

POWER DENSITY CALCULATION

PROPOSED KREM-DT
CHANNEL 20 – SPOKANE, WASHINGTON

[MODIFICATION OF BPCDT-19991028ABY]

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Spokane facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 893 kw, an effective antenna height of 242 meters above ground, and the vertical pattern of the Dielectric antenna, maximum power density two meters above ground of 0.0064 mw/cm^2 is calculated to occur 97 meters northwest of the base of the tower. Since this is only 1.9 percent of the 0.34 mw/cm^2 reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 20 (506-512 MHz), 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.