R.F. RADIATION COMPLIANCE STATEMENT

Las Vegas, NM
University of New Mexico
November 2007

The calculation shown below was derived from the formulas in the OET 65 bulletins as updated. All FM values are calculated at "worst case" without regard to a reduction toward the nadir when the actual vertical elevation field is applied. Consequently, the actual values should be considerably less.

The Proposed FM antenna:

The applicant proposes the use of a 1-bay antenna to emit 0.1 kilowatts of radiated power polarized horizontally and 0.1 kW polarized vertically from a height above ground of 21.3 meters. Using "worse case" OET 65 calculations we can determine that the power density at head height at the base of the existing supporting structure will be 17.9 microwatts per square centimeter. This amounts to 1.8 percent of the maximum of 1,000 microwatts per square centimeter for a controlled environment and 9.0 percent for an uncontrolled environment.

Other Emitters:

There are several FM and TV stations located on or near the proposed tower.

ID Stations Study at 35 37 59 N, 105 14 10 W, Search Distance = 1 km. Search Distance = 1 km (Power Density in Microwatts Per square centimeter)

Call	Service	City	State	Chan.	Power	height	Coordinates	Dist-km	Azimuth	File Number		Pwr Density - % uncontrolled-
AM ------- None Found ----------												
FM ----------												
K296EN X		Las Vegas	NM	296D	0.067kW	18M	353759N 1051410W			BLFT19960715TA	FM	8.7 4.40
TV ----------												
K28IR X*		Las Vegas	NM	28-T	6.700kW	11M	353759N 1051410W			BNPTT20000831CGH	TV	17.1 4.60
K33FL X*		Las Vegas	NM	33+T	1.230kW	22 M	353759N 1051410W			BLTT20000222ABA	TV	0.64 0.16
K47GV X*		Las Vegas	NM	47ZT	1.200kW	11 M	353759N 1051410W			BLTT20011031AAU	TV	3.07 0.69

	Total %
	Applicant Amount 9.0
* 10% vertical elevation field and 20 % aural injection	Grand Total 18.85%

The applicant will reduce transmitting power to safe levels or terminate transmissions in the event a worker must go on to the tower and be at a distance from the proposed antenna such that over-exposure would result.

Consequently, it appears that the proposed transmitting antenna will be in full compliance with the Commission's human exposure to radio frequency electromagnetic field rules and regulations.

Doug Vernier