

EXHIBIT 16

The proposed facility has been analyzed with respect to OET Bulletin 65 Edition 97-01 regarding non-ionizing radiation. A plot of the predicted power density for the proposed operation was produced by the *FM Model for Windows* software provided by the Office of Engineering and Technology.

The Scala CL2-CP antenna proposed is effectively a pair of crossed dipoles with rear reflector elements to generate azimuthal directionality. As such, the EPA “dipole” antenna, a worst-case antenna in terms of downward radiation, was selected in the software. This model depicts the anticipated exposure levels to a person at ground level. The parameters used for this model are as follows:

Antenna Type:	Phelps-Dodge “Ring Stub” or Dipole (EPA)
Horizontal ERP:	250 watts
Vertical ERP:	250 watts
Antenna Height:	55 meters
Number of Elements:	1
Element Spacing:	1 wavelength (not applicable)

As demonstrated by the plot included in this exhibit, the power density at all locations at ground level are well below the maximum allowable exposure limit for uncontrolled (public) access areas of $200 \mu\text{W}/\text{cm}^2$. The power density maxima is $3.58 \mu\text{W}/\text{cm}^2$ at a distance of 14.4 meters horizontally from the base of the tower. This represents only 1.79% of the maximum allowable exposure limit for uncontrolled (public) access.

The tower site is protected by a locked chain-link fence to prevent trespassers from accessing the tower or translator equipment. The antenna tower and security fence is marked with signage warning that non-ionizing radiation in excess of the aforementioned limits may be

experienced at some locations on the tower. The signage also includes contact information and instructions to workers such that power may be removed from the antenna should a worker require access to areas of power density in excess of the controlled access limits.

Based on the analyses above, it is concluded that the proposed operation is in full compliance with non-ionizing radiation exposure limits.

The proposed facility will have no other significant environmental impact. The antenna tower is existing. The proposed location is not in a sensitive environmental area. The proposed facility does not require further environmental analysis under 47 CFR §1.1307 and is therefore excluded from environmental processing under 47 CFR §1.1306.

Temple University of the Commonwealth System of Higher Education
Minor Modification to Construction Permit for W297AT

Power Density versus Distance

