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ENVIRONMENTAL AND RADIO FREQUENCY SAFETY

The licensee of KPTM is committed to the protection of station personnel and/or tower contractors working in the vicinity of the KPTM 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 KPTM must be considered, in addition to predicted emissions from any other proposed or existing stations at the site. For KPTM, which will operate on television Channel 26 (542-548 MHZ), the MPE is 363.33 microwatts per centimeter squared ($\mu W/cm^2$) in an "uncontrolled" environment and 1,816.7 $\mu W/cm^2$ in a "controlled" environment. The proposed KPTM facility will operate with a maximum ERP of 1000 kW from a horizontally polarized omni-directional transmitting antenna with a centerline height of 452.3 meters above ground level (AGL). Considering a conservative predicted vertical plane relative field factor of 0.300 the KPTM facility is predicted to produce a power density at two meters above ground level of 14.82 $\mu W/cm^2$, which is 4.08% of the FCC guideline value for an "uncontrolled" environment, and 0.816% of the FCC's guideline value for "controlled" environments. There is one other full-power DTV facility, three LPTV DTV facilities and one FM radio station that are located at the KPTM 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 20.04% of the limit applicable to "uncontrolled" environments, and 4.01% of the limit for "controlled" environments. (See Appendix A)

APPENDIX A

SUMMARY OF RADIOFREQUENCY
RADIATION STUDY
KPTM, Omaha, Nebraska
CHANNEL 26, 1000 kW ERP, 475 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
KVSS	FM	274	102.7	H & V	385.1	46.100	1.000	0.02077	0.200	10.39%
KBLI-LD	DT	31	575	H & V	148	2.000	0.300	0.00055	0.383	0.14%
KAJS-LD	DT	32	581	H & V	148	15.000	0.300	0.00412	0.387	1.06%
KQLD-LD	DT	34	593	H & V	148	6.000	0.300	0.00165	0.395	0.42%
KXVO	DT	29	563	H	450.3	1000.000	0.300	0.01482	0.375	3.95%
KPTM	DT	26	545	H	450.3	1000.000	0.300	0.01482	0.363	4.08%
								TOTAL PERCENTAGE OF ANSI VALUE=		20.04%

*** 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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