

Phoenix, AZ - KFLR-FM (Auxiliary FM)

Compliance with Radiofrequency Radiation Guidelines

The proposed facility complies with the maximum permissible radiofrequency electromagnetic exposure limits for restricted access, remote mountain top (controlled) environments as set forth under §1.1307(b)(3) of the Commission's rules and the guidelines for RF radiation protection guidelines as set forth in OET Bulletin No. 65 (Edition 97-01), and the accompanying Supplement A, (Edition 97-01). The restricted access, remote mountain top site is intended to house multiple transmitters, therefore the potential for human exposure to non-ionizing radiofrequency radiation has been evaluated with regard to the §1.1307(b)(3) "five percent (5%) contribution rule" utilizing the Commission's own FM Model web-based software application. The use and implementation of this FCC sanctioned software is a matter of record before the Commission.

With regard to the "five percent (5%) contribution rule" of §1.1307(b)(3), five percent (5%) of the maximum permissible $1000 \mu\text{W}/\text{cm}^2$ controlled limit yields a threshold value of $50 \mu\text{W}/\text{cm}^2$. Therefore, single contributions of $\leq 50 \mu\text{W}/\text{cm}^2$ remain within the tolerances as allowed by §1.1307(b)(3) and its governing OET Bulletin No. 65 (Edition 97-01) for restricted access, remote mountain top (controlled) environments such as this location; and as previously set by precedent under similar RF compliance showings for granted Construction Permit BPFT-20170717ABG regarding W298CA - Greenfield, MA (Facility ID: 25008).

The proposed KFLR-FM.P - Phoenix, AZ analog FM Auxiliary (Facility ID: 20638) will operate on CH212C (90.3 MHz) with 1.2 kW ERP circular polarization (H&V). This facility will broadcast from an antenna COR mounted 26 meters above ground level (AGL). The radiating element has been identified as a BEXT model TFC2K, one-bay antenna employing a single EPA Type 2 "Opposed V Dipole" element as defined by the Commission's own FM Model - Appendix B (issued March 31, 2016). This auxiliary facility will not operate with HD/IBOC facilities at this time.

In this instance, the contribution has been calculated to be $38.2873 \mu\text{W}/\text{cm}^2$ or less than five percent (5%) of the maximum permissible $1000 \mu\text{W}/\text{cm}^2$ controlled limit for restricted access, remote mountain top (controlled) environments. Therefore, this single contribution remains within the tolerances as allowed by §1.1307(b)(3) and its governing OET Bulletin No. 65 (Edition 97-01) as outlined above.

The results of the evaluation for the FM station have been shown at the end of this RF compliance discussion. To ensure complete protection, the maximum FM contribution has been assumed without regard to any restricted access fencing distance. In addition, the facility is properly marked with signs. Entry is restricted by means of fencing with locked doors or gates. Furthermore, coordination with other users of the site will be secured to reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic fields in excess of FCC guidelines.

