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ENGINEERING REPORT

Decatur, TX, Channel 238D FM Translator Application

ENGINEERING STATEMENT

Applicant submits this site move minor change application for K238CC, Decatur, Texas, 238D, for a site move of 17 kilometers east-northeast of the current CP site. This is a minor change application. All required protections are met by contour non-overlap pursuant to Section 74.1204, with the exception of protection to KFWR, Jacksboro, TX, 240C0. KFWR is protected, as discussed below.

PROTECTION TO KFWR

KFWR, Jacksboro, TX, 240C0 (54.2 kilometers at 230 degrees True from translator site) is a second adjacent-channel station to the proposed channel 238 translator facility. The 60 dBu F50,50 service contour of KFWR extends well beyond the 238D transmitter site. Using the well-established *Living Way Ministries* Methodology, no actual interference to any population is predicted to exist to KFWR.

Note that a rule waiver of Section 74.1204 for this second and third 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 this station.

The F50,50 signal strength from KFWR at the proposed 238D transmitter site is greater than 67 dBu (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 KFWR is a 238D signal of greater than or equal to 107 dBu. (Note that KFWR has a pending application, BPH-20150807ACE, that proposes a change to an omni antenna at its currently-licensed site. The application facility has a predicted signal of greater than 67 dBu at the translator site.)

The 107 dBu signal based on a free space field determination is predicted to extend out to 498 meters from the proposed 238D transmitter site. The interfering signal level will not reach any point at ground level or at 2 meters above ground level. Therefore, pursuant to Section 74.1204(d) of the FCC Rules, KFWR is adequately protected by the proposed facility.