

## **EXHIBIT 30**

### **ENVIRONMENTAL CONSIDERATIONS**

The applicant, Cartier Communications Inc., has replaced the WYUL(FM) broadcast directional antenna on the side of its existing supporting structure. The site is located off Teboville Road, near Malone, New York, FCC Structure Registration No. 1064217.

The supporting structure consists of a guyed steel tower 92.1 meters in overall height above ground. The antenna is a custom SWR, Inc., Model FM10/8 DA Dual Frequency RSL (reduced side lobe), eight-bay,  $\lambda/2$ -spaced, directional antenna system with the center of radiation 82.8 meters above ground. The maximum Effective Radiated Power ("ERP") is 50.0 kW horizontal and 49.0 kW vertical.

#### **I. RADIO FREQUENCY FIELDS**

In accordance with FCC rules, the worst-case power density in  $\text{mW}/\text{cm}^2$  has been calculated using equation three of Section 2 of the Office of Engineering & Technology Bulletin No. 65 entitled, *Evaluating Compliance With FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields*. Equation three has been reduced so the constant reflects both the factor 1.64 used to obtain ERP relative to EIRP and the factor 1000 for the number of milliwatts/watt. Further consideration includes the Environmental Protection Agency ("EPA") recommendation that a more realistic approximation should include ground reflection by assuming a maximum 1.6-fold increase in field strength or an increase in power density of  $1.6^2$  (2.56).

Based on recommendations of the American National Standards Institute ("ANSI"), Institute of Electrical and Electronics Engineers ("IEEE"), and the National Council on Radiation Protection and Measurements ("NCRP"), the Federal Communications Commission ("FCC") has established maximum permissible exposure ("MPE") limits. The limits are  $1.0 \text{ mW}/\text{cm}^2$  for occupational/controlled environments, averaged over any 6-minute period, and  $0.2 \text{ mW}/\text{cm}^2$  for general population/uncontrolled environments, averaged over any 30-minute period. These limits apply over the radio frequency band from 30 to 300 Megahertz.

In the aforementioned report, reference is made to studies conducted by the EPA in which a mathematical model of antenna behavior was developed to predict the required distance from the antenna radiation center to the bottom of the antenna

supporting structure so the FCC limit will not be exceeded anywhere on the ground. By interpolation of tabulated values in Supplement A to OET Bulletin 65, Section 2, Tables 5 and 6, it was determined that a maximum “worst case” distance of 110.0 meters would be required for a general population/uncontrolled area, and 45.2 for an occupational/controlled environment. These figures are for an eight-element dipole antenna with an effective radiated power of 99 kilowatts (the sum of horizontally- and vertically-polarized power). Typical “best case” distances are 28.2 and 18.3 meters, respectively, using modern, commercially-available antennas.

The following graph depicts the predicted power density two meters above ground as a function of horizontal distance from the base of the tower, based on the vertical radiation characteristics of the eight-element,  $\lambda/2$ -spaced antenna system. The figure shows that the facility will produce a power density that is well below the standards for both occupational/controlled and general public/uncontrolled environments.

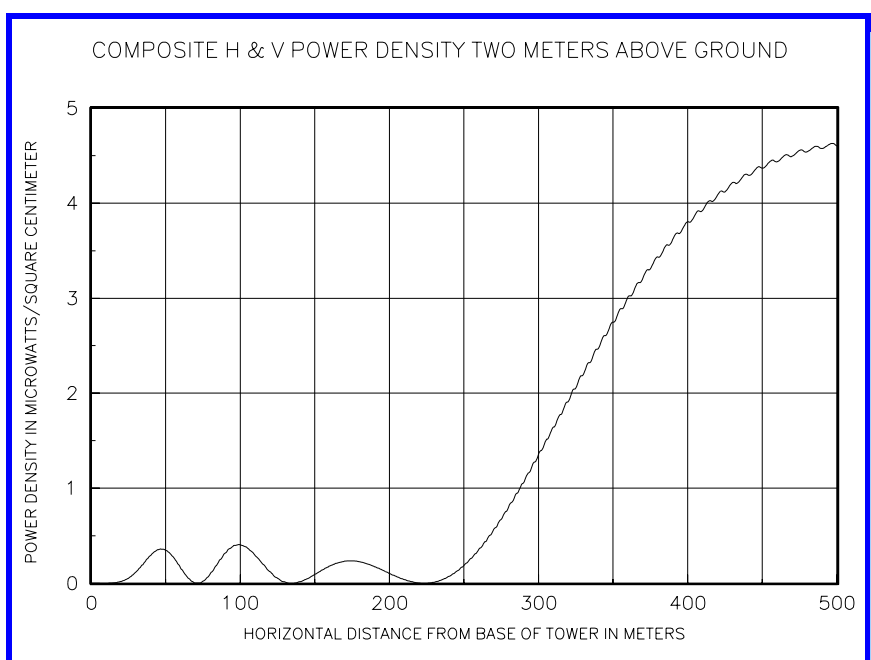


Figure 1

However, the antenna is in use also by diplexed station WVN(FM), which operates with maximum horizontal and vertical ERP levels of 15.0 kW and 14.7 kW, respectively. Thus, the effect of radiated fields from this facility has been considered also in the determination of compliance with the FCC standard.

The RF emissions produced by this facility were computed and added to the WYUL(FM) contribution. The composite results of these predictions appear graphically in figure two. In no case does the total emissions from the stations exceed the permissible occupational/controlled or general population/uncontrolled environment MPE limits near the ground about the tower.

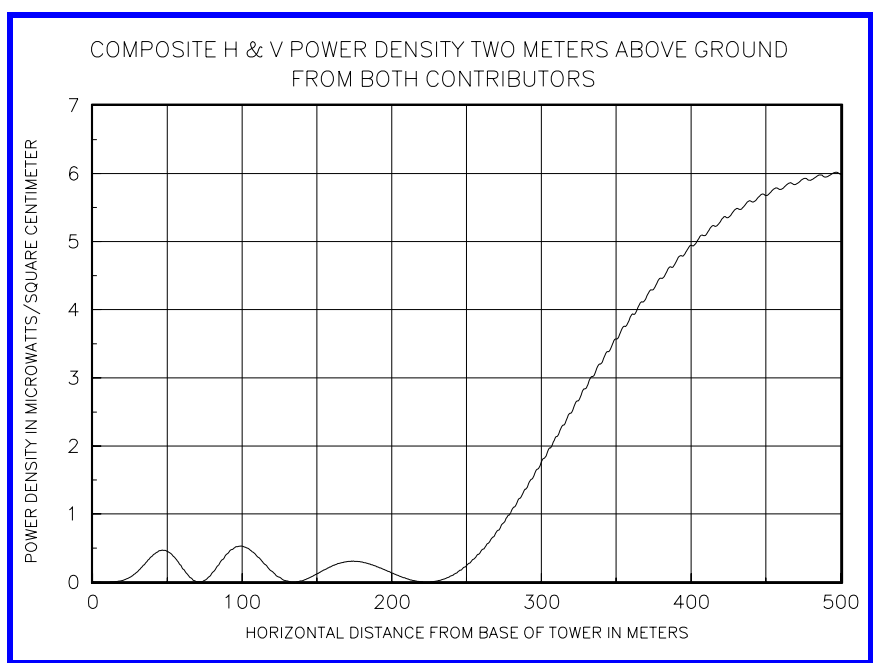


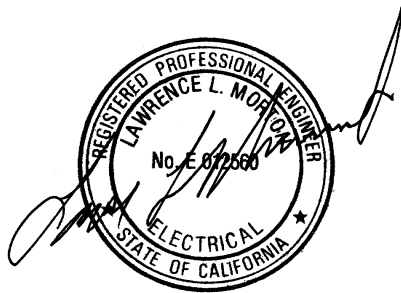
Figure 2

Protection to station workers and the general public is accomplished in two ways. First, the supporting structure is surrounded with a chain link fence and locked gate to discourage casual public access to the facilities. Furthermore, to warn the public of possible danger from radio frequency emissions, the facility is liberally marked around the tower with warning signs that comply with the ANSI standard C95.2-1982 Radio Frequency Radiation Hazard Warning Symbol. Second, when maintenance is performed on the antenna or supporting structure, the stations reduce power or cease operations completely as necessary until such work has been completed and the workers are no longer on the tower.

## **II. CONCLUSION**

Human exposure to radio frequency emissions will not exceed the maximum level established by the Federal Communications Commission based on predictions employing the vertical radiation characteristics of the SWR, Inc., eight-element,  $\lambda/2$ -spaced directional antenna system.

Therefore, it is concluded that the WYUL(FM) operation does not significantly affect the quality of the human environment and that an environmental assessment as described in Part 1, Subpart I, of the Commission's Rules is not required. Furthermore, the facility is not classified as having a significant impact upon the environment as defined in § 1.1305 and § 1.1307 of the Commission's Rules and Regulations.



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