

Engineering Statement

IGLESIA EVANGELICA APOSTOLES Y PROFETAS NAZARETH, INC,

Seeks: Change of COL/Operating Parameters
For FM Translator: K284BX, Ch: 284, 0.050 kW
Hitchcock, Texas

To: Alvin, Texas, Ch: 283, 0.157 kW – 304 (m)

Amended September 22, 2014

General Statement

This engineering statement was prepared in support of an application by Iglesia Evangelica Apostoles Y Profetas Nazareth, Inc. (“IEAPN”) to change the community of license (“COL”) of FM translator K284BX (the “Station”) from Hitchcock, Texas to Alvin, Texas and to make changes in the station’s transmitter location, HAAT, and to change the primary rebroadcast station to FM Station KLOL, a Class C facility at Houston, Texas (FCC ID: 37053). This application demonstrates the proposal complies with Federal Communications Commission (“FCC”) Rules and Regulations (the “Rules”) under Section: 74.1204 with the possible exception of second adjacent station KAMA at Deer Park, Texas (which is addressed herein

Allocation

The instant proposal seeks to relocate the Station’s antenna/transmitter facilities to an existing tower 23.91 km (14.84 miles) north northwest (309.7° T) of its current site. A total of two (2) licensed full power FM second adjacent stations enter into allocation consideration of K284. They are KAMA, Deer Park, Texas (FCC ID: 36745); and KRBE, Houston, Texas (FCC ID: 35524).

Second Adjacent Channel / IF Channel Protection

The proposed operation of the Station on channel 283 at Alvin, Texas with an effective radiated power of 0.157 kW at 304 meters (1000 feet) above ground will not cause interference to any existing, applied for, or proposed facility. However, the proposed Station site is inside the 60 dBu contour of two second adjacent stations; KRBE, Channel 281, at Houston, Texas and KAMA on Channel 285 at Deer Park, Texas. Due to the relationship between the proposed Station and both KAMA and KRBE, a 40 dBu ratio of the protected and interfering contours applies. As the signal level of KAMA is well above 60 dB at the proposed tower site for K284BX, the 40 dB ration has been applied to the contour of KAMA based on the relevant protected contour of the Station at proposed site.

The signal of KAMA at the proposed Station site is 68.62 dBu (50/50). As such, the interfering contour of the proposed translator would necessarily be above 108.62 dBu to cause interference to either station.

Based upon free space computations, the 108.62 dBu contour of the proposed Station's facilities extends only 0.003 kilometers (less than 10 feet) from the proposed antenna.

The proposed operation on channel 283 is also within the 60 dBu contour of second adjacent station KRBE. As the signal level of KRBE is well above 60 dB at the proposed tower site for K284BX, the 40 dB ration has been applied to the contour of KRBE based on the relevant protected contour of the Station at proposed site.

The signal of KRBE at the proposed Station site is 86.41 dBu (50/50). As such, the interfering contour of the proposed translator would necessarily be above 126.41 dBu to cause interference to either station.

Based upon free space computations, the 126.41 dBu contour of the proposed Station's facilities extends only 0.002 kilometers (less than 10 feet) from the proposed antenna.

As the proposed Station's antenna is to be mounted at 304 meters (1000 feet) above ground, this contour never reaches the ground and as such, neither KRBE nor KAMA will not receive interference from the proposed translator in any *populated* area. Based upon this data, the applicant contends the proposed translator facility is in compliance with Section 74.1203(d) of the Rules. To the extent that a waiver of the Rules with regards overlap with KRBE and KAMA is required, IEAPN respectfully requests grant of such waiver.

Conclusion

Based upon the foregoing, IEAPN submits that the instant proposal is in compliance with all relevant Rules and meets all the criteria for waiver of Section 74.1233(a)(1) of the Rules. Therefore, the instant proposal should be granted.