DOCKET NO. 130 - An application of Metro Mobile CTS of Fairfield County, Inc., for a Certificate of Environmental Compatibility and Public Need for the construction, operation, and maintenance of cellular telephone antennas and associated equipment in The City of Bridgeport, Connecticut.

Connecticut Siting Council

May 7, 1990

OPINION

On September 29, 1989, Metro Mobile CTS of Fairfield County, 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 cellular telephone service from an existing building in the City of Bridgeport, 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 tower to share is capable of providing the necessary coverage, would not have a substantial effect on the environment, and would be adequately distant from wetlands, public recreations areas, and adjacent homes. 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 three existing primary cellular facilities in Fairfield, Milford, and Trumbull, Connecticut. The future demand for cellular service is expected to exceed the call-handling capabilities of these three facilities in 1990. The proposed Bridgeport (East) facility would provide additional call-handling capacity overlapping these existing cells for the continuous transfer of calls through the Fairfield, Milford, and Trumbull areas, thereby expanding service, improving signals, and decreasing interference and dropped calls.

The proposed equipment would be located in a room on the fifth floor of the Remington Arms Shot Tower (RAST) building, 939 Barnum Avenue, Bridgeport. Eight cellular telecommunications antennas, consisting of two omnidirectional ten and one-half foot long by two and three-quarter inches in diameter, whip

signal processing transmit antennas and six 20 inches tall by ten and three-eighths inches wide and five inches deep directional panel receive/transmit antennas would be attached to roof-mounted support pipes inside an ornamental railing surrounding the roof area at a height of 154 feet above ground level or 174 feet above mean sea level. The whip antennas would be installed at least 12 feet apart and centered on the roof. Access to the building would be over an existing driveway and parking lot.

Metro Mobile considered five sites for the proposed facility, rejecting four as not acceptable for various reasons, including owners of an existing tall building unwilling to negotiate terms, inadequate call coverage from an existing building, no equipment room availability, and the need to erect a new tower structure on an existing building. Metro Mobile consulted with City of Bridgeport officials regarding potential facility sites. These city officials did not object to the use of the RAST building and recommended no alternate sites for the proposed facility.

The most significant affect 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 antenna which would rise approximately 20 feet taller than the whip antennas. The panel antennas would be installed no higher than four feet above the ornamental railing on the roof of the building. Visibility would be further reduced by painting the antennas a pale color to blend with the rooftop. Since the antennas would not be mounted on the ornamental railing, no reinforcement of the railing would be necessary.

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 street level at the base of the building 155 feet below the antennas and assuming all 90 channels were operating simultaneously at maximum allowable power, was calculated at 0.0526 milliwatts per square centimeter (mW/cm^2), well below the American National Standards Institute (ANSI) safety standard of 2.92 mW/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 230 feet. The power density at that distance for maximum allowable output would be 0.0239 mW/cm^2. Due to the shielding effects of the building's structural composition, the power density on the uppermost occupied floor (eighth floor) of the building would be 0.0003 mW/cm^2 at a distance of 25 feet directly below the antennas.

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.

The RAST building is listed in the Historic American Engineering Record Survey as possessing industrial significance. However, the State Historic Preservation office stated that the proposed facility would have no effect upon the industrial integrity of the building.

The Council has identified no adverse visual, health, or environmental impacts that would result from the installation and operation of the facility. The Council finds that the installation of the facility in and upon an existing building would have much less environmental and visual impact 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 significant either alone or culmulatively with other effects, are not in conflict with the policies of the State concerning such effects, and are not sufficient reason to deny this application, and therefore the Council will issue a Certificate for this proposed facility.

The Council will require a Development and Management (D&M) Plan for this site for approval prior to the commencement of any construction at the proposed Bridgeport (East) site. This D&M Plan shall include detailed plans for the attachment of the antenna structures to the rooftop showing mounting pipes and supports designed specifically for this site, modifications to the building for air conditioning venting and any other purpose, and the cable pathway from antennas to the equipment room.

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