

POWER DENSITY CALCULATION

WDVB-CD  
CHANNEL 22 – EDISON, NEW JERSEY

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Edison facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 15 kW, an antenna radiation center 300 meters above ground, and assuming a vertical relative field value of 40 percent at the steeper elevation angles for the proposed antenna, maximum power density two meters above ground of  $0.0018 \text{ mW/cm}^2$  is calculated to occur near the base of the Empire State Building. Since this is only 0.5 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), a grant of this proposal may be considered a minor environmental action with respect to public exposure to non-ionizing electromagnetic radiation.

In addition, this office performs quarterly power density surveys of the 81<sup>st</sup> Floor parapet of the Empire State Building in order to ensure ongoing compliance with the Commission's RF human exposure standards.

Further, the station owner takes 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 non-ionizing radiation.