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ENVIRONMENTAL AND RADIO FREQUENCY SAFETY

The licensee of WDBB is committed to the protection of station personnel and/or tower contractors working in the vicinity of the WDBB 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 WDBB must be considered, in addition to predicted emissions from any other proposed or existing stations at the site. For WDBB, which will operate on television Channel 14 (470-476 MHZ), the MPE is 315.33 microwatts per centimeter squared ($\mu W/cm^2$) in an "uncontrolled" environment and 1,576.7 $\mu W/cm^2$ in a "controlled" environment. The proposed WDBB facility will operate with a maximum ERP of 675 kW from an elliptically polarized directional transmitting antenna with a centerline height of 599.3 meters above ground level (AGL). Considering a conservative predicted vertical plane relative field factor of 0.300 the WDBB facility is predicted to produce a power density at two meters above ground level of 11.378 $\mu W/cm^2$, which is 3.61% of the FCC guideline value for an "uncontrolled" environment, and 0.722% of the FCC's guideline value for "controlled" environments. There are no other broadcast facilities located at the WDBB site. Therefore the total estimated percentage of the ANSI value at the proposed site is only that contributed by WDBB: 3.61% of the limit applicable to "uncontrolled" environments, and 0.722% of the limit for "controlled" environments. (See Appendix A)

SUMMARY OF RADIOFREQUENCY
RADIATION STUDY
WDBB, Bessemer, AL
Channel 14, 675 kW, 675 m HAAT
October, 2017

CALL	SERVICE	CHANNEL	FREQUENCY	POLAR-IZATION	ANTENNA HEIGHT	ERP (kW)	VERT. RELATIVE FIELD FACTOR	WORST-CASE PREDICTED POWER DENSITY ($\mu W/cm^2$)	FCC UNCONTROLLED LIMIT ($\mu W/cm^2$)	PERCENT OF UNCONTROLLED LIMIT
WDBB	DT	14	473	H & V	599.3	675.000	0.300	11.378	315.33	3.61%
								TOTAL PERCENTAGE OF FCC GUIDELINE VALUE =		3.61%

** For television stations a very conservative vertical relative field factor of 0.3 was assumed pursuant to OET Bulletin 65.*

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