

DOCKET NO. 87 - An application of SNET Cellular, Inc., for a Certificate of Environmental Compatibility and Public Need for the construction, operation, and maintenance of a facility to provide cellular telephone service in the Town of Norwich, Connecticut. : Connecticut Siting Council : March 22, 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 October 30, 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 telecommunications service (cellular service) in the Town of Norwich as an addition to the New London New England County Metropolitan Area (New London NECMA). (Record)
2. The fee as prescribed by Section 16-50v-1 of the Regulations of State Agencies accompanied the application. (Record)
3. The application was accompanied by proof of service as required by Section 16-50l of the CGS. (Record)
4. The Council and its staff made an inspection of the proposed Norwich site on February 8, 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 Kelly Junior High School in Norwich, Connecticut, on February 8, 1988, beginning at 6:45 p.m. (Record)

6. The parties in this proceeding are the applicant and those persons and organizations whose names are listed in the Decision and Order which accompanies those findings.

(Record)

7. The Department of Environmental Protection (DEP) filed written comments with the Council pursuant to Section 16-50j of the CGS on January 19, 1988. (Record)

8. 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 limited to a maximum of seven watts of transmitted power. (Docket 45, Finding 11)

9. Transmitters at the tower sites would broadcast in the frequency band of 880-890 MHz. (Docket 45, Finding 21)

10. 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 45, Finding 25)

11. The FCC has preempted the states's regulation of cellular service in three major areas: public need, technical standards, and market structure. (Docket 45, Finding 36)
12. 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 45, Finding 35)
13. 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 45, Finding 28)
14. The FCC has reserved to the states jurisdiction with respect to charges, classifications, practices, services, facilities, and regulation of service by licensed carriers. (Docket 45, Finding 37)
15. 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 45, Finding 38)
16. In its search for a cellular site in the Norwich area, SNET considered several existing towers in the area. A 440-foot tower owned by Connecticut Public Television on property on Bishop Road in Bozrah was investigated. SNET found the tower is fully loaded, with no space available. A 75-foot

- Department of Motor Vehicles tower, a 120-foot Department of Transportation tower, and a 300-foot Cable Television Antenna tower, all on Plain Hill Road in Norwich, were investigated. These towers were rejected by SNET because the cellular coverage from these towers would have resulted in a coverage gap along Route 395 in the Waterford to Montville area. (SNET 1, Section VI, pp. 3-4; Tr., p. 14)
17. SNET investigated several properties along Wawecus Hill Road in open areas, but rejected these sites due to their high visibility and location close to existing residences. SNET examined property to the east of its proposed site which drops off sharply as it approaches Route 395, but rejected this site because it would not provide adequate coverage along Route 2. (SNET 1, Section VI, p. 5)
 18. The proposed Norwich site is 450 feet east of Rogers Road on property owned by Ruth Brown Beetham. The proposed site is within a wooded area and has an elevation of 381 feet above mean sea level (AMSL) (SNET 1, Section VI, p. 15)
 19. The proposed site is a 100-foot by 100-foot parcel of land within an area zoned residential R-40. (SNET 1, Section VI, p. 15)
 20. To obtain access into the proposed site, a new 12-foot wide, 450-foot access road would be constructed. Utilities would be brought into the proposed site underground. (SNET 1, Section VI, p. 15; SNET 4)

21. There are eight homes within a 2,000-foot radius of the proposed site, the nearest of which, owned by the lessor of the proposed site, is about 500 feet away. (SNET 2, Q.1; Tr., p. 13)
22. There are no inland wetlands on the proposed site or along the proposed access road route. (SNET 2, Q.2)
23. There is an existing electrical transmission line 1,250 feet from the proposed site. An existing natural gas pipeline, owned by the Algonquin Gas Transmission Company, is 1,200 feet from the proposed site. (Tr., p. 13)
24. The proposed Norwich tower would be a 150-foot monopole. A triangular-shaped support structure at the top of the monopole would hold the antennas. The support structure and antennas would result in a structure with a total height of 167 feet. (SNET 1, Section V, pp. 2-4)
25. Between four and six omnidirectional vertical whip antennas, 12 feet in length, would be attached to the antenna support structure. (SNET 1, Section V, pp. 3-4)
26. No existing buildings or other structures would be within the fall zone of this tower. (SNET 3, Q. 8)
27. Use of a 130-foot tower at the proposed site would result in a coverage gap of one mile along Route 395 to the south, one-half mile along Route 395 to the north, and one mile along Route 2. (SNET 3, Q.6)
28. SNET has received approval from the Federal Aviation Administration to construct the proposed 167-foot tower structure.

The proposed tower would not be obstruction-marked or lighted.(SNET 1, Section VI, p. 29)

29. A 22-foot by 24-foot single story equipment building to house electronic equipment would be constructed near the base of the tower. The proposed site would be surrounded by an eight-foot chain link fence. (SNET 1, Section V, p. 1; SNET 4)
30. Along Rogers Road, the top of the proposed tower would be visible to the intersection with Wawecus Hill Road. Along Wawecus Hill Road, the tower would be visible through the trees. The proposed tower would not be visible from Goldmine Road, Knollcrest Road, Blueberry Hill Road, or Mountain View Drive. (Tr., pp. 11-12; SNET 2, Q. 3)
31. The proposed Norwich tower would provide coverage to Routes 2, 2A, 32, 82, 87, 97, 163, and 395 in the towns of Norwich, Bozrah, and Montville, and portions of Waterford, Ledyard, Preston, Franklin, Sprague, and Lisbon. The proposed site would enable SNET to extend its existing coverage from sites in East Lyme and Waterford in the New London NECMA. (SNET 1, Section VI, p.1, p. 10)
32. The electromagnetic radio frequency power density (power density) at the base of the proposed tower would be $0.01926977 \text{ mW/cm}^2$, based on conservative assumptions. This power density would be several orders of magnitude below the American National Standards Institute safety standard of 2.933 mW/cm^2 for the proposed frequency. (SNET 1, Section VI, p. 24, SNET 1, Section IV, p. 8)

33. The proposed facility would have no effect on local television reception. (Tr., p. 16)
34. The Connecticut Historical Commission has determined the proposed Norwich tower 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. 23)
35. 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 Norwich site. (SNET 1, Section VI, p. 21)
36. The proposed Norwich facility installation costs are estimated as follows:

Radio Equipment	\$179,515.00;
Antenna equipment and Mast	39,900.00;
Power and common equipment	171,570.00;
Land and building	185,000.00;
Miscellaneous (including site preparation and installation)	77,700.00;
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	\$653,685.00;

(SNET 1, Section VI, p.25)