

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

In the Matter of)	
)	
Amendment of Part 74)	MB Docket No. 18-119
Of the Commission's Rules)	
Regarding Translator Interference)	
)	

To: The Commission

REPLY TO OPPOSITIONS

Charles M. Anderson, broadcast engineering consultant and licensee of both full power FM stations and FM translators hereby replies to oppositions to his petition for reconsideration of the Commission's action in MB Docket No. 18-119.

In that petition, it was specifically requested that the interference complaint limit contour of 45 dBu be reset to the 54 dBu for full power stations as specified in the original NPRM, that translators and LPFM's interference complaint limiting contour be set at 60 dBu, and that the number of complaints required for an LPFM license be a minimum of six.

The Commission's Action is at Odds with the Local Community Radio Act (LCRA).

Rec Networks claims that we do not have the right to raise the inequities with the Local Community Radio Act since that was not a part of the argument raised in our comments. However, the docket is replete with references to the LCRA including comments and reply comments by the LPFM Coalition and Rec Networks (e.g. July 24, 2018 comments).

The LCRA requires that:

FM translator stations, FM booster stations, and low power FM stations remain equal in status and secondary to existing and modified full-service FM stations.....

The truth of the matter is that LPFM facilities are essentially “bullet proof” to interference complaints while translators are vulnerable out to the 45 dBu contours of full power and LPFMs.

LPFMs are essentially immune from interference complaints.

§ 73.809 Interference protection to full service FM stations.

(a) If a full service commercial or NCE FM facility application is filed subsequent to the filing of an LPFM station facility application, such full service station is protected against any condition of interference to the direct reception of its signal that is caused by such LPFM station operating on the same channel or first-adjacent channel provided that the interference is predicted to occur and actually occurs within:

(1) The 3.16 mV/m (70 dBu) contour of such full service station (emphasis added);

(2) The community of license of such full service station; or

(3) Any area of the community of license of such full service station that is predicted to receive at least a 1 mV/m (60 dBu) signal.

Such interference is virtually impossible on co-channel and first adjacent channels where interference is most likely to occur. If an LPFM (100 Watts @ 30 meters) fully spaced to a maximum class co-channel class A (67 km) is examined, its 25 dBu (50:10) interference contour extends 54.34 km and overlaps a class A's 56.6 dBu (50:50) 45 dBu by 43.94 km). Such a situation would clearly cause interference to listening at the outer boundaries of a class A. Yet, no interference complaint could be lodged unless it is within the 70 dBu or in some cases the 60 dBu.

LPFM's only protect co-channel full powers to their 55-49.7 dBu contours.

Calculations of the protected and interference contours from FCC curves for maximum class facilities at required LPFM spacings reveal that LPFMs only protect full service stations to their 49.7 to 55 dBu (50:50) contours.

Class A	53.6 dBu
Class C3	53.7 dBu
Class C2	53.6 dBu
Class C1	54.5 dBu
Class C0	54.5 dBu
Class C	55.0 dBu
Class B1	51.7 dBu
Class B	49.7 dBu.

Therefore, those commenters who suggested 54 dBu for A-C, 51 dBu for B1s and 48 dBu for class Bs were proposing that translators provide similar protection to full power stations as is incorporated in the LPFMs spacings.

Translators are vulnerable to complaints out to the 45 dBu contour.

§ 74.1203 Interference.

(a) *An authorized FM translator or booster station will not be permitted to continue to operate if it causes any actual interference to:*

* * * * *

(3) *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 is impaired by the signals radiated by the FM translator or booster station, regardless of the channel on which the protected signal is transmitted; except that no listener complaint will be considered actionable if the alleged interference occurs outside the desired station's 45 dBu contour (emphasis added).*

Thus, the Commission's rules have a built in 25 dBu bias in favor of LPFMs (70 dBu limit vs 45 dBu limit) or in some cases 15 dB. Furthermore, LPFMs are completely immune from translator interference complaints. There is no reciprocity. The manifest inequality and imbalance are evident.

Big Radio concedes the 6 dB span of census subdivisions.

The Joint Commenters tout their unique qualifications to balance the merits of full power and translator audiences since they have a "stake in both sides". This is a somewhat disingenuous assertion given the enormity of their relative financial stake in full power stations.

They do acknowledge that their reliance on U.S. Census centroids may result in 6 dB spans (Opposition at footnote 11), but humorously suggest that the limit should have been set at 39 dBu to account for that span and that the 6 dB adjustment has been Incorporated by the Commission in the 45 dBu contour. A more reasonable approach would have been to adjust the complaint threshold to a higher value.

Again, the Joint Commenters present their full power station audience data. The obvious question is where is the translator audience data? Reliance on this data does not result in a "balanced" consideration of the merits of translator vs. full power station's fringe audience. Furthermore, the assertion that fringe audiences are listening to 39-45 dBu signals in their homes defies logic unless they are utilizing high gain antennas or extremely sensitive radios. Use of this data has resulted in a flawed conclusion to the detriment of the thousands of translators now rendering valuable service to audiences nationwide. Denial of the existence and importance of these audiences is contrary to the public interest.

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Respectfully submitted,



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