

DOCKET NO. 93 - AN APPLICATION OF METRO : Connecticut
MOBILE CTS OF NEW HAVEN, INC., FOR A : Siting Council
CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY :
AND PUBLIC NEED FOR CELLULAR TELEPHONE :
ANTENNAS AND ASSOCIATED EQUIPMENT IN THE : April 27, 1988
CITY OF MERIDEN, CONNECTICUT.

FINDINGS OF FACT

1. Metro Mobile CTS of New Haven, 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 January 19, 1988, 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 Meriden, Connecticut, in the New Haven, Connecticut, New England County Metropolitan Area. (New Haven NECMA). (Record)
2. The fee as prescribed by Section 16-50v-1a of the Regulations of State Agencies (RSA) accompanied the application. (Record)
3. The Council and its staff made an inspection of the proposed Meriden site on March 14, 1988. (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 Meriden Public Library, Meriden, Connecticut, beginning at 6:45 P.M. on March 14, 1988. (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. 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)

8. Conventional mobile telephone service has long been limited by insufficient frequency availability, inefficient use of available frequency, and poor quality of service. These limitations have resulted in congestion, blocking of transmission, interference, a lack of coverage, and high costs. (Metro Mobile 1, p. 6)
9. In 1981 the FCC recognized the public need for technical improvement, wide area coverage, high quality service, and competitive pricing in mobile telephone service. (Metro Mobile 1, p. 6)
10. The FCC has determined that the public interest requires two licenses for cellular service be made available in each market area or NECMA. (Metro Mobile 1, p. 7)
11. Applicants for FCC cellular system authorizations are not required to demonstrate a public need for the service, since the FCC has pre-empted this issue through the exercise of this primary jurisdiction, and determined there is a need for such a service generally. (Metro Mobile 1, p. 7)
12. The FCC has pre-empted state regulation of technical standards to assure technical integrity of systems and nationwide compatibility. (Metro Mobile 1, p. 7)
13. The FCC exercises exclusive jurisdiction over cellular radio frequency interference, thus pre-empting state and local action in that area. (Metro Mobile 1, p. 7)
14. The FCC has authorized Metro Mobile and its affiliates to construct cellular systems in the Bridgeport, New Haven, and Hartford NECMAs. (Metro Mobile 1, p. 8)
15. In its search for a cellular site in the Meriden area, Metro Mobile considered and rejected 16 sites. A 125-foot existing tower near the proposed site, owned by the Southern New England Telephone Company (SNETCO) was rejected because SNETCO was unwilling to lease space on this tower. A 70-foot existing tower near the proposed site was rejected upon determination that this tower is structurally insufficient to support additional equipment. An existing 120-foot tower near the proposed site was rejected because the owner was unwilling to lease space on this tower. Metro Mobile investigated and rejected 13 other sites in the Meriden area. These sites were rejected for reasons including inadequate coverage, nearby residential development, or the necessity of constructing a new tower. (Metro Mobile 1, Attachment 2, pp. 1-2)

16. Metro Mobile proposes to attach its antennas to an existing 150-foot self-supporting lattice tower on West Peak in Meriden. Two 6 1/2-foot omnidirectional whip transmit antennas would be base-mounted on two three-foot sidearms and attached at the 79-foot level of this tower. Six 11 1/2-foot directional transmit/receive antennas with reflectors would be mounted on three six-foot sidearms attached at the 100-foot level of the tower. (Metro Mobile 1, p. 9; Tr., p. 10)
17. The tower on which the antennas would be mounted is owned by The Thomas Brothers Company. Property adjacent to the proposed site is owned by the Meriden Parks Department. (Metro Mobile 1, Exhibit 1, pp. 1-2)
18. The tower Metro Mobile would use currently supports a 45-foot FM monopole on the top, a beacon atop that, two bay directional antennas at the 167-foot level, and a 10-foot whip antenna at the 135-foot level. The overall height of the structure, including the FM antenna and beacon light, is 198 feet. This tower was built in 1977, and is expected to last at least another 20 years. (Metro Mobile 1, Exhibit 1, p. 4, p. 8; Metro Mobile 2, Q.4)
19. The proposed site has an elevation of 1020 feet above mean sea level and is zoned Rural Residential. (Metro Mobile 1, Exhibit 1, p. 10)
20. The tower Metro Mobile would use is presently lightly loaded. This tower could support cellular antennas additional to those proposed by Metro Mobile. Except for minimal spacing requirements between the transmit and receive antennas, there would be no problem with frequency interference by two cellular carriers sharing this tower. (Tr., pp. 18-19)
21. There are 18 existing towers currently on West Peak. Among the larger towers are a 125-foot SNETCO microwave tower, an 80-foot WKSS FM radio tower, a 150-foot WWYZ FM radio tower, a 120-foot tower used for paging service, an 80-foot WDRC FM radio tower, a 100-foot WHCN/WLVH FM radio tower, and a 70-foot Algonquin Gas Company microwave tower. The remaining towers are small mast towers. (Metro Mobile 1, Exhibit 1, p. 4; Metro Mobile 2, Q.1)

22. A 10-foot by 18-foot portion of the southeast corner of an existing 22-foot by 32-foot equipment building would be used for Metro Mobile's electronic equipment. A new 10-foot by 15-foot proposed building addition would house Metro Mobile's receiving, transmitting, switching, processing, and performance monitoring equipment. (Metro Mobile 1, Exhibit 1, pp. 9-10)
23. The existing tower base and a portion of the existing equipment building are surrounded by an eight-foot chain link fence. (Metro Mobile 1, p. 10; Tr., p. 10)
24. The coverage from the proposed site would overlap with the existing Wolcott, North Branford, Rocky Hill, and Portland sites, and a planned Middletown site. (Metro Mobile, 1 p. 12)
25. The proposed site would provide coverage primarily within the City of Meriden, the Town of Wallingford, and a portion of Cromwell. Routes covered would include portions of Routes I-84, I-91, and I-691, 5, 15, 10, 68, 70, and 72. (Metro Mobile 1, p. 12)
26. Coverage from the proposed site would fill-in most areas which would have been covered by a previously proposed and rejected site on Besek Mountain in Middlefield. (Metro Mobile 1, Riley testimony, p. 12)
27. Although the coverage from the proposed site would entirely overlap that from the existing Wolcott site, there are gaps within the proposed Meriden coverage area which would be filled by that of the existing Wolcott facility. (Metro Mobile 2, Q.2)
28. The location of the proposed Meriden site would not limit the location of a future Middletown site. (Tr., p. 20)
29. Because of the height above average terrain, the proposed facility's power output would be limited to less than 35 watts to prevent overlap of all areas that would be re-using the same channel frequencies. (Metro Mobile 1, Riley testimony, p. 12; Tr., p. 13)

30. The existing frequencies from antennas currently on West Peak would be compatible with those from the antennas proposed by Metro Mobile. (Metro Mobile 2, Q.3)
31. Based on conservative worst case assumptions, the electromagnetic radio frequency power density at the proposed site would be 0.1432 mW/cm². (Metro Mobile 1, Exhibit 1, p. 3)
32. There are no known existing populations of federally endangered and threatened species or Connecticut species of special concern occurring at the proposed site. Although nearby trap rock ridges constitute a critical habitat, this habitat does not extend to the proposed site within an antenna farm on West Peak. (Metro Mobile 1, p. 14; Metro Mobile 1, Exhibit E, p. 4)
33. The establishment of the proposed site would have no effect on historic, architectural, or archaeological resources listed on or eligible for the National Register of Historic Places. (Metro Mobile 1, Exhibit 3, p. 7)
34. Facility installation costs are estimated as follows:
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| Radio equipment | \$245,200.00 |
| Antennas | 15,200.00 |
| Power system | 12,000.00 |
| Equipment building | 20,000.00 |
| Miscellaneous costs (including site preparation and installtion) | <u>57,800.00</u> |
| TOTAL COST | \$350,200.00 |
- (Metro Mobile 1, Exhibit 1, p. 7)