

POWER DENSITY CALCULATION

PROPOSED K18EG  
CHANNEL 22 – EUREKA SPRINGS, ARKANSAS

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Eureka Springs facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 10.0 kw, an antenna radiation center 64 meters above ground, and the vertical pattern of the RFT antenna, maximum power density two meters above ground of  $0.0031 \text{ mw/cm}^2$  is calculated to occur 21 meters from the base of the tower. Since this is only 0.9 percent of the  $0.35 \text{ mw/cm}^2$  reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 22 (518-524 MHz), this proposal may be excluded from consideration with respect to public exposure to nonionizing electromagnetic radiation.

Further, the station owner will take whatever precautionary steps are necessary, such as reducing power or leaving the air temporarily, to ensure that workers operating in the vicinity of the antenna are not exposed to excessive nonionizing radiation.