

POWER DENSITY CALCULATION

PROPOSED WKOI-DT  
CHANNEL 39 – RICHMOND, INDIANA

[MODIFICATION OF BPCDT-19990601KF]

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Richmond facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 500 kw, an effective antenna height of 270 meters above ground, and the elevation pattern of the Andrew antenna, maximum power density two meters above ground of  $0.0001 \text{ mw/cm}^2$  is calculated to occur 82 meters from the base of the tower. Since this is less than 0.1 percent of the  $0.41 \text{ mw/cm}^2$  reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 39 (620-626 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.