



State Borders

## RADIO FREQUENCY RADIATION STUDY AND STATEMENT

THE 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 COMBINED WFSY(FM) – WPAP-FM AUXILIARY ANTENNA SYSTEM IS AN ERI SHPX ROTO-TILLER ANTENNA (EPA TYPE 3), WITH 4-ELEMENTS THAT ARE 1.03 WAVE SPACED AT THE WFSY FREQUENCY AND 0.97 WAVE SPACED AT THE WPAP-FM FREQUENCY, THE CENTER OF WHICH WILL BE MOUNTED 87 METERS ABOVE GROUND. FOR PURPOSES OF THIS ANALYSIS THE FM MODEL PROGRAM HAS BEEN SET TO CALCULATE VALUES FOR THIS TYPE OF ANTENNA ELEMENT AS A 4 ELEMENT ARRAY 1.0 WAVE SPACED, AND OPERATED WITH A COMBINED EFFECTIVE RADIATED POWER OF 2.4 KILOWATTS IN BOTH THE HORIZONTAL AND VERTICAL PLANES. AT 2 METERS ABOVE THE SURFACE, AT 35 METERS FROM THE BASE OF THE TOWER, THIS PROPOSAL WILL CONTRIBUTE WORST CASE, 1.93 MICROWATTS PER SQUARE CENTIMETER, OR 0.19 PERCENT OF THE ALLOWABLE ANSI LIMIT FOR CONTROLLED EXPOSURE, AND 0.97 PERCENT OF THE ALLOWABLE LIMIT FOR UNCONTROLLED EXPOSURE. THIS FIGURE IS LESS THAN 5 PERCENT 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.