DOCKET NO. 51

AN APPLICATION SUBMITTED BY THE SOUTHERN NEW ENGLAND TELEPHONE COMPANY FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED FOR THE CONSTRUCTION, MAINTENANCE, AND OPERATION OF FACILITIES TO PROVIDE CELLULAR SERVICE IN HARTFORD AND MIDDLESEX COUNTIES.	:	CONNECTICUT SITING COUNCIL
	:	September 26, 1985

F I N D I N G S O F F A C T

1. The Southern New England Telephone Company (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 June 14, 1985, for a certificate of environmental compatibility and public need (certificate) for the construction, maintenance, and operation of telecommunications towers and associated equipment buildings in the towns of Old Saybrook and Enfield to provide Domestic Cellular Radio Telecommunication Service (cellular service) as an addition to the 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. Affidavits of newspaper notice as required by statute and section 16-501-1 of the RSA were also filed with the application. (Record)
5. The Council and its staff made an inspection of the proposed Old Saybrook tower site on August 7, 1985, and of the proposed Enfield site on August 12, 1985. (Record)
6. Pursuant to section 16-50m of the CGS, the Council, after giving due notice thereof, held public hearings at the Old Saybrook Community Recreation Building in Old Saybrook, Connecticut, at 7:00 P.M. on August 7, 1985, and at the Enfield Town Hall in Enfield, Connecticut, on August 12, 1985. (Record)

7. 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)
8. The following state agency filed written comments with the Council pursuant to section 16-50j of the CGS: the Department of Environmental Protection (DEP). (Record)
9. The Council took administrative notice of portions of its record in Dockets 35, 40, and 45. The Council also took administrative notice of FCC OST Bulletin #56, and Connecticut General Assembly Office of Legislative Research Selected Report 83-9. (Record)
10. The two cell sites proposed by SNET would extend coverage in the initial Hartford NECMA as filed by SNET before the Council in Dockets 35 and 40. (SNET 1, Section IV, p. 3)
11. The Federal Communications Commission (FCC) has determined that a need exists today to relieve serious congestion on conventional two-way radio mobile systems around the country. (SNET 1, Section IV, p. 10)
12. The FCC has ruled that expansion of cellular systems can take place through the addition of transmitters beyond those originally planned, or through the addition of cell locations and the use of smaller cells. (SNET 1, Section III, p. 2)
13. SNET applied for construction permits from the FCC for the proposed Old Saybrook and Enfield sites on June 5, 1985. (SNET 1, Section VII, p. 25; SNET 1, Section VI, p. 24)
14. Cellular service consists of small overlapping broadcast regions, 2-10 miles in diameter, known as cells. Each cell is served by a transmitter limited by the FCC to no more than 100 watts effective

radiated power per channel. Each cell has a central switching point containing electronic apparatus uniting the cells into a system. Mobile units are limited to a maximum of seven watts of transmitted power by the FCC. (Docket 35, Exhibit 1-II, pp. 5-8)

15. A nationwide public need exists to improve the present mobile telephone service, due to the current system's limited capacity, long waiting lists nationally, and poor quality service, which have created congested channels and long waiting times. (Docket 35, Exhibit 1-I, pp. 3-4; Docket 35, Exhibit 1-II, pp. 2-3)

16. The FCC has pre-empted the state's regulation of cellular service in three major areas: technical standards, market structure, and state certification prior to federal application for a construction permit. (Docket 35, Exhibit 1-III, p. 4)

17. 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 35, Exhibit 1-I, p. 4)

18. SNET has corresponded with cellular licensees in New York, Boston, Providence, and Springfield to ensure that SNET's proposed sites in Old Saybrook and Enfield would be compatible with neighboring cellular systems. (SNET 1, Section IV, p. 3)

19. In its search for a cellular tower site in the Old Saybrook area, SNET considered the following locations: a SNET garage in Westbrook, a State Police tower in Westbrook, a SNET Central Office Building in Old Saybrook, a water tank on Route 1 in Old Saybrook, a railroad antenna on Route 1, a Connecticut Water Company water tank off of Route 154, a WLIS tower off of Route I-95,

and a WLIS tower off of Route 9. (SNET 1, Section VIII, pp. 3-4)

20. The potential alternative Old Saybrook sites were rejected for insufficient elevation, lack of a proper tower, or rejection by the tower owner. (SNET 1, Section VII, pp. 3-4)

21. SNET has taken an option to lease a parcel of land 800' off of Ingham Hill Road in Old Saybrook on property owned by Robert A. and Carol J. Lorenz. (SNET 1, Section VII, p. 4; SNET 1, Section VII, p. 23)

22. The proposed Old Saybrook site is needed in order for SNET to extend cellular service coverage to Routes 1, 9, 153, 154, 156, and I-95 in the region, as well as marine service to boats on the Connecticut River and Long Island Sound. This proposed site would function in conjunction with the existing Guilford cell site to provide customer hand-off and supplement call carrying capacity. (SNET 1, Section VII, p. 1)

23. The proposed Old Saybrook tower site is a 100'x100' parcel of land on a heavily wooded, 38.5 acre tract of land. The proposed site has an elevation of 161 feet and is located within a residential (AA-1) zoning district, with the closest home being some 700 feet from the proposed tower site. (SNET 1, Section VII, p. 10, p. 13)

24. The proposed Old Saybrook site would contain a free standing monopole antenna supporting a triangular platform 154' above ground level. Whiplike antennas at the corners of this platform would extend the height an additional 13', for a total structure height of 167'. (SNET 1, Section VII, p. 26)

25. The proposed tower would be painted blue-gray to blend in with the background of the sky. The Federal Aviation Administration (FAA) has ruled that the proposed tower would not be a hazard to air navigation, and therefore obstruction marking and lighting are not required. (SNET 1, Section VII, p. 17, p. 26)

26. The electromagnetic radiation power densities at the proposed Old Saybrook antenna mast base would be 0.01488 mW/cm^2 and therefore well below the Connecticut standard of 2.933 mW/cm^2 for this frequency. (SNET 1, Section VII, p. 21)

27. The proposed Old Saybrook tower site would also contain a 25'x21' one story associated equipment building. Both the proposed tower and building would be surrounded by an 8' chain link fence. (SNET 1, Section VII, p. 10, p. 17)

28. The primary impact of the proposed Old Saybrook facility would be visual. Its construction should not have any significant effects on wildlife habitat in the area, nor would any nearby DEP properties be affected. (DEP Comments, July 23, 1985)

29. The proposed Old Saybrook tower would be visible from some portions of Ingham Hill Road. It would not be visible from Fox Hill Road, Pheasant Hill Road, Wild Apple Lane, or points north of the proposed entrance driveway off of Ingham Hill Road. It might be visible from a small portion of Route I-95 during the winter. The proposed site is forested with 70' deciduous trees. (SNET 1, Section VII, p. 17; Tr. 8/7/85, p. 13; Tr. 8/12/85, p. 39; DEP Comments, July 23, 1985)

30. To determine the proposed Old Saybrook tower's potential visibility, SNET flew a meteorological balloon to use as a point of reference from surrounding areas. (Tr. 8/7/85, p. 14)

31. The access road to the proposed Old Saybrook site would be 1800' in length. Of this, 1670' is an existing dirt road. A 130' section would be cleared by SNET in order to gain access to the proposed site. (SNET 2, Q. 9)

32. Rock outcroppings on the access road would be removed or covered with gravel, and curves would be designed to allow tower construction vehicles to gain access to the proposed site. No blasting is planned. (SNET 2, Q. 7; Tr. 8/7/85, p. 16)

33. The proposed Old Saybrook access road would cross four wet areas. New 12" culvert pipe would be installed in these areas. Staked hay bales would be used for siltation protection. (SNET 2, Q. 7; SNET 7, Q. 4; Tr. 8/7/85, p. 25)

34. Some portions of the property containing the proposed Old Saybrook site are classified as wetland soils according to town maps of the area. Neither the proposed access road or the tower site would encroach on these inland wetlands. (SNET 2, Q. 10)

35. As part of its lease agreement, SNET would be required to bring utilities into the proposed Old Saybrook site underground. (Tr. 8/7/85, p. 18)

36. Because of the site location and elevation, no additional cell site would be required between the existing Guilford site and the proposed Old Saybrook site in the near future. The proposed tower would also be able to overlap with a future New London NECMA system. (Tr. 8/7/85, pp. 22-23)

37. In its search for a potential tower site in Enfield, SNET considered a parcel of farmland on Abbe Road and the existing Continental Cablevision tower in the Enfield landfill. A residential development was created on the Abbe Road parcel, and Continental Cablevision informed SNET of its plans to locate two more dish antennas on its tower. Continental believes its tower would not support SNET's cellular equipment, and therefore SNET use of Continental's tower was denied. (SNET 1, Section VI, p. 3; SNET 2, Q. 1)

38. The proposed Enfield tower site is located within the Town of Enfield's landfill, 3500' off of Town Farm Road. SNET obtained an option to lease a 100'x100' parcel of this land. (SNET 1, Section VI, p. 1, p. 3, p. 12)

39. The proposed Enfield site is adjacent to a parcel of land containing an existing 195' Continental Cablevision (Continental) CATV tower. The proposed SNET tower would be located approximately 250' northeast of the existing Continental tower. (SNET 1, Section VI, p. 19; SNET 2, Q. 2)

40. Neither the location nor the frequencies of the proposed Enfield SNET tower would have any impact on the Continental facility. (SNET 4)

41. SNET located its proposed Enfield tower site as close as possible to Continental's tower without encroaching onto Continental's leased parcel. (SNET 7, Q. 2)

42. The elevation of the proposed Enfield tower site is 158', and it is located within an R-88 residential zoning district. (SNET 1, Section VI, p. 12)

43. The Enfield landfill covers 165 acres and has been proposed for future recreational use. (SNET 2, Q. 3)

44. The proposed Enfield tower would be a free-standing monopole supporting a triangular platform 154' above ground level. Whiplike antennas at the corners of the platform would add 13' resulting in an overall structure height of 167'. (SNET 1, Section VI, p. 25)

45. The proposed Enfield tower would be painted blue-gray to blend against the background of the sky. The FAA has ruled that the proposed tower would not be a hazard to air navigation, and therefore obstruction marking and lighting are not required. (SNET 1, Section VI, p. 25)

46. The electromagnetic radiation power densities at the proposed Enfield antenna mast base would be 0.01488 mW/cm^2, and therefore well below the Connecticut Standard of 2.933 mW/cm^2 for this frequency. (SNET 1, Section VI, p. 20)

47. The proposed Enfield tower site would also contain a 25'x21', one story building for associated equipment. Both the proposed tower and equipment building would be surrounded by an 8' chain link fence. (SNET 1, Section VI, p. 9, p. 16)

48. The proposed Enfield tower would be intermittently visible from Town Farm Road and from Abbe Road south of Powder Hill Road. It would not be visible from Powder Hill Road or Route I-91. SNET used the existing Continental tower as a reference in making these determinations. (Tr. 8/12/85, pp. 39-40)

49. The proposed Enfield tower would not be visible from the banks of the Scantic River, located some 1200' to the west of the proposed site. The river's steep bank and the 60' trees surrounding the proposed site would combine to obscure views of the proposed tower from the river. (SNET 1, Section VI, p. 13; SNET 2, Q. 6)

50. The DEP has a long range plan to purchase available property on both sides of the Scantic River in Enfield to create a passive recreational area. (SNET 2, Q. 4; DEP Comments, Letter of January 9, 1984)

51. There are designated Inland Wetlands on the Town of Enfield landfill property. Neither the proposed access road nor tower site would encroach on these wetlands. (SNET 2, Q. 10)

52. The proposed access road to the proposed Enfield tower would be 4550' in length. Of this length, 4500' is an existing road. About 50' of new road would have to be cleared. (SNET 2, Q. 9; Tr. 8/12/85, p. 42)

53. The cell coverage achieved by the proposed Enfield tower would overlap with coverage provided by existing SNET towers in South Windsor and East Hartford. (SNET 2, Q. 11)

54. The proposed Enfield tower is needed to extend SNET coverage to the Massachusetts border. SNET would also achieve greater reliability for coverage at Bradley International Airport, and Routes 5, 190, and 20. (Tr. 8/12/85, pp. 46-47)

55. Because the SNET system would overlap with the proposed NYNEX System located in Springfield, Massachusetts, frequency coordination between SNET and NYNEX has taken place to ensure no

interference between the two systems. (Tr. 8/12/85, pp. 43-44)

56. A tower shorter than 150' would not allow SNET to reach the Massachusetts border from the proposed Enfield site. (Tr. 8/12/85, pp. 46-47)

57. Utilities to the proposed Enfield site would be brought in using an existing aerial pole line for a distance of one pole length and then combined underground into the equipment building. (SNET 2, Q. 9; SNET 1, Section VI, p. 12)

58. There are no known records for rare or endangered species at either of the proposed Old Saybrook or Enfield sites. (SNET 2, Q. 12)

59. The total estimated cost of the Enfield cell facility, including land acquisition, engineering, material, and installation, is $545,500 and is broken down as follows:

Radio equipment	$ 21,000;
Antenna equipment	$ 14,000;
Power & common equipment	$319,000;
Land, building, and mast	$191,000; and
Miscellaneous	500.

(SNET 1, Section VI, p. 21)

60. The State Historic Preservation Officer had determined that the proposed Old Saybrook and Enfield sites would have no effect on historical, architectural, or archaeological resources listed on or eligible for the National Register of Historic Places. (SNET Late File 5)

61. The total estimated cost of the Old Saybrook cell facility, including land acquisition, engineering, material, installation, and utility undergrounding costs, is $499,200 and is broken down as follows:

Radio equipment	$ 21,000;
Antenna equipment	$ 12,000;
Power & common equipment	$275,000;
Land, building, and mast	$191,000; and
Miscellaneous	$ 200.

(SNET 1, Section VII, p. 22; Tr. 8/7/85, p. 18)

62. An analysis of the surrounding area by a privately hired consultant, indicated that the proposed Old Saybrook facility would not have any adverse affect on surrounding property values. (SNET 5, p. 2)