RF HAZARD STATEMENT (DTS2)

TELEVISION STATION WEDW/WZME (DTS)
STAMFORD/BRIDGEPORT, CONNECTICUT
DTS2: CHANNEL 21, 175 KW (H), 70 KW (V), 428 M HAAT

This statement was prepared for television station WEDW/WZME (DTS), Stamford/Bridgeport, Connecticut (Channel 21) concerning an evaluation of compliance of its DTS2 transmitting antenna system with Section 1.1307(b) of the FCC Rules regarding human exposure to radio frequency (RF) energy.

The proposed facility will employ a new transmitting antenna to be mounted at the top of the spire mounted on the Empire State Building in New York. (See FCC Antenna Structure Registration No. 1007048). The Empire State Building supports the transmitting antennas of numerous broadcast and non-broadcast facilities.

The following table summarizes the technical details for the proposed DTS2 facility considered in this analysis:

Call Sign	Channel / Frequency	Average Effective Radiated Power (kW)	Antenna Radiation Center Height Above Ground (meters)	Transmitting Antenna Make and Model / Polarization
WEDW / WZME (DTS2)	21 / 512-518 MHz	175 (H), 70 (V), 245 (Total)	425.5	Dielectric, TFU-12EST/VP-R 3S180 / elliptical

The elevation pattern employed for the above listed antenna is included with the instant application for modification of construction permit, as amended.

The subject facilities were evaluated for RF exposure at 2-m above ground level (AGL) using the procedures outlined in OET Bulletin No. 65, *Evaluating*

Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields[*], with the following results:

Call Sign	Distance (m)	Assumed Antenna Downward Relative Field Factor[†]	Calculated Power Density ($\mu W/cm^2$)	Percent of GP/U MPE (%)
WEDW/WZME (DTS2)	425.5	0.15	1.03	**0.30**

As indicated above, the exposure to RF radiation at 2-m above ground level will not exceed 0.30% of the FCC limit for general population / uncontrolled exposure.

With respect to the building itself, the nearest uncontrolled area which is unshielded by the building structure is the 86th Floor. The radial distance from the antenna radiation center to the closest point on this floor is 109 m. The depression angle to the outer edge of the 86th Floor is greater than 80°. Power density calculations were conducted at 2-m above floor level based on the following conservative assumptions, with the following results:

Call Sign	Distance (m)	Assumed Antenna Downward Relative Field Factor[‡]	Calculated Power Density ($\mu W/cm^2$)	Percent of GP/U MPE (%)
WEDW/WZME (DTS2)	109	0.05	1.79	**0.52**

As indicated above, the exposure to RF radiation at 2-m above the 86th Floor level will not exceed 0.52% of the FCC limit for general population / uncontrolled exposure.

The management of the Empire State Building has established policies and procedures that strictly control access to certain areas of the building where there may be

[*] Federal Communications Commission, Office of Engineering and Technology, OET Bulletin No. 65, Edition 97-01, August, 1997.
[†] This is a conservative estimate of relative field factor at steep depression angles.
‡ This is a conservative estimate of the relative field factor for angles from 90° to 71° degrees below the horizontal.

RF exposure levels in excess of FCC limits. When RF levels exceed the FCC limits at certain locations, access to these locations is restricted. The strict work rules in place concerning access to certain areas of the Empire State Building shall continue; and the applicant shall cooperate in implementation of the work rules. Therefore, the proposed facility complies with the FCC limits for human exposure to RF energy and it is categorically excluded from environmental processing.