

RADIOFREQUENCY RADIATION IMPACT

The proposed facility will not result in human exposure to radiofrequency (RF) radiation in excess of safety standards specified in Section 1.1307(b). Effective October 15, 1997, the FCC adopted revised guidelines and procedures for evaluating the environmental effects of RF emissions. These revised guidelines incorporate two tiers of exposure limits based on whether exposure occurs in a "controlled" (occupational) situation of an "uncontrolled" (general population) situation. Based on the methods published in OET Bulletin No. 65 (entitled "Evaluating Compliance with FCC-Specified Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields"), the predicted power density value produced by the proposed facility will be well below the established ANSI guideline limits.

Verification of compliance with FCC-specified guidelines for human exposure to RF radiation was determined utilizing the equations and graphs set forth in OET Bulletin No. 65 and FMMODEL. The proposed auxiliary antenna (back-up antenna for KKSr(FM), KUJ(FM) and KEGX(FM)) are co-located on the same support structure with Radio Stations KJOX(AM) and licensed auxiliary facility of KIOK(FM). It is noteworthy that the proposed back-up antenna for KKSr(FM), KUJ(FM) and KEGX(FM) will not be for simultaneous operation, only one station will be operated at a time should it be necessary. Since only KJOX(AM), KIOK(FM) licensed auxiliary and one station of the proposed auxiliary facilities (either KKSr(FM) or KUJ(FM) or KEGX(FM)) will be operated simultaneously, this compliance statement will examine the worst case operation of KJOX(AM), KIOK(FM) auxiliary and one of the new proposed auxiliary stations operation into the antenna. Since this will be a multiple-user site, the combined contributions of the proposed facilities and others authorized at the site are considered.

KIOK(FM) Licensed Auxiliary Contribution

The proposed KIOK(FM) licensed auxiliary facility will operate with a radiation centerline at 22.9 meters above ground level (AGL) with an ERP of 4.6 kW on Channel 235 operating with dual polarization. The antenna is mounted on KJOX(AM), a single tower. The KIOK(FM) licensed auxiliary utilizes an Jampro JMPC-2, 2 bay antenna. Utilizing FMMODEL

and the methods prescribed by the EPA in the Gailey and Tell report, this antenna is classified as a "Double V" antenna. The highest value of power density occurs at 11.8 meters from the base of the tower which is 0.132 mW/cm² or **66% of the 0.2 mW/cm² MPE limit for uncontrolled/general exposures.** It is **13.2% of the 1.0 mW/cm² MPE for occupational/controlled areas.**

Proposed Single Station into New Auxiliary Antenna Contribution

The proposed new auxiliary of either KKS(FM) on Channel 239 with a non-directional effective radiated power of 1.5 kilowatts (H&V); or KEGX(FM) on 293 with a non-directional effective radiated power of 5.0 kilowatts (H&V); or KUJ(FM) Channel 256 with a non-directional effective radiated power of with 5.0 kilowatts (H&V) utilizing a BEXT TFC2K 4-bay circularly polarized antenna. The TFC2K will be mounted at 44 meters above ground level on the KJOX(AM) tower. Utilizing FMMODEL and the methods prescribed by the EPA in the Gailey and Tell report, this antenna is classified as a "Double V" antenna. The highest value of power density occurs at 16.32 meters from the base of the tower which is 0.0252 mW/cm² or **12.6% of the 0.2 mW/cm² MPE limit for uncontrolled/general exposures.** It is **2.52% of the 1.0 mW/cm² MPE for occupational/controlled areas.**

KJOX(AM) Contribution

KJOX(AM) operates with 1 kW day, 1.0 kW night, non-directional. The KJOX(AM) is presently surrounded by a marked fence, from its closest point; the fence is located 7.0 meters (23 feet) from the base of the tower. The minimum fencing distance for an AM station operating at 1.0 kilowatts is 3 meters. Presently, KJOX(FM) far exceeds the minimum fencing requirement. Assuming the worst case, that the maximum combined power densities for KIOK(FM) licensed auxiliary and one additional FM station operating into the new proposed auxiliary antenna were calculated, at 7 meters, the combined FM operations represent only 59.9% of the permitted level for uncontrolled exposure. The predicted total power density outside the 7 meter fence from the combined operations is only 78% of the limit; also well below the permitted level for uncontrolled exposure.

Based on FCC OET Bulletin 65 and the calculations conducted herein, it was determined that the existing KJOX(AM) fencing of 7.0 meters is sufficient to restrict the general public uncontrolled exposure. The predicted total power density outside of the fence from the combined operations will also be below the permitted level for uncontrolled exposure.

FENCING OF ENTIRE SITE

The fence around KJOX is a six foot cyclone fence with a locked gate. The gate is the closest point from the tower and is **125 feet (38 meters)** away from the tower to the East. On the North the closest point is **150 feet (45.7 meters)**. To the South and West the closest point is **160 feet (48.7 meters)**. In all cases the entire site exceeds the minimum fencing requirements and the fencing restricts casual and inadvertence access to the site thereby protecting the general public to excessive RF exposure. Warnings signs have been placed at appropriate locations on the fence surrounding the entire site.

OCCUPATIONAL SAFETY

The applicant will ensure protection to station personnel working in the vicinity of their antenna. Access to the antenna supporting tower base and/or inside the fenced area will be restricted to authorized personnel only. The applicant will reduce power or cease operation, when appropriate and deemed necessary, during times of service or maintenance of the transmitting system or when work is being performed on the tower and/or inside the fenced area to avoid potentially harmful exposure to station personnel or workers. The applicant will initiate joint procedures with common users to be followed during times of service or maintenance of the transmission systems when necessary to avoid potentially harmful exposure to personnel. Should the staff find it necessary to require RF measurements at the site to demonstrate further compliance, the applicant is committed to making a renewed showing of compliance and/or conducting RF measurements at the site.