

Comprehensive Engineering Exhibit
Minor Change Application
KPAW Fort Collins, CO

By this minor change application KPAW Fort Collins, Colorado requests authority to use a formerly licensed main facility as an auxiliary facility. No change in location, elevation, frequency, or community is requested in this application.

This existing KPAW facility is located 158 meters above ground level on a tower identified by registration number 1024111. This tower is also shared by KSME, FID 17626, with its main antenna centered at 187 meters AGL.

The proposed facilities were evaluated in terms of potential radio frequency radiation exposure at ground level in accordance with OET Bulletin No. 65, "Evaluating Compliance With FCC-Specified Guidelines for Human Exposure to Radio frequency Radiation."

The antenna system is a Dielectric DCRM, 8- bay, full wave spaced antenna mounted with its center of radiation 158 meters above ground level, and will operate with an effective radiated power of 14 Kilowatts in both the horizontal and vertical planes.

For simplicity of analysis it has been assumed that all radiated power (114 kW) from this tower radiates from the antenna mounted closest to ground level (KPAW Aux). The micro-computer program FM Model was used to determine that at 2 meters above ground, at 46 meters from the base of the tower, this proposal will contribute a combined worst case, 21 microwatts per square centimeter, or 2.1 percent of the allowable ANSI limit for controlled exposure, and 10.5 percent of the allowable limit for uncontrolled exposure. It is therefore believed that this proposal is in compliance with OET Bulletin Number 65 as required by the Federal Communications Commission.

Further, the applicant will see that signs are posted in the vicinity of the tower, warning of potential radio frequency hazards at the site. The site itself is restricted from public access. The applicant will cooperate with other users of the tower to reduce power of the facility, or discontinue operation, as necessary to limit human exposure to levels less than specified by the Federal Communications Commission should anyone be required to climb the tower for maintenance or inspection.