

**RF CERTIFICATION**  
**AND STATEMENT.**

The proposed antenna will be energized such that it produces 3.5 kW Max ERP, vertical & horizontal polarized, from the center of radiation of 30 meters above ground. The applicant will employ a seven (7) bay ERI antenna system. Based on the formulas expressed in 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 pattern 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"**). The highest calculated power density can be found at a distance of 8.28 meters from the tower. At this location the value is 16.201 Microwatts per square centimeter. Since the tower is fenced with a locked gate (inaccessible to the public) this value amounts to 1.6201 percent of the maximum for a "controlled" environment. In an uncontrolled environment, this amounts to 8.1003 percent of maximum. This proposal is in full compliance with all applicable FCC rules.

The proposed antenna system will be located on the same supporting structure as FM station WCGQ. This facility operates with a center of radiation of 228 meters AGL and an ERP of 100.0 kW utilizing a 10 bay circular polarized  $1.0\lambda$  antenna system. From this height and power the highest calculated power density, WCGQ contributes 3.3052 percent, worst case, of the permissible OET 65 guidelines.

Combining the RF hazard of all both stations, the sum renders a total of 4.9523 percent worst case (uncontrolled) hazard.

Should work be required on the supporting structure where exposure would be greater than the maximum allowed, the applicant would lower power or cease operation until the works is completed.

Clyde Scott, Jr.  
Consulting Engineer  
EME Communications