

EXHIBIT E-2  
CHANNEL 6 STUDY  
WILLCOX, ARIZONA, CHANNEL 206C3  
ST. PAUL CULTURAL BROADCASTING, INC  
FCC FORM 340  
OCTOBER 2007

A study of potential interference to channel 6 television stations was conducted in regards to the proposed operation of this new station.

Two stations were found to be within the required spacing of 211 kilometers for this channel, a more detailed study was performed for this station.

The applicant proposes a vertical only polarized antenna system. In turn the ERP of the proposed station was divided by a factor of 40, or 0.003 Kilowatts. The new proposed station is located within the 47 dB $\mu$  of KUAT-TV Tucson, AZ. The corresponding worse case interference contour at any point inside the 47 dB $\mu$  contour would be 63.2 dB $\mu$ . The proposed interference contour generated by the new FM shows a population coverage of 36 persons, or well below the required 3,000 persons under 73.525(c) of the commission's rules.

Figure 1 shows an interference study with KUAT-TV Tucson, AZ.

Figure 2 shows an interference study with KOBG Silver City, AZ.

Figure 3 shows a population cell map and the interference contour, 63.2 dB $\mu$  for the new FM in regards to KUAT-TV.

It was determined that this application will be in compliance with the channel six protection requirements of 73.525 of the commission's rules.