

§ 73.827

FM channel number	LPFM to TV channel 6 (km)
212	90
213	90
214	90
215	90
216	89
217	89
218	89
219	89
220	89

[65 FR 67303, Nov. 9, 2000, as amended at 78 FR 2106, Jan. 9, 2013; 85 FR 35573, June 11, 2020]

§ 73.827 Interference to the input signals of FM translator or FM booster stations.

(a) *Interference to the direct reception of the input signal of an FM translator station.* This subsection applies when an LPFM application proposes to operate near an FM translator station, the FM translator station is receiving its input signal off-air (either directly from the primary station or from a translator station) and the LPFM application proposes to operate on a third-adjacent channel to the station delivering an input signal to the translator station. In these circumstances, the LPFM station will not be authorized unless it is located at least 2 km from the FM translator station. In addition, in cases where an LPFM station is located within ± 30 degrees of the azimuth between the FM translator station and its input signal, the LPFM station will not be authorized unless it is located at least 10 kilometers from the FM translator station. The provisions of this subsection will not apply if the LPFM applicant:

(1) Demonstrates that no actual interference will occur due to an undesired (LPFM) to desired (station delivering signal to translator station) ratio below 34 dB at such translator station's receive antenna.

(2) Complies with the minimum LPFM/FM translator distance separation calculated in accordance with the following formula: $d_u = 133.5 \text{ antilog} [(P_{cu} + G_{ru} - G_{rd} - E_d)/20]$, where d_u = the minimum allowed separation in km, P_{cu} = LPFM ERP in dBW, G_{ru} = gain (dBd) of the FM translator receive antenna in the direction of the LPFM site, G_{rd} = gain (dBd) of the FM translator receive antenna in the direction

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of the primary station site, E_d = predicted field strength (dBu) of the primary station at the translator site, or

(3) Reaches an agreement with the licensee of the FM translator regarding an alternative technical solution.

NOTE TO PARAGRAPH (a): LPFM applicants may assume that an FM translator station's receive and transmit antennas are collocated.

(b) An authorized LPFM station will not be permitted to continue to operate if an FM translator or FM booster station demonstrates that the LPFM station is causing actual interference to the FM translator or FM booster station's input signal, provided that the same input signal was in use or proposed in an application filed with the Commission prior to the release of the public notice announcing the dates for an LPFM application filing window and has been continuously in use or proposed since that time.

(c) Complaints of actual interference by an LPFM station subject to paragraph (b) of this section must be served on the LPFM licensee and the Federal Communications Commission, Attention: Audio Division, Media Bureau. The LPFM station must suspend operations upon the receipt of such complaint unless the interference has been resolved to the satisfaction of the complainant on the basis of suitable techniques. Short test transmissions may be made during the period of suspended operations to check the efficacy of remedial measures. An LPFM station may only resume full operation at the direction of the Federal Communications Commission. If the Commission determines that the complainant has refused to permit the LPFM station to apply remedial techniques that demonstrably will eliminate the interference without impairment of the original reception, the licensee of the LPFM station is absolved of further responsibility for the complaint.

[78 FR 2106, Jan. 9, 2013, as amended at 78 FR 67317, Nov. 12, 2013]

§ 73.840 Operating power and mode tolerances.

The transmitter power output (TPO) of an LPFM station must be determined by the procedures set forth in