



AN APPLICATION OF METRO MOBILE CTS OF FAIRFIELD COUNTY, INC., FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED FOR CELLULAR TELEPHONE ANTENNAS AND ASSOCIATED EQUIPMENT IN THE CITY OF DANBURY, CONNECTICUT.

: CONNECTICUT SITING : COUNCIL

: SEPTEMBER 10, 1987

FINDINGS OF FACT

- Metro Mobile CTS of Fairfield County, Inc. (Metro Mobile), in accordance with the provisions of Sections 16-50g to 16-50z of the Connecticut General Statutes (CGS), applied to the Connecticut Siting Council (Council) on June 5, 1987, for a Certificate of Environmental Compatibility and Public Need (Certificate) for the construction, operation, and maintenance of cellular telephone antennas and associated equipment to provide domestic public cellular radio telecommunications service (cellular service) in the City of Danbury, Connecticut, within the Bridgeport-Stamford-Norwalk-Danbury, Connecticut/New England County Metropolitan Area (Bridgeport NECMA). (Record)
- 2. The fee as prescribed by Section 16-50v-1 of the Regulations of State Agencies (RSA) accompanied the application. (Record)
- 3. The Council and its staff made an inspection of the proposed Danbury site on August 10, 1987. (Record)
- 4. Pursuant to Section 16-50m of the CGS, the Council, after giving due notice thereof, held a public hearing on this

- application in the Danbury City Hall,
 Danbury, Connecticut, beginning at 7:00 p.m. on
 August 10, 1987. (Record)
- 5. The parties in the proceeding are the applicant and those persons and organizations whose names are listed in the Decision and Order which accompanies these findings.

 (Record)
- 6. The Department of Environmental Protection (DEP) filed written comments with the Council pursuant to Section 16-50j of the CGS. (Record)
- 7. The Council took administrative notice of its record in dockets 40, 44, 45, 50, 56, 56B, 58, 62, 67, 69, 73, 75, and 77 in their entirety. (Metro Mobile 1, p. 5; Tr., p. 13)
- 8. Cellular service consists of small, overlapping broadcast regions, two to ten miles in diameter, known as cells.

 Each cell is served by a transmitter limited by the Federal Communications Commission (FCC) to no more than 100 watts effective radiated power per channel. Each cell is connected to a central switching point containing electronic apparatus uniting the cells into a system.

 Mobile units are limited by the FCC to a maximum of seven watts of effective radiated power. (Docket 77, finding 8)

- 9. The FCC requires that a licensee serve at least 75 percent of its licensed service area within three years of obtaining an original construction permit or risk losing the authorization. (Docket 77, finding 9)
- 10. Cellular service is a mobile telephone service. To date, the Department of Public Utility Control (DPUC) has regulated mobile telephone service. Eventually, cellular service could replace the less effective, existing simplex mobile service. The FCC has classified cellular service as a form of basic local exchange service. (Docket 77, finding 10)
- 11. The FCC has determined that a national public need exists to improve the present mobile telephone service, due to the current system's limited capacity, long waiting lists nationally, and poor quality service, which have created congested channels and long waiting times. (Docket 77, finding 11)
- 12. The FCC has established the technical standards for cellular service to ensure the efficient use of the allotted frequency spectrum and to ensure nationwide compatibility. (Docket 77, finding 12)
- 13. The FCC has pre-empted the state's regulation of cellular service in three major areas: technical standards, market

- structure, and state certification prior to federal application for a construction permit. (Docket 77, finding 13)
- 14. Applicants for FCC cellular system authorizations are not required to demonstrate a public need for cellular service, because the FCC has exercised its primary jurisdiction to determine that there is a need for cellular service generally and to encourage the development of cellular service nationwide. (Docket 77, finding 14)
- 15. The FCC has acknowledged state jurisdiction with respect to charges, classifications, practices, facilities, and services offered by licensed carriers. (Docket 77, finding 15)
- 16. According to FCC rules, two licenses are available for award in each NECMA to provide competition. One is initially awarded to a wireline company, the other to a non-wireline company. (Docket 77, finding 16)
- 17. The FCC defines a "reliable service contour" as an area having a signal quality greater than or equal to 39 dBu.

 The FCC requires 75 percent coverage of the cellular geographic service area. (Docket 77, finding 17)
- 18. The FCC requires Metro Mobile to cover at least 75 percent of the Bridgeport NECMA by January 28, 1988, in accordance

with its construction permit. The proposed Danbury site, along with sites previously approved in Greenwich,

Norwalk, Trumbull, Stamford, and Shelton, would provide coverage to approximately 84 percent of the Bridgeport

NECMA. Additional coverage of the NECMA would be provided by future cell sites. (Metro Mobile 1, Exhibit 1, pp. 8, 9)

- 19. Metro Mobile proposed to attach its cellular antennas to the roof of the existing 13-story Danbury Hospital building, on which solar panels are presently mounted. Six receive antennas and two transmit antennas are proposed. Each receive antenna would be approximately nine feet long, and each transmit antenna would be approximately 13 feet long. (Metro Mobile 1, p. 9, Tr., p. 14)
- 20. The proposed receive antennas would be mounted as follows: one on the north penthouse face near the northeast corner, one on the east penthouse face near the northeast corner, one on the east penthouse face near the southeast corner, one on the southern solar panel upper support bracket at the east end, one on the southern solar panel upper support bracket at the west end, and one on the west penthouse face at the northwest corner. (Metro Mobile 1, Exhibit No. 2, p. 8)

- 21. The two transmit antennas would be located on the center solar panel upper support bracket near the east penthouse face. (Metro Mobile 1, Exhibit No. 2, pp. 8, 9)
- 22. The Danbury Hospital is at 24 Hospital Avenue, Danbury, at an elevation of 436 feet above mean sea level at its base. The penthouse roof is 185 feet above ground level (AGL), and the upper support brackets of the solar panels are 202 feet AGL. The proposed site is zoned RH-3 residence. (Metro Mobile 1, Exhibit No. 2, pp.1, 15)
- 23. The cellular electronic equipment would be located within the hospital building. (Metro Mobile 1, p. 9)
- 24. The receive antennas on the solar panels would be visibile from the area south of the hospital where the solar panels are visible. The receive antennas on the north and west sides of the penthouse would be visible from the area north of the hospital where the penthouse is visible. The two receive antennas on the east side of the penthouse would be visible from areas east of the hospital where the penthouse is visible. (Metro Mobile 1, Exhibit No. 2, p. 9)
- 25. The two receive antennas and two transmit antennas on the southern solar panel upper support bracket would extend approximately nine feet and 13 feet above the top of the center and southern solar panels, respectively, and would

- be visible from areas east and south of the building. Ten antennas are currently mounted on the hospital. (Metro Mobile 1, Exhibit No. 2, p. 9; Metro Mobile Late File 2)
- 26. The electromagnetic radio frequency power density at the base of the hospital would be 0.00413 mW/cm2 at 100 watts with 12 channels broadcasting. This would be several orders of magnitude below the American National Standard Institute safety standard for the proposed frequency.

 (Metro Mobile 1, Exhibit No. 2, p. 8; Docket 77, finding 26)
- 27. The proposed site would provide cellular coverage to

 Danbury and to Route I-84 and Route 7 in the area. The

 site would overlap with sites planned for Newtown and

 southerly along Rt. 7. (Metro Mobile 1, Exhibit No. 2,

 p. 16; Tr., pp. 19, 20)
- 28. Metro Mobile investigated and rejected 30 other potential cellular antenna sites in the Danbury area. These sites were rejected for insufficient size, lack of interest by property owners, and inadequate coverage. (Metro Mobile 1, Attachment 2, pp. 1-4)
- 29. Through its initial narrowing process, Metro Mobile identified the Danbury Hospital building as a potential antenna site, due to its location on a hill and the height

- of the building. No similar buildings were found within the search area. (Metro Mobile 1, Exhibit No. 1, p. 12)
- 30. The State Historic Preservation Officer has determined that the mounting of antennas on the roof of the Danbury Hospital would have no effect on historic architectural resources listed on or eligible for the National Register of Historic Places. (Metro Mobile 1, Exhibit E, p. 14)
- 31. There are no known existing or historic records of species classified by the United States government as endangered or threatened, or of species classified by the State of Connecticut as being of special concern, occurring at the proposed site. (Metro Mobile 1, Exhibit E, p. 7)
- 32. Facility installation costs are estimated as follows:

Radio equipment \$333,176.00
Antennas 25,900.00
Standby power system 6,800.00
Miscellaneous costs, (including site preparation and installation) 27,500.00

Total \$393,376.00

(Metro Mobile 1, pp. 18, 19)

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