Environmental Effects

FM TRANSLATOR K245BH, Cowley, Etc., WY, FID # 71803

Western Inspirational Broadcasters, Inc. ("WIBI") certifies that FM Translator K245BH complies with the maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments.

WIBI used the V-Soft RFHAZ4 software program, to determine compliance for this site.

The facility employs a Scala CA5-FM (vertical polarization only) transmit array and is located at an existing communications site with other broadcast facilities nearby. The field strength of the translator's antenna varies with angle of depression from horizontal. Using the vertical elevation field data provided by the manufacturer for the calculations, the maximum K245BH contribution to the site is 13.498 μW/cm^2, which occurs 14 meters from the base of the tower and is 6.75 % of the worst-case uncontrolled (public) exposure limit of 200μW/cm^2.

Combined with relevant RFR generated by nearby FM broadcast facilities, this site results in a total of 13.498 uW/cm^2 (see table below) combined RF energy at 2 meters above ground level, 6.78 meters from the base of the supporting tower, or, 6.78 % of the "public" exposure limit. Signs warning of the presence of RF electromagnetic fields are posted.

CHANNEL	CALLS	H POWER (watts)	V POWER (watts)	HAG (meters)	EPA Antenna	RFR* (V-Soft RFHAZ4)	Proximity (meters)	Intersect Distance (m)
245	K245BH	0	250	9	Scala CA5-FM	13.498	n/a	n/a
218	K218ES	84	0	9	Scala HDCA-10	0.069	200	186
				TOTAL		**13.567**		

*microwatts/cm^2 at intersection with K245BH highest level

Based on this evaluation, the site radiates approximately 7% of the public (uncontrolled) exposure limit at 2 meters above ground level and therefore fully complies with the FCC's maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments.