our society. Simple250 will limit these upgrades to assure that they will be done in situations that will not introduce new levels of interference using methods preferred by the Commission to avoid harmful interference, all in a manner that is not just simple for staff, but also for LPFM stations. Unlike previous proposals, the Simple250 petition does not have any other distractions or competing viewpoints like we saw in the *Sixth Order* or other proposed service changes as we saw in the *Media Modernization* proceeding. Do not get us wrong though, the ability to permit rural and suburban LPFM stations to grow and better serve their listeners is a form of modernization.

³³ See File No. BSTA-20200409AAG (*Granted* Apr. 10, 2020, *ext'd* Jul 9, 2020, *ext'd* Oct 13, 2020) (increase effective radiated power from 14 watts to 50 watts to disseminate emergency information related to the COVID-19 pandemic.)

³⁴ See File No. BLSTA-20200317AAI (*Granted* Mar. 18, 2020, *ext'd* Jun 16, 2020) (request for waiver of 47 C.F.R. §73.879 to rebroadcast on a part-time basis and if necessary, on a full-time basis, the signal of full-service station KCRW(FM), Santa Monica, California to better inform listeners in the Malibu area of COVID-19 related emergency information from Los Angeles County).

19. Simple 250 is just that, simple; and it addresses the concerns expressed by the Commission in past LP250 proposals. This is nearly a decade in the making and is now ready for prime time. REC strongly urges the Commission to do the right thing for the quality of life in rural America and move this *Petition* forward to a *Notice of Proposed Rulemaking* to add a second LP250 service class to the LPFM radio service.

Respectfully submitted,

/S/

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June 21, 2021

APPENDIX A

REC SIMPLE250 LP-250
UPGRADE AVAILABILITY REPORT
SUMMARY AS OF MAY 24, 2021

See separate document in this filing.

APPENDIX B

REC SIMPLE250 LP-250
UPGRADE AVAILABILITY
DETAIL REPORT AS OF MAY 24, 2021

See separate document in this filing.

APPENDIX C**LPFM STATIONS CLOSE TO OTHER LPFM STATIONS
WHERE ONLY ONE CAN UPGRADE TO LP250**

All facilities shown are located at 29 or 30 rounded kilometers to another LPFM station on co-channel or 16 rounded kilometers to another LPFM station on first-adjacent channels. Because of the required distance separation between two LP250 stations, only one of the two stations would be able to upgrade from their current site and channel. Stations that are second-adjacent channel short-spaced would have to make new demonstrations of compliance that their operations with a larger interfering contour will not result in interference to any radio service.

PART 1 - Both facilities are eligible for an upgrade

The following 15 facilities meet all other §73.807 minimum distance separation requirements to full-service stations and FM translators. We have divided these into “MX Groups”. It is REC’s position that if at least two members of an MX Group mutually request an upgrade with an acceptance of interference, that they should be permitted to short-space on a case-by-case basis, which can be revocable by either station at any time.

MX Group # 1

196533	KDIV-LP	Fayetteville, AR
196505	KMRW-LP	Springdale, AR

MX Group # 2

191871	KPSQ-LP	Fayetteville, AR
134355	KHEL-LP	Rogers, AR

MX Group #3

195574	KBUU-LP	Malibu, CA
197314	KWSV-LP	Simi Valley, CA
195799	KTPC-LP ³⁵	Venice, CA

MX Group #4

195233	WFDG-LP	Murrayville, GA
197628	WESI-LP	Sugarhill, GA

MX Group #5

124366	WTQT-LP	Baton Rouge, LA
194439	WPYR-LP	Baton Rouge, LA

MX Group #6

192697	WRPG-LP	Pikeville, NC
135130	WUBN-LP	Wilson, NC

MX Group #7

192071	WROE-LP	Roanoke, VA
196071	WRXA-LP	Rocky Mount, VA

³⁵ KTPC-LP is currently operating at 50 watts pursuant to a second-adjacent channel waiver. Because of this and other circumstances surrounding this station’s location, it is extremely unlikely that the station would ever be able to upgrade to LP250 at their current site.

PART 2 – Upgrade may be possible for these stations because their conflicting LPFM station is not able to upgrade due to other short-spacing.

These 13 stations meet all other §73.807 minimum distance separation requirements to full-service and FM Translator stations, however they are near another LPFM station and do not meet the minimum distance separation requirements between two LP250 stations. However, the “short-spaced” LPFM station is not able to upgrade on their own from their current site due to a §73.807 short-spacing with a full-service or FM Translator facility.

131688	KMTE-LP	Montrose, CO
133832	WCIW-LP	Immokalee, FL
192020	WNKQ-LP	Kissimmee, FL
192085	WSCQ-LP	Sun City Center, FL
124451	WJTR-LP	Ashburn, GA
124387	WCFY-LP	Evansville, IN
193811	WHAV-LP	Haverhill, MA
192736	WSJF-LP	Eldersburg, MD
132425	WKHV-LP	Kingston, NY
134266	KQRZ-LP	Hillsboro, OR
195722	KYQT-LP	Portland, OR
194855	WXRU-LP	Piedmont, SC
195124	WHIC-LP	Carthage, TN