Mexican Agreement Compliance

The "Agreement Between the Government of the United States of America and the Government of the United Mexican States" of 1992, Annex 1, Section 2, defines the current regulation concerning translators located within 320 km of the Mexican border. This section reads as follows:

2.1 Low Power FM Stations (LPFM)

2.1.1 LPFM stations may operate on any channel from 201 to 300 and they must protect the allotments and assignments of the other Administration based on their maximum permitted parameters in accordance with the Table of Allotment's and Assignments.

2.1.2 An LPFM station is permitted to operate with ERP that shall not exceed 50 watts in the direction of the other country and to produce an interfering contour not to exceed 32 km in the direction of the other country.

2.1.3 The maximum distance to the protected contour (60 dBu) all of an LPFM station shall be 8.7 km in the direction of the other country.

2.1.4 LPFM stations located within 125 km of the common border must be notified in accordance with the notification procedures in Article 8.

2.1.5 An LPFM station located in excess of 125 km from the common border may operate with an ERP in excess of 50 watts in the direction of the other country, provided the protected contour produced is not greater than, starting from 125 km from the common border, 8.7 km in the direction of the other country. Before the station can commence operation it must comply with a notification procedures contained in Article 8 and the provisions of 2.1.1, 2.1.6, and 2.1.7 of this section.

2.1.6 Should any interference be caused by an LPFM station, the offending station must immediately correct the interference or cease operation.

2.1.7 The use of a channel by an LPFM station shall not prejudice in any manner the future allotment of such channel by the other Administration.

The proposed translator is 31.4 km from the Mexican border, so it falls under the provisions of the Agreement, Sections 2.1.1, 2.1.2, 2.1.3, and 2.1.4 (LPFM stations not in excess of 125 km from the common border). The nearest co-channel or first, second or third-adjacent channel station or allocation from Mexico is co-channel Class B Station XHATFM at a distance of 97.72 km which is clearly outside of the required 65 km distance.

The direction to Mexico at 320 kilometers or less from the proposed transmitter site is from 90 degrees to 230 degrees (easily verified using a map and protractor). All LPFM stations within 125 km from the border should certify that their interfering contour [34 dBu F(50,10)] in the direction of the other country should not exceed 32 km. The Exhibit H tabulation shows the maximum contour toward Mexico extends 12.20 km at 190 degrees.

The facility in the instant application does not radiate more than 50 watts Effective Radiated Power in the direction of Mexico between Azimuths 90 degrees to 230 degrees. The maximum ERP toward Mexico is 0.0.16 watts between 160 and 200 degrees as shown in Exhibit H.

The maximum distance to the F (50,50) 60 dBu protected contour shall not extend toward Mexico by more than 8.7 km. The chart in this exhibit shows the maximum distance to the protected contour in the direction of Mexico is 0.95 km between between 160 and 200 degrees as shown in Exhibit H. Therefore, this proposal completely satisfies the requirements of the Agreement.

Exhibit H - Mexican Treaty Compliance for New FM Translator, El Cajon, CA

32-41-46.4 N. Latitude 116-56-10.3 W. Longitude

Max ERP 10 Watts (Directional) – 101.1 MHz - Center of Radiation = 796 meters AMSL

Bearing Deg T.	ERP Watts	HAAT (meters)	DH (meters)	f(50,10) 34 dBu Distance (km)	f(50,50) 60 dBu Distance (km)
90	0.001	380	580	3.77	0.41
95	0.001	405	490	3.83	0.41
100	0.001	445	580	3.92	0.41
105	0.001	462	650	3.93	0.41
110	0.001	479	560	3.94	0.41
115	0.001	469	690	4.59	0.48
120	0.002	462	520	5.42	0.57
125	0.004	449	470	6.62	0.68
130	0.006	370	430	7.33	0.77
135	0.008	281	460	7.21	0.83
140	0.012	299	480	8.16	0.89
145	0.013	328	390	8.81	0.91
150	0.014	369	630	9.61	0.93
155	0.015	441	640	10.49	0.94
160	0.016	497	470	11.02	0.95
165	0.016	555	370	11.44	0.95
170	0.016	593	420	11.79	0.95
175	0.016	627	350	12.08	0.95
180	0.016	633	310	12.13	0.95
185	0.016	641	250	12.19	0.95
190	0.016	642	250	12.20	0.95
195	0.016	640	270	12.18	0.95
200	0.016	636	240	12.15	0.95
205	0.015	643	230	11.99	0.94
210	0.014	649	160	11.83	0.93
215	0.013	657	150	11.44	0.91
220	0.012	661	100	11.00	0.89
225	0.008	666	90	9.81	0.83
230	0.006	676	60	8.78	0.77