

POWER DENSITY CALCULATION

PROPOSED KEYU-DT  
CHANNEL 31 – AMARILLO, TEXAS

[MODIFICATION OF BMPCDT-20040107ABA]

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Amarillo facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 700 kw, an effective antenna height of 294 meters above ground, and the vertical pattern of the SWR antenna, maximum power density two meters above ground of  $0.00010 \text{ mw/cm}^2$  is calculated to occur 549 meters southeast of the base of the tower. Since this is less than 0.1 percent of the  $0.38 \text{ mw/cm}^2$  reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 31, a grant of this proposal may 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.