

FCC 301
Comprehensive Engineering Exhibit
WALC Charleston, SC
Facility ID # 72377

This application seeks to modify WALC, Charleston, SC to a location 132.6 meters above ground level upon a tower identified by registration number 1053895. This location is 137 meters above mean sea level, and 137 meters above average terrain.

The proposed operation is fully spaced Section 73.207 with the exception of WGTN-FM Andrews, SC. With respect to WGTN-FM, Section 73.215 (contour protection) processing is requested. Contour protection to WGTN is provided by use of a directional antenna. WGTN-FM is presently licensed Section 73.215, thus only the licensed facilities have been protected. A map demonstrating this protection is part of this exhibit.

The Proposed facilities were evaluated in terms of potential radio frequency radiation exposure at ground level in accordance with OET Bulletin No. 65, "Evaluating Compliance With FCC-Specified Guidelines for Human Exposure to Radio frequency Radiation." The proposed antenna system is a Dielectric DCRM, 6- bay, half-wave spaced, antenna, mounted with its center of radiation 132.6 meters above ground level, and will operate with an effective radiated power of 13.5 Kilowatts in both the horizontal and vertical planes. At 2 meters above ground, at the 235 meters from the base of the tower, this proposal will contribute worst case, 0.55 microwatts per square centimeter, or 0.06 percent of the allowable ANSI limit for controlled exposure, and 0.3 percent of the allowable limit for uncontrolled exposure. This figure is less than 5% of the applicable FCC exposure limit at all locations extending out from the base of the tower. Section 1.1307(b)(3) excludes applications when the calculated level is predicted to be less than 5% of the applicable exposure limit. It is therefore believed that this proposal is in compliance with OET Bulletin Number 65 as required by the Federal Communications Commission.

Further, the applicant will see that signs are posted in the vicinity of the tower, warning of potential radio frequency hazards at the site. The site itself is restricted from public access. The applicant will cooperate with other users of the tower to reduce power of the facility, or discontinue operation, as necessary to limit human exposure to levels less than specified by the Federal Communications Commission should anyone be required to climb the tower for maintenance or inspection.

73.215 Contour Protection Map

