

Capstar TX Limited Partnership

KIAK Radio Station

Channel 273 - 102.5 MHz

Fairbanks, AK

### **Radio Frequency Radiation Study and Statement**

The facilities were evaluated in terms of potential radio frequency radiation exposure at ground level in accordance with OST Bulletin No. 65, "Evaluating Compliance With FCC-Specified Guidelines for Human Exposure to Radio frequency Radiation."

The KIAK antenna system will be an ERI SHPX-12AC-SP 12 section full-wave spaced multi-user antenna, mounted with its center of radiation 86 meters above ground level, and will operate with an effective radiated power of 100.0 kilowatts in both the horizontal and vertical planes. At two meters, the height of an average person, at a distance of 19 meters from the tower base, this proposal will contribute, worst case, 42.0 microwatts per square centimeter, or 7.7% of the allowable ANSI limit for controlled exposure, and 38.4% of the allowable limit for uncontrolled exposure. Table below indicates arithmetical sums of radio frequency radiation by each user of this antenna.

	ERP	Exposure Power Density	Exposure Uncontrolled	Exposure Controlled
	Kw	uW/sq cm	%	%
KAKQ-FM	32	13.8	6.9	1.4
KKED	50	21	10.5	2.1
KIAK-FM	100	42	21	4.2
Sums	182	76.8	38.4	7.7

It is therefore believed that regardless of the contribution of other users of the antenna, this proposal is in compliance with OST Bulletin Number 65 as required by the Federal Communications Commission.

Further, the applicant has posted warning signs in the vicinity of the tower, warning of potential radio frequency hazards at the site. The area at the base of the antenna is restricted from public access by locked gate and fencing. The applicant will cooperate with other users of the tower to reduce power of the facility, or shut down the emitter, as necessary to limit human exposure to levels less than specified by the Federal Communications Commission should anyone be required to climb the tower for maintenance or inspection.