

Engineering Exhibit
WKCG(FM)
Facility ID 68660
Minor Change Application
October 12, 2006

By this application it is sought to modify the facility of WKCG (FM) to specify a new antenna height and power at a location 0.53 km from the presently authorized location.

It is proposed that WKCG (FM) share the antenna of station WABK. This existing antenna is non-directional and is located 48 meters above ground level upon a tower identified by Antenna Structure Registration (ASR) number 1048652. From this location WKCG (FM) is fully spaced as a Class B facility in accordance with Section 73.207 to all known facilities, applications and allocations, with the exception of stations WYKR and WPOR. *Table 1* below is a spacing study for the proposed location. With respect to WYKR, spacing in accordance with 73.213(c) is proposed as the stations became short spaced as a result of changes in the Section 73.207 table, this proposal maintains existing protection to WYKR-FM as demonstrated in Figure 1. With respect to WPOR, the existing short spaced facilities are grandfathered as 3rd adjacent facilities with no spacing or contour overlap requirement.

The proposed 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." This proposal is to combine WKCG into the existing WABK Dielectric DCR-M6 antenna system, with element spacing of 0.8333 wavelengths at the WKCG frequency, mounted with its center of radiation 48 meters above ground level. This proposal will operate with an effective radiated power of 41 kilowatts in both the horizontal and vertical planes. At 2 meters above ground, at 22.8 meters from the base of the tower, this proposal will contribute worst case, 12.7 microwatts per square centimeter, or 1.27 percent of the allowable ANSI limit for controlled exposure, and 6.35 percent of the allowable limit for uncontrolled exposure. At the frequency of WABK the element spacing is 0.860 wavelengths, operating with an effective radiated power of 50 kilowatts in both the horizontal and vertical planes. At 2 meters above ground, at 25.2 meters from the base of the tower, this frequency will contribute worst case, 17.85 microwatts per square centimeter, or 1.78 percent of the allowable ANSI limit for controlled exposure, and 8.90 percent of the allowable limit for uncontrolled exposure. There are no known non-exempt radiators within 1 km of this site. 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 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.

Table 1

ComStudy 2.2 search of channel 267 (101.3 MHz Class B) at 44-18-36.0 N, 69-49-51.0 W.

Callsign	City	Chnl	ERP_w	Class	Status	Dist_km	Sep	Clr	Comments
WPOR	PORTLAND	270	33000	B	LIC	72.59	74	-1.4	73.213(a)
WTBM	MEXICO	264	850	C3	LIC	70.66	71	-0.3	Rounds out
WYKR-FM	HAVERHILL	267	3000	A	LIC	173.28	163	10.3	73.213(c)

Figure 1.

