

ENGINEERING STATEMENT – SECOND ADJACENT CHANNEL PROTECTION

KHJK (40.9 kilometers at 260 degrees True from LPFM site) and KKMY (20.0 kilometers at 31 degrees True from LPFM site) (La Porte, TX, 279C and Orange, TX, 283C1, respectively) are second adjacent-channel stations to the proposed channel 281 LPFM facility. The 60 dBu F50,50 service contours of each extends well beyond the LPFM transmitter site. Using the well-established *Living Way Ministries* Methodology, no actual interference to any population is predicted to exist to KHJK or KKMY.

Note that a rule waiver of Section 73.807 for this second adjacent-channel protection using the well-established *Living Way Ministries* Methodology is respectfully requested if such a rule waiver is deemed necessary for protection to any station.

The F50,50 signal strength from KHJK at the proposed LPFM transmitter site is greater than 81 dBu (the “desired” signal for KHJK). The F50,50 signal strength from KKMY at the proposed LPFM transmitter site is greater than 84 dBu (the “desired” signal for KKMY). The second/third adjacent-channel protection is an undesired-to-desired (“U/D”) dB signal strength ratio of 40:1. Therefore, predicted interference to the worst-case of the above two protected facilities is from that of KHJK and is an LPFM signal of greater than or equal to 121 dBu.

The 121 dBu signal based on a free space field determination is predicted to extend out to 20 meters from the proposed LPFM transmit antenna. The interfering signal level will not reach any point at ground level or at 2 meters above ground level. Therefore, both KHJK and KKMY are adequately protected by the proposed facility.