

TV CHANNEL 6 INTERFERENCE STUDY

A study of the Commission's database reveals that the nearest channel 6 television facility is KAAL Austin, MN. KAAL is located within the minimum distance specified by the Commission and therefore must be considered. KAAL operates with 100kW at 696m COR AMSL.

Coordinates for KAAL are: 43-37-42 93-09-12

The KAAL contours were plotted on a map and the affected contour was found to be the 59.0 dBu contour. The proposed interfering contour was determined by using the table in 47 CFR 73.599 (figure 1).

The population within an area of interference using a maximum of 20.0 kW would exceed the commissions population limits of 3000 persons, therefore the applicant chooses vertical only polarized transmissions. CFR 47 section 73.525 (4)(I) states the maximum permissible vertically polarized ERP will be the maximum horizontally polarized ERP permissible at the same proposed height, calculated without the adjustment for television receiving antenna directivity specified in paragraph (e)(iii) of the section, multiplied by either: 40 if the predicted interference area lies entirely outside the limits of a city of 50,000 persons or more; or 10 if it does not. A horizontal ERP of .5 kW ($20.0/40=.5$) is used to calculate the area of interference. This power level causes interference with no persons.

Pursuant to Section 73.525, applicant proposes vertical only polarity of 20.0kW. The attached exhibit indicates overlap of relevant contours, a population of less than 3,000 persons are affected by the proposed channel and as such the proposed is in compliance with 47 CFR 73.525 of the Commission's Rules.