DOCKET NO. 89 - 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 Town Newtown, Connecticut.

: Siting

: Connecticut

: Council March 3, 1988

## FINDINGS OF FACT

- 1. 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 November 6, 1987, for a Certificate of Environmental Compatibility and Public Need (Certificate) for the construction, operation, and maintenance of a cellular telephone tower and associated equipment. The proposed facility would provide Domestic Public Cellular Radio Telecommunication Service (cellular service) in the Town of Newtown, Connecticut, within the Bridgeport, Connecticut New England County Metropolitan Area (Bridgeport NECMA). (Record)
- The fee as prescribed by Section 16-50v-1 of the Regulations of State Agencies (RSA) accompanied the application. (Record)
- 3. The application was accompanied by proof of service as required by Section 16-501 of the CGS. (Record)
- 4. The Council and its staff made an inspection of the proposed and alternative Newtown cell sites on January 4, 1988. To assess potential tower visibility, Metro Mobile flew balloons representative of the proposed tower heights at the proposed alternative sites. (Record)

- 5. Pursuant to Section 16-50m of the CGS, the Council, after giving due notice thereof, held a public hearing on this application in the Sandy Hook Fire House, Sandy Hook, Connecticut, on January 6, 1988 beginning at 1:00 P.M. and continuing at 6:30 P.M. (Record)
- 6. The Department of Environmental Protection (DEP) filed written comments with the Council pursuant to Section 16-50j of the CGS on December 30, 1987. (Record)
- 7. The Council took administrative notice of its record in Docket 88, Docket 90, of the Findings of Fact, Opinion, and Decision in Docket 75, and Docket 79, and FCC OST Bulletin 65, dated October 1985. (Record)
- 8. The parties to the proceedings are the applicant and those persons and organizations whose names are listed in the Decision and Order which accompanies these findings. (Record)
- 9. 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 79, finding 8)

- 10. 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 79, finding 9)
- 11. 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 79, finding 10)
- 12. 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 79, finding 11)
- 13. 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 79, finding 12)

- 14. 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 79, finding 13)
- 15. 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 79, finding 14)
- 16. The FCC has acknowledged state jurisdiction with respect to charges, classifications, practices, facilities, and services offered by licensed carriers. (Docket 79, finding 15)
- 17. 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 79, finding 16)
- 18. 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 79, finding 17)

- 19. In its search for a tower site in the Newtown area, Metro Mobile investigated 35 potential sites in the Newtown area. These were rejected for reasons including inadequate coverage, access problems, and unavailability. Metro Mobile investigated the use of state-owned property at the Fairfield Hills Hospital, but was informed no property was available. (Metro Mobile Late File 6; Metro Mobile 1, Attachment 1, pp. 1 4)
- 20. The proposed Newtown site is a leased parcel of land measuring approximately 32 feet by 90 feet in size, west of Commerce Road. The proposed site is 10 to 15 feet east of the bottom edge of the Consolidated Rail Corporation railroad tracks. (Metro Mobile 1, Exhibit 1, p. 4, p. 20)
- 21. The proposed Newtown site is zoned M-5, Industrial, and has an elevation of 380 feet above mean sea level (AMSL).
  (Metro Mobile 1, Exhibit 1, pp. 19 20)
- 22. The proposed site is owned by Alvaro Cortina. Access to this site would be over a 12-foot wide, 10-foot long drive to be constructed from Commerce Road. (Metro Mobile 1, Exhibit, p. 1, p. 19, p. 21)
- 23. The proposed Newtown site is near an industrial park. The Fairfield Hills Hospital is south of this proposed site.

  Land to the west of the proposed site is zoned residential. (Metro Mobile 1, Exhibit 1, p. 20)

- 24. There are approximately 30 residences within a 2,000-foot radius of the proposed site, the nearest of which is about 500 feet to the southwest. (Metro Mobile Late File 10, Exhibit 1, p. 5)
- 25. The proposed Newtown tower would be a 180-foot monopole, which would be a 193-foot structure, including antennas. The monopole would support two 15-foot omnidirectional antennas, base mounted 178 feet above ground level (AGL), and six 11.5-foot receive antennas side mounted below the top of the tower. Two triangular antenna arm platforms measuring 13.5 feet on a side would support the six receive antennas. (Metro Mobile Late File 10, Exhibit 1, pp. 16 -18)
- 26. About 40 to 60 feet of the proposed Newtown tower would be visible along Queen Street between Grand Place and Borough Lane. About 120 feet of the proposed tower would be visible from open areas of the Fairfield Hills Hospital to the south. The upper portion of the proposed tower would be visible from Commerce Road and from Route I-84 from Route 34 to Exit 10.

During the winter, more of the tower would be visible from these locations. (Metro Mobile Late File 10, Exhibit 1, p. 5)

- 27. Commerce Road and the Consolidated Rail Corporation rail tracks would be within the fall zone of the proposed

  Newtown tower. (Metro Mobile Late File 9, p. 1)
- 28. A single story, 21-foot by 22.5-foot electronics building would be constructed near the base of the proposed tower.

  Both the tower and equipment building would be surrounded by an eight foot chain link fence with 12-inch security wire on top. (Metro Mobile 1, p. 9; Metro Mobile Late File 10, Exhibit 1, p. 19)
- 29. The alternative Newtown site is a leased parcel of land measuring approximately 4,400 square feet, 300 feet north of Route 34 and 130 feet south of the Route I-84 exit ramp. The alternative site is owned by Carmine Renzulli. (Metro Mobile 1, Exhibit 1A, p. 1, p. 4)
- 30. The alternative Newtown site has an elevation of 350 feet AMSL, and is zoned B-3 Professional. (Metro Mobile 1, Exhibit 1A, p. 4)
- 31. Access into the alternative site would be via a 12-foot wide road from Route 34 to be constructed within an existing 25-foot wide vehicle access and utility easement. (Metro Mobile Late File 10, Exhibit 1A, p. 20)

- 32. There are approximately 20 residences within a 2,000-foot radius of the alternative site, within the closest being approximately 320 feet to the south. (Metro Mobile Late File 10, Exhibit 1A, p. 5)
- 33. The alternative Newtown tower would be a 180-foot monopole, which would be a 193-foot structure, including antennas. The monopole would support two 15-foot omnidirectional antennas, base mounted 178 feet AGL, and six 11.5-foot receive antennas side mounted below the top of the tower. Two triangular antenna arm platforms measuring 13.5 feet on a side would support the six receive antennas. (Metro Mobile Late File 10, Exhibit 1A, pp. 17 19)
- 34. A portion of the westbound Route I-84 entrance ramp would be within the fall zone of the alternative tower. (Metro Mobile Late File 9, p. 2)
- 35. A single story, 21-foot by 22.5-foot electronics building would be constructed near the base of the alternative tower. Both the tower and equipment building would be surrounded by an eight-foot chain link fence with security wire on top. (Metro Mobile 1, p. 9, Metro Mobile Late File 10, Exhibit 1A, p. 20)

- 36. The alternative Newtown tower would be visible from between exits 10 and 11 along Route I-84. Less than 30 feet of the tower would be visible from a small segment of Route 34 east of the exit 11 interchange. The monopole would not be visible from that portion of Route 34 north of Route I-84. (Metro Mobile Late File 10, Exhibit 1A, p. 5)
- 37. The proposed or alternative Newtown sites would provide coverage to Route I-84 in the Newtown area and would overlap with the existing Danbury site to the west and a proposed Southbury site to the east. (Metro Mobile 1, Exhibit 1, p. 29; Metro Mobile 1, Exhibit 1A, p. 30)
- 38. The eletromagnetic radio frequency power densities (power densites) would be 0.0278 mW/cm<sup>2</sup> for 64 channels broadcasting at 100 watts 180 feet AGL on both the proposed and alternative towers, based on conservative assumptions. (Metro Mobile Late File 10, Exhibit 1, p. 5; Metro Mobile Late File 10, Exhibit 1A, p. 5)
- 39. The expected power densities for the proposed and altlernative sites in this application would be several orders of magnitude below the American National Standards Institute level of 2.993 mW/cm<sup>2</sup> for the proposed frequencies. (FCC OST Bulletin No. 65, October 1985; Metro Mobile 1, pp. 21 22)

- 40. The State Historic Preservation Officer decided that the proposed and alternative Newtown tower sites would have no effect on historic, architectural, or archaeological resources listed on or eligible for the National Register of Historic Places. (Metro Mobile 3)
- 41. There are no known existing or historic records, of species classified by the United States government as endangered or threatened, or species classified by the State of Connecticut as being of special concern, occurring at the proposed or alternative Newtown sites.

  (Metro Mobile 1, Exhibit E, p. 4)
- 42. The proposed Newtown tower facility installation costs are estimated as follows:

| Radio equipment               | \$241,100.00; |
|-------------------------------|---------------|
| Tower and antennas            | 50,200.00;    |
| Power systems                 | 12,00.00;     |
| Equipment building            | 68,300.00;    |
| Miscellaneous (including site | 132,800.00;   |
| preparation and installation) |               |

Total \$504,400.00

(Metro Mobile Late File 10, Exhibit 1, p. 17)

44. The alternative Newtown tower facility installation costs are estimated as follows:

| Radio equipment               | \$241,100.00; |
|-------------------------------|---------------|
| Tower and antennas            | 50,200.00;    |
| Power systems                 | 12,000.00;    |
| Equipment building            | 68,300.00;    |
| Miscellaneous (including site | 157,800.00;   |
| preparation and installation) |               |
| Total                         | \$529,400.00  |

(Metro Mobile Late File 10, Exhibit 1A, p. 18)

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