

POWER DENSITY CALCULATION

PROPOSED K52FJ  
CHANNEL 33 – FORT SMITH, ARKANSAS  
[MODIFICATIONS OF BPTTL-20010116AET]

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Fort Smith facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 23.2 kw, an effective antenna height of 50 meters above ground, and the vertical pattern of the SWR antenna, maximum power density two meters above ground of  $0.0023 \text{ mw/cm}^2$  is calculated to occur 6 meters north of the base of the tower. Since this is only 0.6 percent of the  $0.39 \text{ mw/cm}^2$  reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 33 (584-590 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.