

Exhibit 24 - Statement B
ENVIRONMENTAL CONSIDERATIONS
prepared for
Radio Communications Board,
Georgia Institute of Technology
WREK(FM) Atlanta, Georgia
Facility ID 54536
Ch. 216C1 100 kW (MAX-DA) 102 m

Nature of The Proposal

Radio Communications Board, Georgia Institute of Technology (“*Georgia Tech*”), licensee of WREK(FM), herein proposes to amend its Construction Permit¹ to show minor changes in the height and antenna pattern of the proposed directional antenna system. The proposed non-directional antenna will be side-mounted on an existing structure² with an overall height of 107 meters above ground.

The use of existing transmitting locations has been characterized as being environmentally preferable by the Commission, according to Note 1 of §1.1306 of the FCC Rules. Because no change in structure height is proposed, no change marking and lighting requirements is anticipated. Therefore, it is believed that this application may be categorically excluded from environmental processing pursuant to §1.1306 of the Commission’s rules.

Human Exposure to RF Electromagnetic Field

The proposed operation was evaluated for human exposure to radiofrequency energy using the procedures outlined in the Commission’s OET Bulletin No. 65 (“OET 65”). OET 65 describes a means of determining whether a proposed facility exceeds the radiofrequency exposure guidelines adopted in §1.1310. Under present Commission policy, a facility may be presumed to comply with the limits specified in §1.1310 if it satisfies the exposure criteria set forth in OET 65. Based upon that methodology, and as demonstrated in the following, the proposed transmitting system will comply with the cited adopted guidelines.

A maximum effective radiated power (“ERP”) of 100 kilowatts, circularly polarized, will be employed. *Georgia Tech* proposes to install the antenna such that its center of radiation is 83.3 meters above ground level. A number of publicly accessible buildings are located in the

¹ See BPED-20070907AFB.

² See FCC Antenna Structure Registration Number 1028279.

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immediate vicinity of the existing tower. According to information provided by the applicant, these buildings reach a height of 14.6 meters above ground. Therefore, calculations were made based on a distance of 68.7 meters to the top of the tallest nearby building.

Calculations were made pursuant to OET 65 to predict power density attributable to the proposed facility at locations two meters above ground level in the immediate vicinity of the tower (66.7 m distance from the antenna radiation center).

An Electronics Research 8-bay, full-wavelength spaced antenna is proposed, which has a maximum relative field value of 0.31 between 10 and 90 degrees below the horizontal. This relative field value was used for all calculations. The “uncontrolled/general population” limit specified in §1.1310 for the FM Band is 200 $\mu\text{W}/\text{cm}^2$.

The formula used for calculating FM signal density in this analysis is essentially the same as equation (9) in OET-65.

$$S = (33.4098) (F^2) (ERP) / D^2$$

Where:

<i>S</i>	=	power density in microwatts/cm ²
<i>ERP</i>	=	total (average) ERP in Watts
<i>F</i>	=	relative field factor
<i>D</i>	=	distance in meters

Using this formula, the proposed facility would contribute a worst-case power density of 144.3 $\mu\text{W}/\text{cm}^2$ or 72.2 percent of the general population/uncontrolled limit. At ground level locations even farther away from the base of the tower, the calculated RF power density is even lower, due to the increasing distance from the transmitting antenna. According to data retrieved from the FCC’s Engineering Database, there are no other non-exempt emitters in the vicinity of the proposed facility.

Safety of Tower Workers and the General Public

As demonstrated herein, excessive levels of RF energy attributable to the proposal will not be caused at publicly accessible areas near the antenna supporting structure. Consequently,

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members of the general public will not be exposed to RF levels in excess of the Commission's guidelines. Nevertheless, appropriate RF exposure warning signs will continue to be posted and access will continue to be restricted by fencing or other appropriate means.

With respect to worker safety, it is believed that based on the preceding analysis, excessive exposure will not occur at publicly accessible areas. A site exposure policy will continue to be employed to protect maintenance workers from excessive exposure when work must be performed on the tower or in areas where high RF levels may be present. Such protective measures may include, but will not be limited to, restriction of access to areas where levels in excess of the guidelines may be expected, power reduction, or the complete shutdown of facilities when work or inspections must be performed in areas where the exposure guidelines would otherwise be exceeded. On-site RF exposure measurements may also be undertaken to establish the bounds of safe working areas. The applicant will coordinate exposure procedures with any pertinent stations.

Based on the preceding, it is believed that the instant proposal may be categorically excluded from environmental processing under §1.1306 of the Rules.