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ENVIRONMENTAL AND RADIO FREQUENCY SAFETY

The licensee of WOAI-TV is committed to the protection of station personnel and/or tower contractors working in the vicinity of the WOAI-TV antenna, and is committed to reducing power or ceasing operation during times of maintenance of the transmission systems, when necessary, to ensure protection to personnel.

The predicted emissions of WOAI-TV must be considered, in addition to predicted emissions from any other proposed or existing stations at the site. For WOAI-TV, which will operate on television Channel 28 (554-560 MHZ), the MPE is 371.3 microwatts per centimeter squared ($\mu W/cm^2$) in an "uncontrolled" environment and 1,856.7 $\mu W/cm^2$ in a "controlled" environment. The proposed WOAI-TV facility will operate with a maximum ERP of 800 kW from an elliptically polarized non-directional transmitting antenna with a centerline height of 459 meters above ground level (AGL). Considering a conservative predicted vertical plane relative field factor of 0.300 the WOAI-TV facility is predicted to produce a power density at two meters above ground level of 23.03 $\mu W/cm^2$, which is 6.20% of the FCC guideline value for an "uncontrolled" environment, and 1.24% of the FCC's guideline value for "controlled" environments. There is one other full-power DTV station located at the WOAI-TV site. The total estimated percentage of the ANSI value at the proposed site, including the cumulative radiation from all authorizations located within the relevant proximity, is 12.95% of the limit applicable to "uncontrolled" environments, and 2.59% of the limit for "controlled" environments. (See Appendix A)

APPENDIX A

SUMMARY OF RADIOFREQUENCY RADIATION STUDY

WOAI-TV, San Antonio, Texas
CHANNEL 28, 800 kW ERP, 457 m HAAT
October, 2017

CALL	SERVICE	CHANNEL	FREQUENCY	POLARIZATION	ANTENNA HEIGHT ** mAGL	ERP (kW)	VERT. RELATIVE FIELD FACTOR	PREDICTED POWER DENSITY (mW/cm^2)	FCC UNCONTROLLED LIMIT (mW/cm^2)	PERCENT OF UNCONTROLLED LIMIT
WOAI-TV	DT	28	557	H & V	457	800.000	0.300	0.02303	0.371	6.20%
KENS	DT	29	563	H & V	440	816.000	0.300	0.02534	0.375	6.75%
								TOTAL PERCENTAGE OF ANSI VALUE=		12.95%

*** The antenna heights indicated above are 2 meters less than the actual antenna heights so that the predicted power densities consider the 2 meter human height allowance.*

This evaluation includes facilities collocated at the site, and facilities located within 315 meters.

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