

POWER DENSITY CALCULATION
PROPOSED WHBQ-DT AUXILIARY
CHANNEL 13 – MEMPHIS, TENNESSEE

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Memphis facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 20 kw, an antenna radiation center 229 meters above ground, and the elevation pattern of a typical 6-bay super turnstile antenna, maximum power density two meters above ground of 0.0012 mw/cm^2 is calculated to occur 177 meters from the base of the tower. Since this is only 0.6 percent of the 0.2 mw/cm^2 reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 13 (210-216 MHz), a grant of this proposal may be considered a minor environmental action with respect to public and occupational ground-level 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.