

**Engineering Exhibit**  
**KPRR (FM) El Paso, TX (FID#68688)**  
**RF Radiation Compliance**  
**Auxiliary Antenna**

Although KPRR (FM) is not eligible to use the “RF Exposure Worksheet”, the auxiliary facility does comply with the FCC established guidelines regarding exposure to RF electromagnetic fields as described in OET Bulletin 65 Edition 97-01. The alternate method for showing compliance is described below.

**Facilities:**

The proposed KPRR (FM) auxiliary site is located on a mountain top (with an approximate elevation of 4250 feet) known as Upper Comanche Peak. The mountain has only one access road to the site with a locked rolling gate and fences on each side. On one side, the fence extends to the edge of a cliff, on the other side the fence extends up the side of the mountain. The gate is located approximately 1.93 kilometers from the site on a road to barricade any foot or vehicle access to this site.

The proposed KPRR auxiliary antenna is an ERI, SHPX-2AE-HW, 2 bay, .5 wave spaced antenna, operating at 10 kW ERP. This antenna will be mounted at 33 meters above ground level on the KHEY (FM) tower, described by ASR # 1041224. KHEY (FM) is licensed for 88 Kw ERP(H&V) and utilizes a 12 bay ERI Rototiller antenna, full wave spaced with beam tilt , with the center of radiation of 49 meters from ground level.

This is a common site with station KLAQ (FM) licensed for 88 kW ERP (H&V). Another tower with two TVs (KDBC & KINT TV) and two FM's (KINT & KISS FM) is located 60 meters away to the west from the base of the KHEY tower, and 21 meters to the south is a microwave tower.

**General Population / Uncontrolled Exposure:**

To determine the level of RF exposure, measurements were made on December 8<sup>th</sup> 2004 in all areas at the transmitter site and surrounding areas, whether or not they are accessible to the general public. A Narda survey meter model 8718B with an A8724D probe was utilized. The probe was calibrated in percent of limit for Occupational/Controlled Exposure for frequencies ranging from 300KHZ to 3.0 GHz. The “ Max Hold” setting was used to record the highest levels measured. Measurements were made at 2 meters above the ground while walking the entire area at the site and adjacent areas out to the edge of the mountain’s cliffs. The maximum RF exposure level measured .05% and was found at the road access gate located approximately 1.93 kilometers from the transmitter base. Using FM Model, at this distance it is predicted

that this level will continue to be well below the 20% limit for General Population/Uncontrolled Exposure. The locked gate and fences barricade any access to the controlled section of the mountain and RF warning signs are posted conspicuously. Therefore, KPRR (FM) does comply with OET Bulletin 65 Edition 97-01 with regard to General Population/Uncontrolled Exposure.

1

### **Occupational/Controlled Exposure:**

On December 8<sup>th</sup>, 2004, using the measurement methods described above the maximum RF exposure level measured 68.3% and was found at 21.3 meters from the tower base and decreased in level as the distance from the tower is increased. Assuming a worse case scenario, the addition of the KPRR auxiliary antenna will add an additional 6.2 percent of the Occupational/Controlled Exposure limit bringing the maximum RF exposure level to 74.5 percent. The maximum RF Exposure level inside the transmitter building was near the transfer switch and was measured at 16.41% of the Occupational/Controlled Exposure limit. Assuming the worst case scenario, the addition of the KPRR auxiliary antenna would increase the maximum RF Exposure level inside the building to 22.6 percent. RF radiation warning signs are conspicuously posted on the locked tower gate and fence. Therefore, the addition of the KPRR (FM) auxiliary antenna will also comply with OET Bulletin 65 Edition 97-01 with regard to Occupational/Controlled Exposure.

Gilbert Garcia  
Regional Vice President of Engineering  
Clear Channel Radio

2

