

DOCKET NO. 114 - An application : Connecticut  
of SNET Cellular, Inc., for a :  
Certificate of Environmental : Siting  
Compatibility and Public Need : Council  
for a cellular telephone tower :  
and associated equipment in the :  
Town of Monroe, Connecticut. : January 16, 1990

FINDINGS OF FACT

1. SNET Cellular, Inc. (SNET), in accordance with provisions of sections 16-50g to 16-50z of the Connecticut General Statutes (CGS), applied to the Connecticut Siting Council (Council) on May 19, 1989, for a Certificate of Environmental Compatibility and Public Need (Certificate) for the construction, operation, and maintenance of a telecommunications tower, associated equipment, and building to provide domestic public cellular radio services (cellular services) in the town of Monroe within the Fairfield New England County Metropolitan Area (NECMA). (Record)
2. Affidavit of newspaper notice as required by section 16-50l of the CGS was supplied by the applicant. Newspaper notice of this application was published twice in The Bridgeport Post and Monroe Courier. (SNET 1, Section I, pp.5 and 6)
3. The Council and its staff inspected the proposed site in the Town of Monroe, Connecticut, on September 6, 1989. During the field review, SNET flew a balloon to simulate the height of the proposed tower. (Record)
4. Pursuant to section 16-50m of the CGS, the Council, after giving due notice thereof, held a public hearing on this application on September 6, 1989, beginning at 3:00 p.m. and continuing at 6:30 p.m. in the Monroe Town Hall Meeting Room, Monroe, Connecticut. (Record)
5. Pursuant to section 16-50m of the CGS, the Council, after giving due notice thereof, reopened the hearing on this application on November 30, 1989, beginning at 1:00 p.m. in the Monroe Town Hall Meeting Room, Monroe, Connecticut. (Record)
6. The parties to the proceeding are the applicant and those persons and organizations whose names are listed in the Decision and Order which accompanies these findings. (Record)
7. The Department of Environmental Protection (DEP) filed written comments with the Council pursuant to section 16-50j of the CGS. (Record)
8. In 1981, the Federal Communication Commission (FCC) recognized a national need for technical improvement, wide area coverage, high quality service, and competitive pricing in mobile telephone service. (SNET 1, Section III p.)
9. The FCC has determined that the public interest requires two licenses for cellular service be made available in each market of each NECMA. One license is awarded to a "wireline" carrier and the other to a "non-wireline" carrier. (SNET 1, p.3)

10. The FCC has pre-empted regulation of cellular systems in three major areas: standards to assure technical integrity and compatibility, market structure, and state certification prior to federal filing. (SNET 1, Section III, p.4)
11. Applicants for cellular licenses are not required to demonstrate a public need for cellular service as the FCC pre-empts this issue. (SNET 1, Section III, p.3)
12. 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 FCC to no more than 100 watts per channel with the proposed cell site operating a maximum of 45 channels. Each cell is connected to a central switching facility uniting the cells into a system. (SNET 1, Section II, pp. 2 and 3; SNET 1, Section VI, p.25)
13. The system design provides frequency reuse and handoff and would be capable of an orderly and compatible expansion. (SNET 1, Section II, p.6)
14. The proposed cellular site is planned to overlap coverage with SNET's existing cellular coverage from sites in Newtown, Southbury, and Bridgeport. (SNET 1, Section VI, p.32)
15. The coverage from the proposed Monroe tower site would include Routes 25, 58, 59, 110, and 111 within the towns of Monroe, Trumbull, Redding, and Easton. (SNET 1, Section VI, p.1)
16. SNET considered and rejected four sites in the Monroe area. Inability to lease space on the tower, low elevation, and inadequate coverage were reasons that these sites were not selected. (SNET 1, Section VI, pp.4-6)
17. The proposed site is on town-owned property which presently contains a 140-foot Housatonic Cable Vision Company (HCV) tower and equipment building. SNET considered and rejected this tower because HCV's lease with the town of Monroe would expire and at the time HCV did not want to enter into an agreement with SNET. (SNET 1, Section VI, p.4)
18. On May 19, 1989, SNET proposed a 180-foot tower and equipment building on the landfill, at an elevation of 646 feet above mean sea level (AMSL). On October 2, 1989, SNET withdrew this site and tower, and amended its application by proposing a 240-foot tower and associated equipment building on the town-owned property approximately 460 feet east of the originally proposed site, just off the edge of the landfill. (SNET Late File 7, Section VI, p.37 and Drawing 1)
19. The proposed site is a 200-foot by 200-foot parcel, 1,130 feet east of Guinea Road on an 18.7 acre site owned by the Town of Monroe. A portion of this property was formerly the Town of Monroe landfill. The western side of the leased parcel is on the eastern slope of the former landfill, but the proposed tower and building would be located approximately 50 feet from the edge of the former landfill. (SNET Late File 7, Section VI, p.39, Drawing 1)

20. The elevation of the proposed site is 586 feet AMSL and consists of a level, wooded area just east of the landfill. (SNET Late File 7, Section VI, p.39)
21. The increase in tower height from 180 feet to 240 feet was proposed because of the 60-foot decrease in ground elevation AMSL. Therefore, the signal propagation would be approximately the same for either site. (SNET Late File 7, Section VI, p.38)
22. SNET proposes to construct a 30-foot by 30-foot equipment building adjacent to the tower base, SNET would utilize 450 square feet of the proposed building while a similar size area would be available to other users. (SNET 1, Section V, p.1; SNET 3, Q.18)
23. An existing accessway would be used to enter the town property from Guinea Road. SNET would construct a new 860-foot access from the existing accessway, across the landfill, to the proposed tower site. (SNET Late File 7, Section VI, p.39)
24. Utilities would be in concrete encased conduits buried in the accessway. (SNET Late File 7, Section VI, p.40; Transcript pp.12 and 13)
25. Although SNET would apply to the DEP Solid Waste Management Unit for approval to construct an accessway across the landfill, SNET does not believe that the accessway or the tower site would disturb municipal solid waste buried within the landfill which would require approval from the DEP to alter the landfill. (SNET Late File 7, Section VI, p.40; Transcript p.18)
26. The proposed accessway and tower location would require the removal of approximately 12 trees of 8 to 14 inches in diameter. (SNET Late File 7, Section VI, p.48)
27. A small area of inland wetland soils, measuring 20 feet by 35 feet, was identified by a certified soil scientist within the leased parcel of the proposed site. The tower would not be within this inland wetland and construction of the proposed facility would not infringe upon the inland wetland soil area. (SNET Late File 7, Section VI, p.49; SNET 8, Q.29; Transcript pp. 15 and 26)
28. There are approximately five residences within a 1000-foot radius of the proposed tower. (SNET 2, Q.5; SNET Late File 7, Drawing 1)
29. The fall zone of the proposed tower would be on property owned by the Town of Monroe. The equipment building would be the only structure within the fall zone. (SNET Late File 7, Drawing 1)
30. Construction of the proposed tower would not interfere with any present or future transmission path used by HCV. The alternate tower would have to move approximately 170 feet north before it would interfere with the nearest transmission path of HCV. (SNET Late File 9, p.1)

31. A town-owned public radio station tower, WMNR, located at Stephen School in Monroe, is expected to be removed due to the expansion of the school. If the proposed tower were 20 feet higher, antennas at the top of the proposed tower could provide adequate broadcast coverage within the town for the radio station. (SNET 1, Section V, p.3, and Section VI, p.4; SNET 8, Q.29; Transcript dated 6 SEP 89, pp.67, 73 and 76; Transcript dated 30 NOV 89, p.22)
32. Reducing the height of the proposed tower by 20 feet would result in the loss of coverage for approximately two miles along Route 111, and small holes may occur along Routes 25, 59, and 111 possibly causing service interruptions during the foliated season. (SNET 3, Q.23)
33. SNET requested FAA approval for the proposed site on September 29, 1989. To date, SNET has not received any response from the FAA regarding the proposed tower. (SNET 8, Q.3)
34. Based on conservative assumptions, the worst case electromagnetic radio frequency power density level would be 0.05200 milliwatts per square centimeter (mW/cm<sup>2</sup>) at the base of the proposed tower. The American National Standards Institute (ANSI) safety standard for the proposed frequency level, as adopted by the State of Connecticut pursuant to DEP regulations, is 2.933 mW/cm<sup>2</sup>. (SNET Late File 7, Section VI, p.41)
35. A lattice tower was chosen because the town plans to develop the landfill area into a "communications park", and a lattice tower would provide more mounting flexibility of antennas. (SNET 2, Q.11)
36. The proposed site is in a RD-Residential and Farming District-D zone. (SNET Late File 7, Section VI, p.39)
37. On July 26, 1989, the Town of Monroe Planning and Zoning Commission approved a change in zoning regulations to allow communication site and facilities as permitted uses on the landfill property. (SNET 3, Q.24 and Attachment A)
38. The Monroe landfill is not in operation and has been closed since 1982. The town must seek closure approvals from the DEP for their solid waste disposal area. (SNET 2, Q.4; DEP comments dated August 17, 1989)
39. According to the Connecticut Historical Commission "the project will have no effect on historic, architectural, or archaeological resources listed on or eligible for the National Register of Historic Places." (SNET 3, Q.17)
40. The Department of Environmental Protection states "there are no known extant populations of federally endangered and threatened species or Connecticut 'species of special concern' occurring at the site in question." (SNET 3, Q.17)

41. The total estimated cost of construction for the alternate site is as follows:

1. Radio equipment	\$179,515
2. Antenna equipment and Tower	\$100,000
3. Power & Common equipment	\$171,570
4. Land & Building	\$300,000
5. Miscellaneous	\$ 77,700

Total Site Cost \$828,785  
(SNET Late File 7, Section VI, p.42)

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