

POWER DENSITY CALCULATION
PROPOSED WBRC-DT
CHANNEL 50 – BIRMINGHAM, ALABAMA

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Birmingham facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 953 kw (H) and 133 kw (V), an antenna radiation center 308 meters above ground, and the elevation pattern of the Dielectric antenna, maximum power density two meters above ground of 0.00053 mw/cm^2 is calculated to occur 99 meters from the base of the tower. Since this is only 0.1 percent of the 0.46 mw/cm^2 reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 50 (686-692 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.