

## **Radiofrequency Electromagnetic (RF) Measurements**

### **Background**

KQRI-FM1 has been constructed on an existing communications site known as “Sandia Crest” shared by a number of other broadcasters. On April 21, 2012, Don Davis, Technical Consultant for Educational Media Foundation, used a Narda Type 8718B measurement device with a Type A8742D “frequency shaped probe,” to evaluate radiofrequency exposure compliance at the KQRI-FM1 transmitter site.

### **Test Procedures**

In performing the measurements, Mr. Davis slowly walked from the base of the tower to approximately 100 meters from the tower along eight approximately equally-spaced radials, terrain permitting. As he walked, he slowly moved the probe between 2 and 8 feet above ground, and from side to side, seeking, and noting, the highest “overall” readings. In addition to the eight radials, Mr. Davis also investigated areas that appeared to have the potential for higher readings, including inside the transmitter building and the area immediately around the KQRI-FM1 tower. KQRI-FM1’s contribution to RF energy at the site was determined by taking the difference between peak values with KQRI-FM1 on and off.

### **Discussion**

As can be seen on the attached study form, the highest reading found from all facilities was 7.1% of the uncontrolled / public exposure limits of OET-65. KQRI-FM1 produced, in the maximum, a value of 4.4% of the uncontrolled/public exposure limits in the general direction of the main lobe of the directional antenna. These values are below the FCC limits for human exposure to RF fields. Therefore no fencing or warning signs are required.

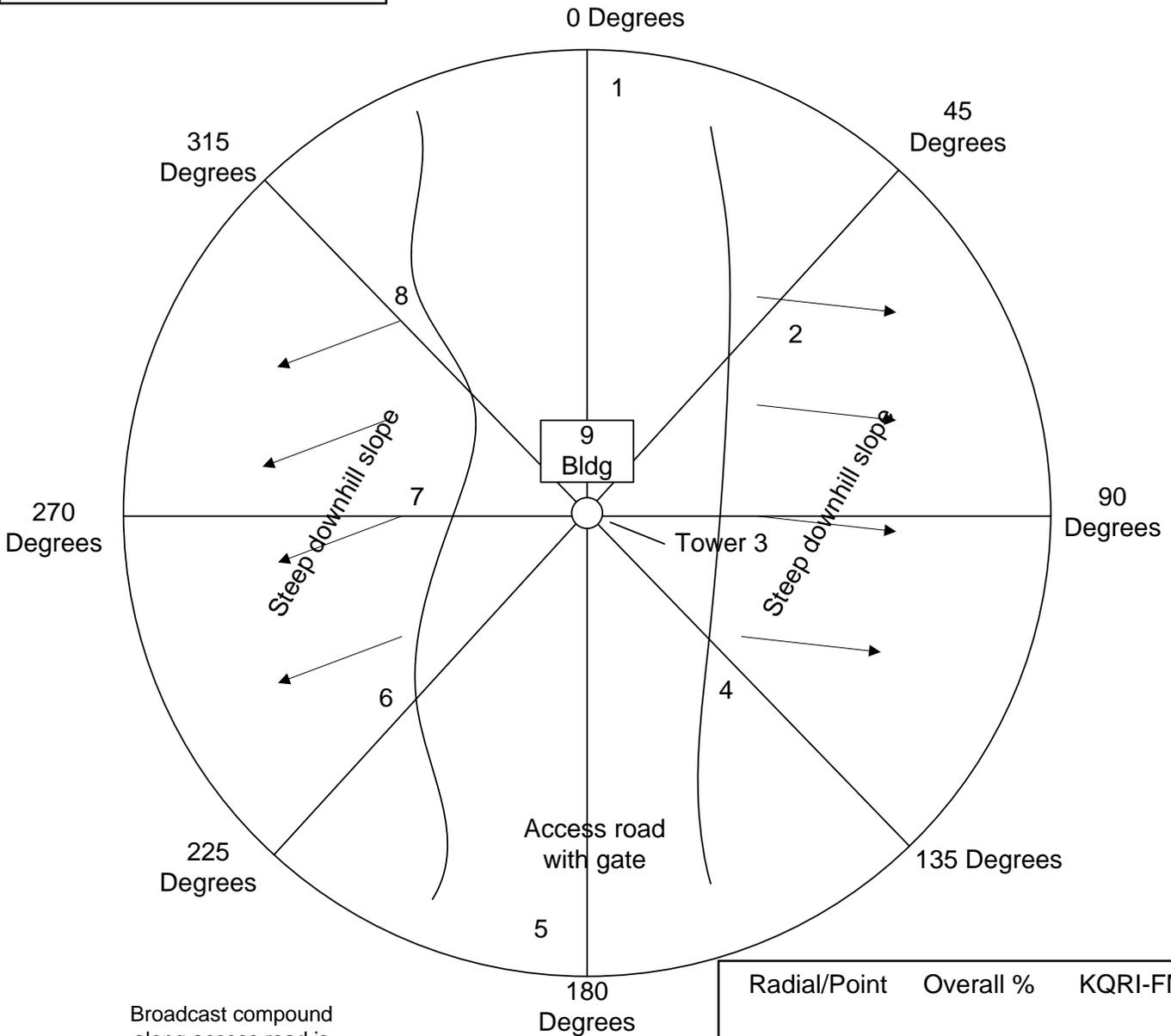
### **Conclusion**

The measurements indicate that both KQRI-FM1 and the other facilities in the vicinity comply with the radiofrequency exposure limits of OET-65. Therefore, EMF respectfully requests that the instant application be granted.

Date: 4/21/2012  
 Time : 1400 local  
 WX conditions: Clear  
 Readings taken by: Don Davis  
 Instrument Used:  
 Narda 8718B s/n 04103  
 w/ Probe A8742D s/n 02802  
 Cal date: 10/2002

## RFR Study Form

**105.5 KQRI-FM1 Albuquerque NM  
 (Sandia Crest Electronic Site)**



Broadcast compound  
 along access road is  
 fenced with access gate  
 to prevent public entry

**Not to Scale**

Radial/Point	Overall %	KQRI-FM1 %
1	7.1	4.4
2	2.6	1.2
3	4.5	1.6
4	1.5	0.4
5	2.1	0.8
6	2.0	0.6
7	3.5	1.8
8	5.3	3.7
9 in room	4.4	3.2

All readings shown in % of OET-65 uncontrolled/  
 public exposure levels