

EXHIBIT E-18
Monroe, MI
Channel 201

Introduction: Engineering Exhibit E-18 will clarify what steps have been taken to avoid any significant Channel 6 interference.

Procedure: An adjustment of 6 dBu for television receiving antenna directivity was added between the range of angles allowed under 73.525(e)(1)(iii). Since the applicant chooses to use mixed polarity, distances to the appropriate FM field strength contours were determined by using the formula listed in section 73.525(e)(4)(ii), $(H + V/A)$ is no greater than P . Substituting the appropriate values, $(.09 \text{ kW} + 2.8 \text{ kW} / 40 = .16 \text{ kW})$. The equivalent permitted horizontal power is 160 watts since the area is outside a city with a population of 50,000 persons. The non-directional horizontal radiator will radiate 90 watts in all directions equally. The vertical directional values were divided by 40 and then added to 90-watt horizontal component in 10-degree increments. The sum values were used to determine the distance to the 54 dBu (50, 10) interfering contour.

Exhibits: Along the left side of of Exhibit E-6, TV 6 contour arc are shown for the 47 dBu F(50, 50) of WLNS TV-6. In the center of the exhibit are the 54 dBu F(50, 10) contours for the proposed FM station are drawn. No overlap occurs.

Conclusion: This proposal qualifies for an exemption under 47 CFR 73.525 (b)(2)(ii). The Commission may properly grant this application since it is below their statutory limit of 3,000 persons.

