

POWER DENSITY CALCULATION

PROPOSED W67DF
CHANNEL 45 - SPRINGFIELD, MASSACHUSETTS

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Springfield facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 41.3 kw, an effective antenna height of 9 meters above ground, and the vertical pattern of the Andrew antenna, maximum power density two meters above ground of 0.27 mw/cm^2 is calculated to occur 2 meters south of the base of the tower. Since this is 12.3 percent of the 2.19 mw/cm^2 reference for controlled environments (areas without public access) surrounding a facility operating on Channel 45 (656-662 MHz), and since the area surrounding the tower is secure from unauthorized access, a grant of this application can be considered a minor environmental action 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.