

GREG BEST CONSULTING, INC.

9223 N. Manning Avenue
Kansas City, MO 64157
816-792-2913

January 5, 2013

Federal Communications Commission
Media Bureau
445 12th Street SW
Washington, DC 20554

Dear Sir,

This will serve as the exhibit for the RF Radiation Hazard calculation for this proposed facility.

The RF radiation near the ground (2 meters above ground) can be calculated using the OET-65 formula for broadcast television stations taking into account the following factors

S= power density in watts per square meter

P= total Effective Radiated Power from the antenna

F= field radiated on the axis to the ground level

R= distance to the ground level (actually 2 meters above ground)

Therefore, given the following data for the proposed facility:

P= 0.80 kwatts

R=Radiation center above ground level – 2 meters)
= 10 meters

F= 0.1 for UHF antennas

The RF radiation near the ground level can be calculated with the following result:

2.73 $\mu\text{watts/cm}^2$

which is 0.70 % of the general population exposure limit of 391 $\mu\text{w/cm}^2$

Also located on the same tower or in the vicinity of the proposed location is the RF exposure contribution from KILM. Its RF exposure contribution is calculated below.

P= 1000 kwatts

R=Radiation center above ground level – 2 meters)
= 144 meters

F= 0.1 for UHF antennas

The RF radiation near the ground level can be calculated with the following result:


16.6 $\mu\text{watts/cm}^2$

which is 3.81 % of the general population exposure limit of $435 \mu\text{W}/\text{cm}^2$

The combined RF exposure contribution can be found by summing the percentages from each station. The total RF exposure amount is $3.81 + 0.70 = 4.51$ % of the allowable OET-65 limit for general population exposure.

Should you have any questions regarding this information please contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Gregory L. Best, PE". The signature is fluid and cursive, with the initials "PE" clearly visible at the end.

President