

WSGC(FM) Auxiliary Permit Application Amendment

Human Exposure to Excess Levels of Radiofrequency Radiation Study

The proposed auxiliary facility will have a center of radiation of 44 meters (145 feet) with 625 watts at 105.3 MHz. According to OET 65, "Applicants and licensees should be able to calculate, based on considerations of frequency, power and antenna characteristics the distance from their transmitter where their signal produces an RF field equal to, or greater than, the 5% threshold limit.

As can be seen below the proposed facility's maximum contribution to RF on the site is 0.0029 mW/cm² at a distance of 42 meters from the antenna, approximately 2 meters above ground which is as close as a human would be to the antenna. This is 1.4% of the uncontrolled (public) exposure limit of .205 mw/cm².

The proposed tower for this auxiliary application is also the site of translator W259DH which operates with 250 watts with a center of radiation at 45 meters.

Considering worst case scenario of full radiation straight down, W259DH would contribute .0011 w/cm² at 2 meters above ground. The proposed auxiliary application would contribute .0029 mw/cm² at 2 meters above ground. The combined RF exposure would be approximately .0040 mw/cm². This is approximately 1.6% of the uncontrolled (public) exposure limit of .205 mw/cm².

All licensees will reduce power of the proposed translator as necessary for safe tower work within the parameters of OET 65.

Frequency of Operation : 105.3 MHz

Average Power at Antenna : 625 watts H 625 watts V

Distance from Antenna : 42 meters (138 feet)

Estimated Power Density : 0.0029 mW/cm²

Ground Reflections : No

Proposed	.0029 mw/cm ²
W259DH	.0011 mw/cm ²
Total	.0040 mw/cm ²