Site Selection & RF Energy Exposure
Unimas Partnership of San Antonio
KCOR-CD San Antonio, TX
Channel 27 15 kW-DA 148 m

This application proposes continued use of a self-supporting, multiple-use communications tower owned by nationwide tower lessor Crown Castle. No physical construction is proposed outside the existing transmitter building. Use of currently utilized, shared sites is environmentally preferred.

Operation on channel 27, with its center frequency of 551 MHz, implies a radiofrequency radiation exposure guideline value of 367 $\mu W/cm^2$ for the general population. The installed Dielectric TLP-12B/VP-R antenna has its radiation center 166.1 meters above ground level. The maximum downward radiation value, at depression angles greater than 15°, is 0.1, for both polarization. Vertically-polarized ERP is 30% of the horizontally-polarized value. Consequently, the worst-case predicted exposure level at 2 meters above ground level is 0.24 $\mu W/cm^2$. This exposure level is 0.07% of the guideline value, far below the "responsibility threshold" of 5%. Access to the site and tower base is restricted by fencing and marked by appropriate warning signs. The applicant recognizes its responsibility to reduce power or interrupt operation during tower work, to ensure safe working conditions for rigging personnel.

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