

Site Selection and RF Energy Exposure

prepared 01/11/2019 for

Univision Atlanta LLC

WUVG-DT Athens, GA

Channel 18 1000 kW-DA 328 m

This application proposes continued use of a multiple-use communications tower owned by American Tower, located in the “antenna farm” in the Briarcliff district of Atlanta, GA. Use of currently utilized, shared sites in areas with similar structures is environmentally preferred. American Tower is installing a new wideband, multi-station antenna for shared use by WUVG-DT and other TV tenants at this site.

Operation on channel 18, with its center frequency of 497 MHz, implies a radiofrequency radiation exposure guideline value of $331 \mu\text{W}/\text{cm}^2$ for “uncontrolled” areas (the general population). The proposed RFS PEP70E antenna will have its radiation center 350.5 meters above ground level, with vertical ERP not exceeding 25% of horizontal ERP. The maximum downward radiation value, at depression angles greater than 35° , does not exceed 0.03 for either polarization. Consequently, the worst-case predicted exposure level at 2 meters above ground level will not exceed $0.31 \mu\text{W}/\text{cm}^2$. This exposure level is 0.09% of the guideline value, far below the “responsibility threshold” of 5%. Access to the site and tower base is restricted by fencing and marked by appropriate warning signs. A formal RFE exposure control protocol is in effect for on-tower work. The applicant recognizes its responsibility to reduce power or interrupt operation during tower work, to ensure safe working conditions for rigging personnel.



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