

## **RF CERTIFICATION AND STATEMENT**

The proposed antenna system will be energized such that it produces 22 kW ERP, from the center of radiation of 107 meters above ground. The applicant will employ a 4 bay Dielectric 1.0  $\lambda$  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 45.82 meters from the tower and two (2) meters above ground. At this location, the value is 14.25 Microwatts per square centimeter. Since the tower site is fenced with a locked gate, (inaccessible to the public) this value amounts to 1.425 percent of the maximum for a "controlled" environment. In an uncontrolled environment, a value of 7.13 percent of the maximum amount. This proposal is in full compliance with all Communications RFHaz3 program.

The proposed antenna system will be co-located on the same supporting structure as FM station WHNJ, WPIK, WMFM, WEOW and WAIL

WPIK operates at 125m AGL with an ERP of 50 Kw. The worst-case contribution is 6.093 Microwatts per square centimeter.

WHNJ operates at 140m AGL with an ERP of 12.5 Kw. The worst-case contribution is 3.696 Microwatts per square centimeter.

WMFM, WAIL and WEOW operates into a combined antenna system at 166m AGL with an ERP of 100 Kw each. The worst-case contribution is 2.238 Microwatts per square centimeter.

The combined worst case for all stations equals 28.896 Microwatts per square centimeter or 14.28 percent of maximum allowed. The proposed site fenced and locked and is in a remote area with no population within several meters of the site. Attached is a Google Earth showing.

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 work is completed.

Regarding compliance with the nationwide programmatic agreement and NHPA Section 106 for tower co-location, the applicant has been informed by the FCC staff that compliance with the agreement is not required when: 1) the supporting structure was constructed prior to March 16, 2001; and 2) no new tower construction is proposed; and 3) the tower is not being substantially altered. Specifically, compliance is NOT necessary

where an antenna and feed line are being attached to an existing structure. There is no change to the existing structure or antenna systems proposed with this action.

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