

Change in KBTR-CD Authorized Facilities

Change in Directional Antenna:

The authorized PSI model PSIL12OI horizontally polarized omniodirectional antenna with no beam tilt was replaced with an Alive model ATC-BCE412M-V3-36 elliptically polarized omniodirectional antenna with 1 degree of electrical beam tilt. The relative field patterns are essentially identical and the antenna rotation (80 degrees) did not change. Therefore, it is believed that this change can be notified as part of the application for license.

RFR Compliance:

As the antenna polarization changed from horizontal to elliptical, an analysis of the potential radiofrequency radiation (RFR) exposure at ground level to workers and the general public was conducted. The radiation center for the proposed DTV antenna will be located 183 meters above ground level. The total DTV ERP is 19.5 kW (15 kW horizontal polarization, 4.5 kW vertical polarization). A worst-case vertical plane relative field value of 1.0 is presumed for the antenna's downward radiation in both the horizontal and vertical planes of polarization (for angles towards the base of the tower). The calculated power density at a point 2 meters above ground level is 19.89 uW/cm² which is 4.9% of the FCC's recommended limit of 403.3 uW/cm² for channel 36 for an uncontrolled environment. Therefore, based on the responsibility threshold of 5%, the proposal will comply with the RF emission rules.

Access to the transmitting site is restricted and appropriately marked with RFR warning signs. Furthermore, as this is a multi-user site, a formal RFR protection protocol is in effect in the event that workers or other authorized personnel enter the restricted area or climb the tower to ensure that appropriate measures will be taken to assure worker safety with respect to RFR exposure. Such measures include limiting the exposure time, wearing protective clothing, reducing power to an acceptable level or term