

# **GREG BEST CONSULTING, INC.**

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Federal Communications Commission  
Media Bureau  
445 12<sup>th</sup> 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:

P= 15 kwatts

R=Radiation center above ground level – 2 meters)  
= 90 meters

F= 0.1 for UHF antennas

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

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

which is 0.14 % of the general population exposure limit of 440  $\mu\text{w/cm}^2$  at this channel.

In addition to the proposed facilities, there is another source of RF radiation on this tower. In particular, radiation comes from WNDL. The contribution from this source is calculated below and then summed with the result from the proposed facilities to get the total RF exposure for this tower.

## **WNDL**

P= 3000 watts

R=Radiation center above ground level – 2 meters)  
= 89 meters

F= 0.2 for VHF antennas

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

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

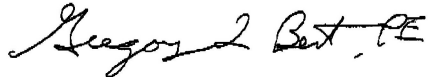
which is 0.13 % of the general population exposure limit of  $200 \mu\text{W}/\text{cm}^2$

**TOTAL RF EXPOSURE**

The total RF exposure can be obtained by summing the individual percentages. Thus the total RF exposure predicted is  $0.14 + 0.13 = 0.27$  % of the General Population Exposure limit.

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

Sincerely,

A handwritten signature in black ink that reads "Gregory L. Best, PE". The signature is written in a cursive style with a horizontal line extending from the end.

President