

ENGINEERING STATEMENT – WAIVER REQUEST

PROTECTION TO WNGE AND WUPT

WNGE, Negaunee, MI, 258A (14.5 kilometers at 133 degrees True bearing) and WUPT, Gwinn, MI, 262C1 (14.8 kilometers at 132 degrees True bearing) are second adjacent-channel to the proposed channel 260D facility. The 60 dBu F50,50 service contour of both stations extends near (in the case of WNGE) and beyond (in the case of WUPT) the proposed 260D transmitter site. Using the well-established *Living Way Ministries* Methodology, no actual interference to any population is predicted to exist to WNGE and WUPT.

Note that a rule waiver of Section 74.1204 for this second/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 these two stations.

The F50,50 signal strength from WNGE at the proposed 260D transmitter site is less than 60 dBu (the “desired” signal) with the 260D site located 700 meters outside of the WNGE 60 dBu F50,50 contour. The F50,50 signal strength from WUPT at the proposed 260D transmitter site is greater than 76 dBu (the “desired” signal). The second/third adjacent-channel protection of Section 74.1204 is an undesired-to-desired (“U/D”) dB signal strength ratio of 40:1. Therefore, predicted interference to WNGE is a signal of great than 100 dBu (at 700 meters from the 260D site); and the predicted interference to WUPT is a signal of greater than or equal to 116 dBu at the 260D site.

The 100 dBu signal based on a free space field determination is predicted to extend out to 223 meters from the proposed 260D transmitter site so WNGE is adequately protected (the nearest point on the 60 dBu service contour is 700 meters away—see above paragraph).

The 116 dBu signal based on a free space field determination is predicted to extend out to 36 meters from the proposed 260D transmitter site. The interfering signal level for the proposed 260D facility to WUPT 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, WNGE and WUPT are adequately protected by the proposed facility.