

SUMMARY OF RADIOFREQUENCY RADIATION STUDY

AUXILIARY-APP

May 8, 2019

<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>
AUXILIARY-APP	FM	<i>Frequency Agile</i>		H & V	80	7.200	note 1	2.593	200.00	1.30%
WTYB-MAIN	FM	280	103.9	H & V	102.6	0.000	note 2	0.000	200.00	0.00%
W245DD-CP	FM	245	96.9	H & V	75	0.250	1.000	3.135	200.00	1.57%
W289CL-CP-APP*	FM	289	105.7	H & V	68	0.250	1.000	3.835	200.00	1.92%

TOTAL PERCENTAGE OF FCC GUIDELINE VALUE = 4.78%

The proposed auxiliary antenna will be separately licensed for use as needed by either WTYB (103.9 MHz), WJCL-FM (96.5 MHz), WIXV (95.5 MHz), or WEAS-FM (93.1 MHz).

Only one station will be capable of using the auxiliary antenna at any given time. By definition, the colocated WTYB main antenna will be OFF during times the auxiliary antenna is used by WTYB.

* By separate application, the authorized antenna height for W289CL will be reduced by 40 feet (12.2 meters) to accommodate the proposed auxiliary antenna. For a worst-case RFR analysis, the lower W289CL antenna height is considered herein.

note 1: FM Model Antenna: EPA Type 2; Shively 6842, 4-bay, 0.5 wave spaced antenna,

note 2: FM Model Antenna: EPA Type 5; Dielectric DCR-M type, 6-bay, 0.85 wave spaced antenna,