

## TV CHANNEL 6 INTERFERENCE STUDY

A study of the Commission's database reveals that the nearest channel 6 television facility is WECT Wilmington, NC. WECT is located within the minimum distance specified by the Commission and therefore must be considered. WECT operates with 100kW at 588m COR AMSL. Coordinates for WECT are: 34-34-43 78-26-13

The WECT contours were plotted on a map and the affected contour was found to be the 68.9 dBu contour. The proposed interfering contour 64.6 dBu - 70.6 dBu was determined by using the table in 47 CFR 73.599(f)(figure 1).

The population within an area of interference using a maximum of 2.25kW 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 .0563kW ( $2.25/40=.0563$ ) is used to calculate the area of interference. This proposed facility *could* cause interference to 3,438 persons according to the 2000 Census Block Data provided in this exhibit.

**Pursuant to Section 73.525, applicant proposes vertical only polarity of 2.25kW, the above tabulations indicate that a population of 3,438 persons are affected by the proposed channel. American Family proposes to effectively install 438 filters on television receivers within the predicted interference area with 90 days after commencing program test and no later than 45 days thereafter and will provide the affected channel 6 with certification containing sufficient information to permit verification of such installations.**

**American Family believes the proposed is in compliance with 47 CFR 73.525 of the Commission's Rules.**