



TV CHANNEL 6 COMPATIBILITY STUDY

New NCE-FM, Channel 210A Fond du Lac, Wisconsin

The facility proposed herein complies with §73.525 of the FCC, concerning predicted interference to TV Channel 6 stations. The only Channel 6 station within the pertinent distance is WITI-TV in Milwaukee, which is 86.9 kilometers away. The proposed NCE-FM site is inside WITI-TV's predicted Grade B (47 dBu) contour.

Since vertical polarization is proposed, and the interference area would not encompass a community whose population is 50,000 or more (the 1990 Census population of Fond du Lac was 37,757 persons), a 16 dB reduction factor has been applied to the FM field strength calculations as per §73.525(e)(4)(i). No adjustment for TV receiving antenna directivity was used.

Attached Figure 7-A shows a set of predicted F(50,50) field strength contours from the TV Channel 6 station in the potential area of interference. From Figure 1 of §73.599 of the FCC Rules, the following was determined:

WITI-TV F(50,50) Field	U/D in dB from §73.599	NCE-FM F(50,10) Interf. Field
51.2	14.7	65.9
51.7	14.2	65.9
52.2	13.7	65.9
52.7	13.2	65.9
53.2	12.7	65.9
53.7	12.3	66.0
54.2	11.8	66.0
54.7	11.3	66.0
55.2	10.9	66.1

Since the interfering signal levels, as determined above, from the proposed NCE-FM throughout the interference area are essentially the same value (± 0.1 dB), the interference area was assumed to be the area within the proposed NCE-FM 65.9 dBu contour. The population within this area, based on the 1990 U.S. Census tract data base, was determined to be 2,813 persons.

Since the population within the predicted TV Channel 6 interference area is less than 3,000 persons, this proposal is in compliance with §73.525.

Figure 7-C

**MINOR CIVIL DIVISIONS MAP SHOWING
PREDICTED TV CHANNEL 6 INTERFERENCE AREA**

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