

ENGINEERING STATEMENT – SECOND ADJACENT CHANNEL PROTECTION

WLYF (16.2 kilometers at 30 degrees True from LPFM site) and WHYI-FM (16.4 kilometers at 30 degrees True from LPFM site) (Miami, FL, 268C1 and Fort Lauderdale, FL, 264C0, respectively) are second adjacent-channel stations to the proposed channel 266 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 WLYF or WHYI-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 WLYF at the proposed LPFM transmitter site is greater than 90 dBu (the “desired” signal for WLYF). The F50,50 signal strength from WHYI-FM at the proposed LPFM transmitter site is greater than 90 dBu (the “desired” signal for WHYI-FM). 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 an LPFM signal of greater than or equal to 130 dBu.

The 130 dBu signal based on a free space field determination is predicted to extend out to 8 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 WLYF and WHYI-FM are adequately protected by the proposed facility.