

POWER DENSITY CALCULATION

PROPOSED WNAB-DT
CHANNEL 23 – NASHVILLE, TENNESSEE

[MODIFICATION OF BPCDT-19991014ABF]

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Nashville facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 350 kw, an antenna height of 307 meters above ground, and assuming a vertical relative field value of 20 percent at the steeper elevation angles for the proposed Harris antenna, maximum power density two meters above ground of 0.0050 mw/cm² is calculated to occur near the base of the tower. Since this is only 1.4 percent of the 0.35 mw/cm² reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 23 (524-530 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.