

Radiofrequency Radiation (RFR) Statement of Compliance

The proposed site is considered a multiple-use transmitter site. For a multiple-use site such as this, the percentage of the FCC guideline value each facility contributes must be determined, and the sum of the individual contributions must not exceed 100% of the FCC guideline value. The attached Table, entitled "Summary of Radiofrequency Radiation Study", shows the stations considered in the instant study and authorized technical facilities. As shown on the attached Table, the maximum cumulative predicted power density at the shared site represents only 67.4% of the FCC guideline value for "uncontrolled" environments.

Based on the calculations discussed above, the maximum cumulative predicted power density at the shared site is 13.5% of the FCC guideline value for "controlled" environments. The applicant will insure the protection of station personnel or tower contractors working in the vicinity of the proposed transmitting antenna. The applicant will reduce power and/or cease operation in cooperation with other site users during times of service or maintenance of the transmission systems as necessary to avoid potentially harmful exposure to personnel.

**SUMMARY OF RADIOFREQUENCY
RADIATION STUDY**
KOMO-TV, Seattle, WA
Channel 30, 1000 kW, 259 m HAAT
October, 2017

<u>CALL</u>	<u>SERVICE</u>	<u>CHANNEL</u>	<u>FREQUENCY</u>	<u>POLAR- IZATION</u>	<u>ANTENNA HEIGHT</u>	<u>ERP (kW)</u>	<u>VERT. RELATIVE FIELD FACTOR</u>	<u>WORST-CASE PREDICTED POWER DENSITY ($\mu\text{W}/\text{cm}^2$)</u>	<u>FCC UNCONTROLLED LIMIT ($\mu\text{W}/\text{cm}^2$)</u>	<u>PERCENT OF UNCONTROLLED LIMIT</u>
KUNS-TV*	DT	24	533	H	148	598.000	0.180	30.368	355.33	8.55%
KUNS-TV*	DT	24	533	V	148	300.000	0.180	15.235	355.33	4.29%
KOMO-TV*	DT	30	569	H	163	1000.000	0.120	18.560	379.33	4.89%
KOMO-TV*	DT	30	569	V	163	365.000	0.120	6.775	379.33	1.79%
KIRO-TV	DT	23	527	H	176	715.000	0.300	71.011	351.33	20.21%
KONG (App)	DT	31	575	H	127	1000.000	<note 1>	13.000	383.33	3.39%
KING-TV	DT	25	539	H	147.7	608.000	0.300	86.119	359.33	23.97%
KDMD-LD	DT	6	85	H	122	3.000	0.300	0.626	200.00	0.31%
TOTAL PERCENTAGE OF FCC GUIDELINE VALUE =										67.40%

* KUNS-TV and KOMO-TV are specifying elliptical polarization on their post repack channels. For these two stations, the horizontal and vertical effective radiated powers are included separately in the above table. In addition, a relative elevation pattern field factor of 0.18 and .012 are used to calculate the worst-case power density 2 meters above ground for KUNS-TV and KOMO-TV, respectively. Based on the proposed elevation pattern contained in each station's application for Construction Permit, the relative field factor specified for each station is not exceeded at any downward direction greater than 5 degrees below the horizon.

note1: The Engineering Statement contained in the KONG pending application for Construction Permit (FCC File No. BPCDT-20080617AEE) states that the maximum predicted power density, 2 meters above ground is 0.013 mW/cm². This value was used in the table above.

For all other stations listed in the table above, a very conservative elevation pattern relative field factor of 0.3 was assumed pursuant to OET Bulletin 65.