

ENGINEERING STATEMENT – SECOND ADJACENT CHANNEL PROTECTION

KKPS (Lic at 31.2 kilometers at 276 degrees True; CP at 32.1 kilometers at 290 degrees True; from LPFM site) and KTEX (31.2 kilometers at 276 degrees True from LPFM site) (Brownsville, TX, Stations on 258C and 262C0, respectively) are second adjacent-channel stations to the proposed channel 260 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 KKPS or KTEX.

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 KKPS (as both licensed and as authorized) at the proposed LPFM transmitter site is greater than 80 dBu (the “desired” signal for KKPS). The F50,50 signal strength from KTEX at the proposed LPFM transmitter site is greater than 81 dBu (the “desired” signal for KTEX). 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 KKPS and is an LPFM signal of greater than or equal to 120 dBu.

The 120 dBu signal based on a free space field determination is predicted to extend out to 23 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 KKPS and KTEX are adequately protected by the proposed facility.