

## **ENGINEERING STATEMENT – SECOND ADJACENT CHANNEL PROTECTION**

KLWB-FM (Licensed as Opelousas, LA, 279C3; CP as Carencro, LA, 279C2) is second adjacent-channel to the proposed channel 281 LPFM facility and is located only 18.9 kilometers (at 36 degrees True bearing) from the proposed LPFM transmitter site. The 60 dBu F50,50 service contour for both the license and CP facilities 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 KLWB-FM.

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 KLWB-FM at the proposed LPFM transmitter site is 73 dBu for the license and 78 dBu for the CP (the “desired” signal). The second/third adjacent-channel protection is an undesired-to-desired (“U/D”) dB signal strength ratio of 40:1. Therefore, predicted interference to KLWB-FM from the proposed LPFM facility is a signal of greater than or equal to 113 dBu.

The 113 dBu signal based on a free space field determination is predicted to extend out to 50 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, KLWB-FM is adequately protected by the proposed facility.