DOCKET NO. 124 - AN APPLICATION OF SNET CELLULAR, INC., FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED FOR THE CONSTRUCTION, OPERATION, AND MAINTENANCE OF A CELLULAR TELEPHONE TOWER AND ASSOCIATED EQUIPMENT IN THE TOWN OF LISBON, CONNECTICUT.

Connecticut

Siting

Council

March 12, 1990

FINDINGS OF FACT

1. SNET Cellular, Inc. (SNET), in accordance with the provisions of Sections 16-50g to 16-50z of the Connecticut General Statutes (CGS), applied to the Connecticut Siting Council on September 28, 1989, for a Certificate of Environmental Compatibility and Public Need (Certificate) for the construction, maintenance, and operation of a telecommunications tower and associated equipment to provide domestic public cellular radio communication service (cellular service) in the Town of Lisbon, Connecticut, within the New London New England County Metropolitan Area (New London NECMA). (Record)

2. The Council and its staff made an inspection of the proposed Lisbon site on November 21, 1989. This inspection was publicly noticed in the New London Day, the Norwich Bulletin, and the Hartford Courant. (Record)

3. Pursuant to Section 16-50m of the CGS, the Council held a public hearing on the proposed tower site on November 21, 1989, beginning at 3:00 P.M. and continuing at 7:00 P.M. the same day, in the gymnasium of the Lisbon Central School, Lisbon, Connecticut. (Record)

4. The parties to this proceeding are the applicant and those persons and organizations whose names are listed in the Decision and Order which accompanies these Findings of Fact. (Record)

5. Cellular service consists of small, overlapping broadcast regions, two to ten miles in diameter, known as cells. Each cell is limited by the Federal Communications Commission (FCC) to no more than 100 watts effective radiated power per channel. The proposed cell can accommodate a maximum of 45 cellular channels. Each cell is connected to a central switching point containing electronic apparatus uniting the cells into a system. (SNET 1, Section II, p. 2; SNET 1, Section VI, p. 24).

6. The FCC has determined that the public interest requires two licenses for cellular service be made available in each market of each NECMA. (SNET 1, p. 3)

7. In 1981, the FCC recognized a national need exists for technical improvement, wide area coverage, high quality service, and competitive pricing in mobile telephone service. (SNET 1, Section III, pp. 1-3).

8. The FCC has pre-empted state regulation in determining that a public need currently exists for cellular service, setting technical standards for that service, and establishing a competitive market. (SNET 1, Section III, pp. 3-4)

9. The FCC granted SNET authorization to provide cellular service in the New London NECMA on July 25, 1986. SNET received the operating license for the New London NECMA on May 27, 1987. (SNET 1, pp. 3-4)

10. The proposed Lisbon cell site is planned to overlap with coverage from an existing cell site in the City of Norwich and future planned cell sites in the Windham Rural Service Area. (SNET 1, Section VI, p. 31; SNET 2, Q. 7, p. 2)

11. The coverage from the proposed Lisbon tower site would include State routes 2, 12, 97, 138, 164, 169, and 201, and Interstate 395, within the towns of Lisbon, Norwich, Sprague, Preston, and Griswold. (SNET 1, Section VI, p.1)

12. The proposed Lisbon tower site is off of Mell Road, 230 feet north of Route I-395. The proposed site is owned by Stanley and David Wildowsky and is zoned R-60, low density residential. (SNET 1, Section VI, p. 1, pp. 14-16, p. 29)

13. The proposed site is a 100-foot by 100-foot parcel of land on a 150 acre parcel bordering Route I-395 and presently used as a pasture for livestock. (SNET 1, Section VI, p. 3, pp. 14-16)

14. An electric transmission line right-of-way with 125-foot high towers is 600 feet from the proposed site. The nearest home is 650 feet from the proposed site. (SNET 1, Section VI, p. 3; Tr., 3:00 P.M., p. 13)

15. The elevation of the proposed site is 270 feet above mean sea level. (SNET 1, Section VI, p. 29)

16. SNET proposes to construct a 180-foot monopole at the proposed site. At the top of the mast, a triangular-shaped platform would hold the cellular antennas. The platform is 10 feet in width and adds four feet to the height of the tower structure. The mast and support platform would be painted a mixed blue grey color. The monopole would be designed to withstand 125 mile-per-hour winds while covered with two inches of radial ice. (SNET 1, Section V, p. 3)

17. Between four and six omnidirectional whip antennas, each 12 feet in length and three inches in diameter, would be attached to the top of the tower. One 15-foot cellular message alert antenna would also be attached to the top of the tower. The total height of the tower structure, including antennas, would be 199 feet. (Tr., 3:00 p.m., p. 19; SNET 1, Section V, p. 5; SNET 1, Section VI, p. 29)

18. A 12-foot by 26-foot equipment building would be constructed near the base of the proposed tower. Both the tower and equipment building would be surrounded by an eight-foot high chain link fence. (SNET 1, Section VI, p. 12)

19. The proposed tower would be visible from where Mell Road passes over Route I-395, and from the intersection of State Route 169 and Mell Road. The proposed tower would also be visible through the existing transmission line from the intersection of Mell Road and Nygren Road. (SNET 2, Q. 8)

20. The Federal Aviation Administration (FAA) ruled on October 25, 1989, that no obstruction marking or lighting would be required on the proposed tower. (SNET Late File 3)

21. The proposed access road would be a paved road approximately 550 feet in length and 12 feet in width. The slope of this road from Mell Road to the proposed site would be approximately 15 percent. A three-foot wide paved ditch along both sides of the road is intended to channel water runoff and minimize erosion along the edge of this road. (Tr., 7:00 P.M., p. 11; SNET 2, Q. 9, SNET Late File 4)

22. The route of the proposed access road would cross an area of ledge. Some blasting might be required during construction. (SNET 2, Q. 9, SNET Late File 4, p. 1)

23. A trench drain across the entire width of the proposed access road at the intersection with Mell Road would be designed to catch and prevent water runoff from crossing Mell Road. (SNET Late File 4, p. 1)

24. SNET explored with the property owner the possibility of an alternative access road route along a gentler slope. The owner offered SNET additional land, while stipulating that SNET fence the entire length of this alternative access road, as this property is used by grazing livestock. (SNET Late File 5, p. 1)

25. The alternative access road, 650 feet in total length, and 12 feet in width, would have a 12 percent slope. SNET would construct a 300-foot concrete retaining wall along the northern perimeter of the alternative access road. A galvanized metal beam guide rail would be mounted atop this retaining wall. (SNET Late File 5)

26. A new trench drain would be installed at the intersection of the alternative access road and Mell Road. (SNET Late File 5)

27. A three-foot wide paved ditch would be constructed along each side of the alternative access road. Side slopes would be seeded for erosion protection. (SNET Late File 5)

28. Utilities would be brought into the proposed site via an aerial pole line from Mell Road, regardless of the route used. (SNET Late File 5, p. 1)

29. There are no inland wetlands on the proposed site or its surroundings. (SNET 2, Q. 2; Tr, 3:00 P.M., p. 25)

30. The construction of the proposed tower would have no effect on historic, architectural, or archaeological resources listed on or eligible for the National Register of Historic Places. (SNET 2, Q. 6, p. 2; SNET Late File 3, Connecticut Historical Commission letter of September 22, 1989)

31. Based on conservative assumptions, with the maximum number of channels operating at maximum power, and the operation of a single message alert channel, the worst case electromagnetic radio frequency power density (power density) level would be 0.07971 mW/cm^2 at the base of the proposed tower. The American National Standards Institute (ANSI) safety standard for the proposed frequency is 2.933 mW/cm^2. (SNET 1, Section IV, p. 8; SNET 1, Section VI, p. 24)

32. The General Assembly has directed that the Commissioner of the Department of Environmental Protection shall by regulation adopt the standards recommended by the ANSI with respect to human exposure to radio frequency electromagnetic fields. (CGS 22a-162(a))

33. There are no known existing populations of Connecticut species of special concern or Federal endangered or threatened species occurring at the proposed tower site. (SNET 2, Q. 5, p. 2, DEP letter of October 3, 1989)

34. In its search for a cell site in the Lisbon area, SNET investigated several properties. Two properties northeast of the proposed site, with elevations 50 to 60 feet higher than the proposed site, were considered. These were rejected due to the 3,000 to 4,000-foot access roads required, and the wetlands surrounding them. A property on Mell Road and a property on Route 12 were investigated, but rejected because of their close proximity to residences. (SNET 1, Section VI, p. 4)

35. Facility costs at the proposed Lisbon tower site are estimated as follows:

Radio Equipment	$179,500.00
Antenna equipment and tower	68,000.00
Power and common equipment	170,670.00
Land and building	275,000.00
Miscellaneous (including site preparation and installation)	70,400.00
Total Cost	$763,570.00

(SNET 1, Section VI, p. 25)

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