

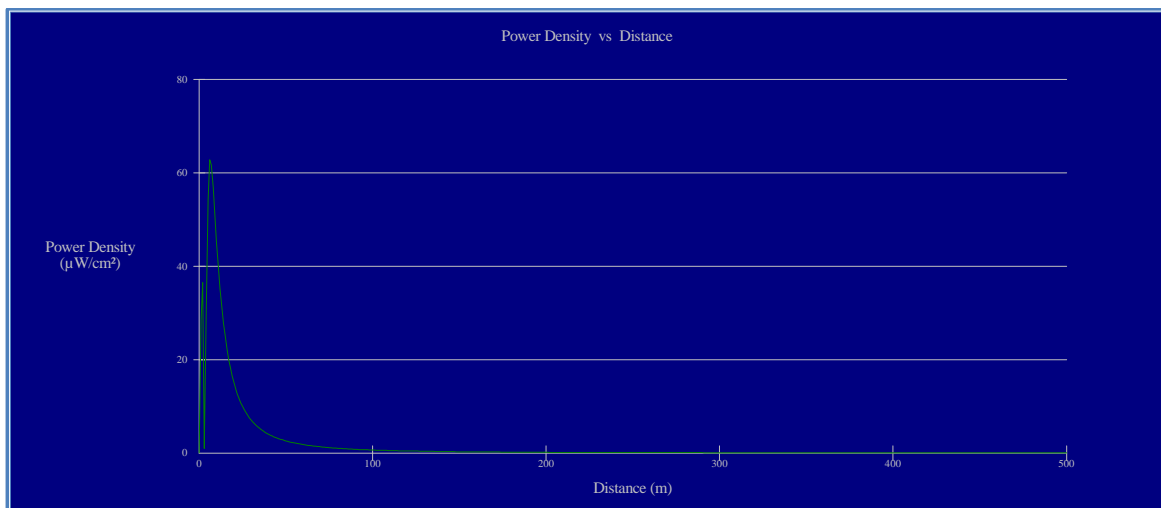
Environmental Protection Statement

An analysis of the proposed Northern Arizona University ("NAU") site was performed using the Commission's FM Model program. The proposed antenna is a three bay Shively 6812B. This antenna has a maximum ERP of 100.0 W horizontal and vertical polarization. The antenna is mounted at 13.6 meters above ground level on the top of the Northern Arizona University Communications building. The roof structure is 3.6 meters below the center of radiation of the antenna. The three bay antenna was analyzed using the following parameters.

Horizontally Polarized Radiation	100.0 W
Vertically Polarized Radiation	100.0 W
Distance from Center of Radiation to Roof	3.6 meters
Type of Antenna	6812B
Antenna Element Spacing	0.68 λ

The following Figure 1 was produced using the FCC FM Model:

Figure 1



Maximum Value: 62.8 $\mu\text{W}/\text{cm}^2$ at 6.0 meters.

This configuration produces a maximum of 62.8 microwatts per square centimeter at a distance of 6.0 meters from the base of the tower at roof level. This is 31.4% of the 200 microwatts per square centimeter allowed for uncontrolled exposure.

In the main lobe of the antenna, the maximum power radiated horizontally outward from the center of radiation of the FM antenna is 200.0 W (horizontal plus vertical polarization). There are no occupied structures in the main lobe of the antenna. The entrance to the roof will be clearly marked with non-ionizing radiation signs and all maintenance personnel clearly informed of the antenna location and hazard. The roof is not normally occupied and only maintenance personnel are allow on the roof. No occupied areas of the university receive electromagnetic exposure in excess of that allowed for uncontrolled environments. This includes all floors of the antenna support building.

The applicant certifies that it will reduce power or cease operation as necessary to protect persons having access to the site from radio frequency electromagnetic exposure in excess of FCC guidelines.

There is no tower construction. There is no change to the building or rooftop other than the mounting of the small LPFM antenna on an existing structure. This Northern Arizona University proposal has no significant environmental impact and complies with the maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments. Therefore, this proposal is excluded from environmental processing.

A handwritten signature in cursive script that reads "Charles F. Ellis".

Charles F. Ellis PE
Ellis Engineering
November 2, 2013