GREG BEST
CONSULTING, INC.
9223 N. Manning Avenue
Kansas City, MO 64157
816-792-2913

August 11, 2009

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= 15 kwatts

R=Radiation center above ground level – 2 meters)
= 211 meters

F= 0.1 for VHF antennas

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

0.11 μwatts/cm^2

which is 0.03 % of the general population exposure limit of 403 μw/cm^2 for this channel.

In addition to the proposed facilities, there are three other sources of RF radiation on the same tower. In particular, radiation comes from WVCY-DT, WMVT-DT and WMVS-DT. The contribution from these sources is calculated below and then summed with the RF radiation from proposed facility to get the total RF exposure for this tower.

WMVT-DT

P= 500 kwatts

R=Radiation center above ground level – 2 meters)
= 361.5 meters

F= 0.1 for UHF antennas

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

1.28 μwatts/cm^2

which is 0.32 % of the general population exposure limit of 400 μw/cm^2

WMVS-DT

P= 25 kwatts

R=Radiation center above ground level – 2 meters)
= 360 meters

F= 0.2 for VHF antennas

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

0.26 μwatts/cm^2

which is 0.13 % of the general population exposure limit of 200 μw/cm^2 for this channel

WVCY-DT

P= 196 kwatts

R=Radiation center above ground level – 2 meters)
= 292 meters

F= 0.1 for UHF antennas

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

0.77 μwatts/cm^2

which is 0.22 % of the general population exposure limit of 347 μw/cm^2

TOTAL RF EXPOSURE

The total RF exposure can be obtained by summing the individual percentages. Thus the total RF exposure predicted is 0.03 + 0.32 + 0.13 + 0.22 = 0.7 % of the General Population Exposure limit. This calculation indicates the RF exposure meets the OET-65 requirements.

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

Sincerely,

Gregory L Best, PE

President