

DOCKET NO. 140 - An application of Metro Mobile CTS of New Haven, Inc., for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of cellular telephone antennas and associated equipment in the City of New Haven, Connecticut.

Connecticut  
Siting  
Council

April 1, 1991

OPINION

On November 13, 1990, Metro Mobile CTS of New Haven, Inc., (Metro Mobile), applied to the Connecticut Siting Council (Council) for a Certificate of Environmental Compatibility and Public Need (Certificate) to construct, operate, and maintain a cellular telecommunications facility consisting of antennas and associated equipment to provide increased domestic public cellular radio telecommunications service (cellular service) from an existing building in the City of New Haven, Connecticut.

The public need for cellular telephone facilities has been determined by the Federal Communications Commission (FCC) which pre-empts a determination of public need by state regulatory agencies. Under Connecticut law, the Council must balance the need to develop the proposed site as a cellular telephone facility with the need to protect the environment, including public health and safety.

In locating a proposed facility site, an applicant must determine if a new site or an existing structure to share is capable of providing the necessary coverage that would not have a disproportionate effect on the environment when compared to need, including scenic, historic, and recreation areas. Because Metro Mobile does not have the legal authority to obtain land through eminent domain, acquisition of a site requires consent of the property owners to lease or sell the property. These requirements restrict the number of potential facility sites within a defined search area.

The proposed site would operate as a secondary cellular facility located between existing primary cellular facilities in Hamden, North Haven, West Haven, and Branford. The proposed New Haven facility would provide additional call-handling capacity overlapping these existing cells for the continuous transfer of calls through the Hamden, North Haven, West Haven, East Haven, and Branford areas, thereby expanding service, improving signals, and decreasing interference and dropped calls.

The proposed equipment would be located in a room on the 11th floor of the Gateway Center Building, (Gateway), 54 Meadow Street, New Haven, Connecticut. Eight cellular telecommunications antennas consisting of two omnidirectional 76-inch high by two-inch in diameter whip signal processing transmit antennas and six 36-inch tall by 12-inch wide directional panel, radome receive/transmit antennas would be placed on the rooftop penthouse. The whip antennas would be installed about 12 feet apart on the penthouse roof and the panel antennas would be attached to the outside of the penthouse walls. All antennas would be located at a height of 157 feet above ground or 167 feet above mean sea level.

Metro Mobile considered 12 sites for the proposed facility, rejecting 11 as not acceptable for various reasons. Metro Mobile consulted with City of New Haven officials regarding the location and construction of the proposed New Haven facility. The City officials approved Metro Mobile's design for the proposed cell site and subsequently granted local construction permits, including Metro Mobile's Coastal Area Management Plan.

The most significant effect that might result from the proposed antennas would be from visibility. However, the proposed antennas would be difficult to see from nearby surrounding areas. Furthermore, the proposed whip antennas would be mounted adjacent to an existing flag pole which would rise approximately 34 feet taller than the whip antennas. The panel antennas would be installed no higher than the top of the parapet on the roof of the building. Visibility would be further reduced by painting the antennas a color to blend with the penthouse.

Electromagnetic radio frequency power density is a health and safety concern of the Council. However, the electromagnetic radio frequency power density from the proposed antennas, as measured at the center of the antennas and assuming all 90 channels were operating simultaneously at maximum allowable power, was calculated at 0.0536 milliwatts per square centimeter ( $\text{mW}/\text{cm}^2$ ), well below the American National Standards Institute (ANSI) safety standards of  $2.92 \text{ mW}/\text{cm}^2$ , as adopted by the State of Connecticut by Connecticut General Statute 22a-162. The power density would rapidly decrease as distance from the antenna increased. The distance from the nearest residence to the antennas is about 240 feet. The power density at that distance for maximum allowable output would be  $0.0219 \text{ mW}/\text{cm}^2$ . Due to the shielding effects of the building's structural composition, the power density from the center of the area not occupied by Metro Mobile on the uppermost floor (eleventh floor) of the building would be  $0.0002 \text{ mW}/\text{cm}^2$ .

No wetlands or water courses exist at the proposed site.

The proposed site would have no significant impact on rare or endangered species or areas of historical significance.

In addition, the Council finds that the installation of the facility in and upon an existing building would have much less environmental and visual effect than the construction of a new tower at any other location.

Based upon its record in this proceeding, the Council opines that the effects associated with the construction, operation, and maintenance of a cellular site and associated equipment at the proposed site, including the effects on the natural environment; ecological integrity and balance; public health and safety; scenic, historic, and recreational values; forests and parks; air and water purity; and fish and wildlife are not disproportionate either alone or cumulatively with other effects when compared to need, are not in conflict with the policies of the State concerning such effects, and are not sufficient reason to deny this application.

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