



## **RF Radiation Compliance**

The proposed KRQZ will comply with OET Bulletin 65 Edition 97-01 with regard to General Population/Uncontrolled Exposure and Occupational/Controlled Exposure.

### **Facilities:**

The proposed facilities for KRQZ will be 4.0 kW ERP (Circular Polarized) and will utilize a 3 bay full wave spaced ERI LP-3E-DA antenna with the center of radiation located 37 meters above ground level. The antenna will be side mounted on a 55 meter guyed tower containing one other broadcasting station, KSNI-FM.

### **Prediction Method:**

Based on the formulas expressed in the OET Bulletin, No. 65, August 1997, "Evaluating Compliance with F.C.C. Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields", published by the Federal Communications Commission's office of Engineering and applying a combination of the element and array patterns as defined in E.P.A study PB85-245868 ("**Engineering Assessment of the Potential Impact of the Federal Radiation Protection Guidance on the AM, FM, and TV Broadcast Services**").

### **General Population / Uncontrolled Exposure:**

The highest calculated power density can be found at a distance of 19 meters from the tower base and 6 feet above the ground. This value is 20.45  $\mu\text{W}/\text{cm}^2$ . Based on a worse case scenario of an unprotected environment where the location could be accessible by the public, this amounts to 10.2% of the maximum permissible exposure in an "uncontrolled" environment.

### **Restricted Population / Controlled Exposure:**

The highest calculated power density can be found at a distance of 19 meters from the tower base and 6 feet above the ground. This value is 20.45  $\mu\text{W}/\text{cm}^2$ . Based on a worse case scenario of a protected environment where the location could be accessible by the public, this amounts to 2% of the maximum permissible exposure in a "controlled" environment.

The only other broadcaster located at this site is KSNI-FM. Based on the EPA report filed with their latest renewal; they predicted they contribute 27.9% of the General Population/Uncontrolled Exposure limit and 5.6% of the Restricted Population / Controlled Exposure. Thus combined with KRQZ the total amount of the General Population/Uncontrolled Exposure limit is 38.1% and the total amount of the Restricted Population / Controlled Exposure limit is 7.6%. Thus, KSNI-FM and KRQZ comply with OET Bulletin 65 Edition 97-01 with regard to the General Population/Uncontrolled Exposure and Restricted Population / Controlled Exposure limits at all accessible points on the site and surrounding areas.

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**Occupational / Controlled Exposure:**

**In regard to protecting persons having access to the site; should persons be required to work at the site where exposure would result in a non-ionizing radiation level greater than the Commission's maximum level; KRQZ will reduce power or cease operations as necessary to protect persons having access to the site, including the towers or antennas, from RF exposure in excess of FCC guidelines.**

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