

Docket No. 84 - An application of SNET Cellular, Inc., for a Certificate of Environmental Compatibility and Public Need for a cellular telephone antenna tower and associated equipment in the Town of Haddam, Connecticut. : Connecticut Siting Council : February 5, 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 on September 15, 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 in the Town of Haddam as an addition to the Hartford New England County Metropolitan Area (Hartford 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 Haddam tower site on December 2, 1987. (Record)  
To assess potential tower visibility, SNET flew a four-foot diameter meteorological balloon in early October 1987, and again during the Council field review on December 2, 1987. (Tr., pp. 16-17)

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 Haddam Town Hall, Haddam Connecticut, beginning at 6:30 p.m. on December 2, 1987. Mrs. Elizabeth Giurintano, an abutting property owner, spoke in opposition to the proposed tower. Before closing the hearing, the chairperson asked if anyone opposed closing the hearing, and there was no opposition. The hearing was closed by the chairperson at 7:44 p.m. the same evening. (Tr., pp. 24-36, 39-40)
6. The Department of Environmental Protection (DEP) filed written comments with the Council pursuant to Section 16-50j of the CGS on November 24, 1987. (Record)
7. The Council took administrative notice of its record in Docket 45, and of the document entitled "Evaluating Compliance with FCC-Specified Guidelines for Human Exposure to Radiofrequency Radiation," Office of Science and Technology, Bulletin No. 65, October 1985. (Record)
8. On October 28, 1987, SNET agreed to the Council's request to extend the decision deadline by not more than thirty days. (Record)
9. The Federal Communications Commission (FCC) has determined that a need exists to relieve congestion on conventional two-way radio systems throughout the United States. (SNET 1, Section IV, p. 10)
10. Cellular service consists of small overlapping broadcast regions, two to ten miles in diameter, known as cells. 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 45, Finding 11)

11. 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 45, Finding 24)
12. 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 45, Finding 25)
13. The FCC has pre-empted the states' regulation of cellular service in three major areas: technical standards, market structure, and state certification prior to federal application for a construction permit. (Docket 45, Finding 36)
14. The FCC has acknowledged state jurisdiction with respect to charges, classifications, practices, facilities, and services offered by licensed carriers. (Docket 45, Finding 37)
15. 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 nonwire line company. (Docket 45, Finding 38)
16. The FCC defines a "reliable service contour" as an area having a signal quality greater than or equal to 39

decibel units. This is the required method of estimating coverage for FCC permit applications. (Docket 45, Finding 39)

17. The proposed Haddam tower site is 450 feet west of Morris Hubbard Road, on property owned by Leone and Helen Baroni, 139 Morris Hubbard Road, Higganum, Connecticut. (SNET 1, Section VI, pp. 1, 5, 14)
18. The proposed site is a 40-foot by 150-foot parcel of land zoned Rural Residential (R-1), approximately 400 feet from the owner's residence. The elevation of the proposed site is approximately 344 feet. (SNET 1, Section VI, pp. 15-16)
19. The nearest portion of the Cockaponset State Forest is 650 feet from the proposed site, and the nearest home would be 375 feet from the base of the proposed tower. There are 42 homes within a 2000-foot radius of the proposed site. (SNET 2, Q. 1, Q. 2)
20. Access would be off Morris Hubbard Road via a 450-foot by 30-foot right-of-way. SNET would upgrade the accessway with packed gravel to make it passable throughout the year. This access road would be adjacent to the property of Elizabeth B. Giurintano. (SNET 1, Section VI, pp. 12-16, 20)
21. Utilities into the proposed site would be brought in underground. (SNET 1, Section VI, p. 34)
22. SNET would construct a 150-foot monopole tower at the proposed site. The monopole would be approximately 36 inches in diameter at its base and taper to approximately 14 inches at the top. (SNET 1, Section V, p. 2)

23. The proposed monopole would hold a triangular support structure ten feet wide and four feet in height, to hold the cellular antennas. The proposed monopole would be painted a blue-grey color. (SNET 1, Section V, pp. 2-3)
24. The antennas would be omnidirectional whip antennas, 12 feet in length and three inches in diameter. Between four and six antennas would be mounted on the triangular support structure that would add 17 feet to the height of the tower, resulting in a total structure height of 167 feet. (SNET 1, Section VI, pp. 3-4)
25. The base of the 167-foot structure would be 160 feet from the nearby existing Connecticut Light and Power (CL&P) transmission line. The height of the nearby transmission line support structures is approximately 125 feet. (Tr., pp. 20-21, 29)
26. Occasionally, cellular antennas are hit by lightning and have to be replaced. (Tr., p. 34)
27. The associated equipment building would be a single-story, 24 foot by 22-foot building to house electronic equipment. The building and monopole would be surrounded by a fence. Security and fire alarms would be installed within the building. (SNET 1, Section V, pp. 1-2)
28. The radiofrequency electromagnetic radiation power density would be  $0.10002 \text{ mW/cm}^2$  at the base of the proposed tower. The American National Standard Institute safety standard for the proposed frequency is  $2.933 \text{ mW/cm}^2$ . (SNET 1, section VI, p. 19; p. 25; FCC OST Bulletin No. 65) (SNET 1, Section IV, p. 8)

29. The proposed tower would be visible for a distance of about 1000 feet along Morris Hubbard Road. About 50 feet of the proposed tower would be partially visible through the trees from the cul-de-sac on this road. The proposed tower would be visible for about one-half mile along Route 81, primarily to the north of its intersection with Route 9, and from an area to about 500 feet south of its intersection with Route 9. Tower visibility would extend for a distance of approximately two miles along Route 9, primarily to the north. The proposed tower would not be visible from the intersection of Ponset Road and Route 81. (SNET 2, Q. 3; Tr., pp. 15-17)
30. The proposed Haddam site would provide coverage to Routes 9, 81, 82, 149, and 151, within the towns of Haddam, Higganum, and portions of Middletown, East Hampton, East Haddam, Portland, Durham, and Killingworth as an expansion of the Hartford NECMA. The proposed Haddam site would connect SNET's existing Middlefield, East Lyme, and Old Saybrook service areas, and would complete SNET coverage along Route 9. (SNET 1, Section VI, p. 1)
31. In its search for a tower site in the Haddam area, SNET considered several other locations. Property near the Scoville Reservoir owned by Wellington Forest, Inc. was considered but rejected because of planned residential development. Property owned by Erwin Waibel was considered, but rejected due to topography and difficulty

in access. Three properties off of Morris Hubbard Road owned by Floyd Burr, Burr and Caminati, and Richard Watral were investigated. These properties are surrounded by the Cockaponset State Forest, making access into these sites difficult to obtain. A 280-foot tower owned by CL&P on Goose Hill would have provided poor coverage along Route 9. A 321-foot tower owned by American Telephone and Telegraph in Killingworth would have given poor coverage along Route 9, and might have caused interference with the existing SNET Guilford and Old Saybrook cellular sites. (SNET, Section VI, pp. 3-4)

32. The proposed SNET Haddam tower would be approximately four miles from an existing Metro Mobile CTS tower in Haddam. SNET's use of this tower would result in a coverage gap in SNET's coverage along Route 9. (SNET Late File 4; Tr., pp. 18-19)
33. SNET offered the Council no alternative sites in its application. (Tr., p.32)
34. There are no regulated inland wetlands on the proposed Haddam site. (SNET 2, Q.9)
35. The Natural Resources Center of the DEP indicated there are no known existing populations of federally endangered or threatened species or species of special concern at the proposed site. (SNET 1, Section VI, p. 22)

36. The Connecticut Historical Commission indicates that construction of the proposed tower site would have no effect on historic, architectural, or archaeological resources listed on or eligible for the National Register of Historic Places. (SNET 1, Section VI, p. 24)
37. The Federal Aviation Administration (FAA) granted SNET approval for the construction of the proposed Haddam tower on December 3, 1987. The FAA indicated that obstruction marking and lighting would not be required on the proposed tower. (SNET Late File 6)
38. Proposed facility installation costs are estimated as follows:

Radio Equipment.....	\$427,619.00;
Antenna equipment and mast.....	42,725.00;
Power and common equipment.....	152,900.00;
Land and building.....	179,200.00;
Miscellaneous costs (including site preparation and..... installation)	<u>13,601.00;</u>
	Total....\$816,045.00.

(SNET 1, Section VI, p.26)