

DOCKET NO. 90 - An application : Connecticut Siting  
of SNET Cellular, Inc., for :  
a Certificate of Environmental : Council  
Compatibility and Public Need  
for a cellular telephone antenna  
tower and associated equipment in :  
the Town of Southbury, Connecticut. : March 3, 1988

FINDINGS OF FACT

1. SNET Cellular, Inc. (SNET), in accordance with the provisions of Sections 16-50g through 16-50z of the Connecticut General Statutes (CGS), applied to the Connecticut Siting Council (Council) on November 13, 1987, for a Certificate of Environmental Compatibility and Public Need (Certificate) for the construction, operation, and maintenance of a cellular telephone antenna tower and associated equipment. The proposed facility would provide Domestic Public Cellular Radio Telecommunications Service (Cellular Service) in the Town of Southbury as an addition to the New Haven New England County Metropolitan Area (New Haven 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 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 Southbury tower sites on January 4, 1988. (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 Pomperaug High School on January 11, 1988, beginning at 2:30 p.m. and continuing at 6:30 p.m. (Record)
6. The parties in this proceeding are the applicant and those persons and organizations whose names listed in the Decision and Order which accompanies these findings. (Record)
7. The Council took administrative notice of its record in Docket 45, Docket 75, and FCC OST Bulletin 65, October 1985. (Tr., p.44)
8. The Department of Environmental Protection (DEP) filed written comments with the Council pursuant to Section 16-50j of the CGS on December 30, 1987, and the Department of Transportation filed written comments on February 1, 1988. (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 has a central switching point containing electronic units to a maximum of seven watts of transmitted power. (Docket 75, Finding 9)
10. Transmitters at the tower sites would broadcast in the frequency band of 880-890 MHz. (Docket 75, Finding 10)

11. Cellular service is an improved mobile telephone service. Prior to the introduction of cellular service, mobile telephone communication was provided by simplex mobile service, which was regulated by the Connecticut Department of Public Utility Control (DPUC). Eventually, cellular service will replace simplex mobile service. (Docket 75, Finding 12)
12. Nationally, a public need exists to improve the present mobile telephone service, due to the simplex system's limited capacity, congested channels and long waiting times. (Docket 75, Finding 13)
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 75, Finding 15)
14. The FCC has preempted the states' regulation of cellular and state certification prior to federal application for a construction permit. (Docket 75, Finding 16)
15. The FCC has reserved to the states jurisdiction with respect to charges, classifications, practices, services, facilities, and regulation of service by licensed carriers. (Docket 75, Finding 17)
16. According to FCC rules, there will be two licenses awarded in each NECMA to provide competition. One will be awarded to a wireline company, the other to a non-wireline applicant. (Docket 75, Finding 18)

17. SNET considered 15 sites in the Southbury area in its search for potential tower sites. These sites were rejected for reasons including inadequate coverage, access problems, or unavailability. (SNET 1, Section VI, pp. 3-9)
18. The proposed Southbury site is a 100-foot by 100-foot parcel of land 1,300 feet south of Horse Fence Hill Road. The proposed site is owned by Scott and Lynn Smith, and is zoned residential R-60. (SNET 1, Section VI, pp. 18-19)
19. Access into the proposed site would be over an existing dirt roadway 1,300 feet in length. A 350-foot extension of this roadway would have to be created to reach the proposed site. The proposed site has an elevation of 345 feet AMSL. (SNET 1, Section VI, p. 19)
20. The proposed Southbury tower would be a 150-foot monopole, which would be a 167-foot structure including antennas. The top of the mast would hold a triangular support structure to support antennas. This support structure is approximately ten feet wide. The omnidirectional whip antennas are twelve feet long and three inches in diameter. (SNET 1, Section V, pp. 2-3)
21. There are eight homes within a 1,000-foot radius of the proposed site. (SNET 2, Q. 2)
22. The fall zone of the proposed tower would include property owned by an adjacent landowner, Paraskewa Jakolew. No existing structures are within this fall zone. (SNET Late File 10)

23. In response to Council inquiries, SNET contacted the owner of the proposed site about moving the proposed site to a location to the west. The owner stated a preference for constructing the proposed tower at the original location. (SNET Late File 7)
24. The top 50 feet of the proposed Southbury tower would be visible from the intersection of Route 172 and Meadow Road. The top 75 feet of the proposed tower would be visible from the intersection of Route 172 and Main Street. Four homes along Horse Fence Hill Road would have a clear view of the upper portion of the proposed tower. It would also be visible to two homes along Flood Bridge Road, Route I-84, and from portions of Hollow Swamp Road. (SNET 2, Q. 4; DEP Comments, December 30, 1987; SNET 1, Section VII, p. 15)
25. The alternative Southbury tower site is a 100-foot by 100-foot parcel of land approximately 1,000 feet southwest of the proposed site, off of Horse Fence Hill Road. The alternative site is owned by Nina Shevzov. (SNET 1, Section VII, p. 1, p. 6)
26. The elevation of the alternative site is 374 feet AMSL. The alternative site is within an R-60 residential zone. (SNET 1, Section VII, p. 6)
27. A new 15-foot wide access roadway approximately 2,000 feet in length would have to be constructed through a heavily wooded area. The existing roadway which could be used as

an access to the proposed site could not be used to reach the alternative site, due to deed restrictions. (SNET 1, Section VII, p. 6; Tr., p. 40; SNET 2, Q. 5; SNET Late File 9)

28. A 400 to 500-foot section of the new access road into the alternative Southbury site would cross an inland wetlands classified as Ridgebury, Leicester, and Whitman extremely stony fine sandy loam. (SNET 2, Q. 3; Tr. p. 39; SNET Late File 9)
29. Construction of the alternative site would involve considerable more tree removal for access and clearing of the site. (SNET 1, Section VII, p. 14; DEP Comments, December 30, 1987, p. 2)
30. SNET would construct a 130-foot monopole at the alternative site. Due to higher elevation, the top of this tower would be approximately 10 feet higher than at the proposed site. (SNET 1, Section VII, p. 1)
31. The top 35 feet of the alternative Southbury tower would be visible from the intersection of Main Street and Route 172. The proposed tower platform might be visible through the trees from the intersection of Route 172 and Meadow Road. The alternative tower would also be visible to homes along Horse Fence Hill Road, Flood Bridge Road, and along adjacent portions of Route I-84. (SNET 2, Q. 4; DEP Comments, December 30, 1987; SNET 1, Section VII, p. 15)

32. There are four homes within a 1,000-foot radius of the alternative site. (SNET 2, Q. 2)
33. Both the proposed and alternative tower sites would contain a 21-foot by 24-foot equipment building. The tower and building would be surrounded by an eight-foot chain fence link fence. (SNET 1, Section V, pp. 1-2)
34. Utilities would be brought into the proposed Southbury site underground. An above ground pole line is proposed to bring utilities into the alternative site. (SNET 1, Section VI, p. 36; SNET 1, Section VII, p. 6)
35. Either of the sites in this application would provide cellular service along Routes 6, 25, 34, 67, 172, 188, and I-84 within the towns of Southbury, Newtown, Oxford, Middlebury, Woodbury, Danbury, and Brookfield. The Southbury site would overlap coverage with existing SNET sites in Waterbury and Newtown. (SNET 1, Section VI, pp. 1, 35; SNET Late File 6)
36. The electromagnetic radio frequency power density (power density) would be  $0.10002\text{mW}/\text{cm}^2$  at the base of the proposed Southbury tower, based on conservative assumptions. (SNET 1, Section VI, p. 28)
37. The power density would be  $0.13087\text{mW}/\text{cm}^2$  at the base of the alternative Southbury tower, based on conservative assumptions. (SNET 1, Section VII, p. 7)

38. The expected power density at either Southbury site would be several orders of magnitude below the American National Standards Institute safety standard of  $2.933\text{mW}/\text{cm}^2$  for the proposed frequencies. (FCC OST Bulletin 65; SNET 1, Section VI, p. 28; SNET 1, Section VII, p. 7)

39. The State Historic Preservation Officer decided that the proposed and alternative Southbury sites would have no effect on historic, architectural, or archaeological resources listed on or eligible for the National Register of Historic Places.

40. 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 Southbury sites. (SNET 1, Section VI, p. 25)

41. The proposed Southbury facility installation costs are estimated as follows:

Radio equipment . . . . .	\$137,000.00
Antenna equipment . . . . .	39,000.00
Power and common equipment . . . . .	152,000.00
Land, building, and mast . . . . .	203,000.00
Miscellaneous (including site prepara-	
tion and installation . . . . .	<u>55,717.00</u>
TOTAL	\$586,717.00

(SNET 1, Section VI, p. 29)



42. The alternative Southbury facility installation costs are estimated as follows:

Radio equipment . . . . .	\$137,000.00
Antenna equipment and mast . . . . .	38,000.00
Power and common equipment . . . . .	152,000.00
Land and building . . . . .	289,400.00
Miscellaneous (including site prepara- tion and installation . . . . .	<u>69,717.00</u>
TOTAL	\$686,117.00

(SNET Section VII, p.8)

0997E