

AN APPLICATION SUBMITTED BY THE SOUTHERN : CONNECTICUT SITING
 NEW ENGLAND TELEPHONE COMPANY FOR A
 CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY
 AND PUBLIC NEED FOR THE CONSTRUCTION,
 MAINTENANCE AND OPERATION OF FOUR
 TELECOMMUNICATION TOWERS AND ASSOCIATED : COUNCIL
 EQUIPMENT BUILDINGS IN THE TOWNS OF
 SOUTHTON, HARTFORD, EAST HARTFORD AND
 SOUTH WINDSOR, CONNECTICUT TO PROVIDE
 DOMESTIC PUBLIC CELLULAR RADIO
 TELECOMMUNICATION SERVICE. : November 16, 1983

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

1. Southern New England Telephone Company, (SNET), in accordance with provisions of sections 16-50g to 16-50z of Connecticut General Statutes (CGS), applied to the Connecticut Siting Council (Council) on July 20, 1983, for a certificate of environmental compatibility and public need (certificate) for the construction, maintenance, and operation of four telecommunications towers and associated equipment buildings in the towns of Southington, Hartford, East Hartford, and South Windsor, Connecticut, to provide Domestic Public Cellular Radio Telecommunication Service (cellular service). (Record)
2. The fee as prescribed by section 16-50v-1 of the Regulations of Connecticut State Agencies (RSA) accompanied the application. (Record)
3. The application was accompanied by proof of service as required by section 16-50l of the CGS. (Record)
4. Affidavits of newspaper notice as required by Statute and section 16-50l-1 of the RSA were also filed with the application. (Record)
5. Pursuant to section 16-50m of the CGS, the Council, after giving due notice thereof, held public hearings at One Central Park Plaza, New Britain, Connecticut, on September 29, 1983, at 7:00 P.M. and September 30, 1983, at 1:00 P.M. (Record)

6. The parties to the proceeding are the applicant, SNET, and those persons and organizations whose names are listed in the Decision and Order which accompanies these findings. (Record)
7. The following state agencies filed written comments with the Council pursuant to section 16-50j of the CGS: the Department of Economic Development (DED) and the Department of Environmental Protection (DEP). (Record)
8. On September 23, 1983, SNET amended its original application, deleting its request for a certificate for the South Windsor site pending further investigation of alternative sites. (SNET Exhibit 4)
9. On September 27, 1983, members of the Council and its staff made an inspection of the proposed sites in Southington, Hartford, and East Hartford. (Record)
10. 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 Federal Communications Commission (FCC) to no more than 100 watts effective radiated power. 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 transmit power by the FCC. Cellular service would have a maximum of 45 channels per cell. (SNET Exhibit 1, Section II, pp. 5-8)
11. Each proposed cell site would have approximately the same equipment. A building housing electronic equipment on each site would be a single story masonry structure measuring 20'x24'. Each building would have no windows and only one door. Since the

- equipment would operate automatically, no personnel would be stationed on-site. (SNET Exhibit 1, Section V, pp. 1-2)
12. Sites would have no parking lots, only a driveway and space for one vehicle. Shrubs would be planted around the building to reduce visibility. Fences would be constructed around the tower site with security and fire alarms inside. (SNET Exhibit 1, Section V, pp. 1-2)
 13. Each mast would be a self-supporting hollow steel pole. Masts would measure 36" in diameter at the base, tapering to 14" at the top. The masts would be 12-sided, and would be painted blue-gray to blend in with the sky. (SNET Exhibit 1, Section V, pp. 1-4)
 14. Each mast would support a 10' wide triangular platform at the top, which would hold a minimum of four and a maximum of six whip-type omnidirectional antennas. (SNET Exhibit 1, Section V, pp. 1-4)
 15. Each triangular platform would have two functions: support of the transmit and receive antennas and support of directional antennas in the future, if and when such antennas are required by cell-splitting. (Tr. 9/30/83, pp. 42-43)
 16. The omnidirectional antennas would be 12' long and 3" in diameter. These antennas and the support platform would add 17' to the overall tower structure height. (SNET Exhibit 1, Section V, pp. 1-4)
 17. Transmitters at the tower sites would broadcast in the frequency band of 880-890 MHz. (SNET Exhibit 1, Section IV, p. 3)
 18. For the purposes of cellular service construction permit applications, the FCC has defined a New England County Metropolitan Area (NECMA) consisting of Hartford, Tolland, and Middlesex counties.

This Hartford NECMA is part of SNET's planned Cellular Geographic Service Area (CGSA) in Connecticut, which includes three NECMAs. Fairfield County and New Haven County constitute the other NECMAs within SNET's planned Connecticut CGSA. The Connecticut CGSA would include 17 cell sites as an integrated network. (SNET Exhibit 1, Section III, pp. 2-3; CSC Exhibit 3; Tr. 9/29/83, p. 95)

19. The FCC has found an immediate public need for cellular service, yet it has not reached a decision on SNET's construction permit applications and, as of 9/29/83, would not indicate when SNET might expect a decision on such applications. Prior state or municipal approvals are not a prerequisite for these construction permits. (SNET Exhibit 2, Q. 2; Tr. 9/29/83, 22-23, 76-77; Tr. 9/30/83, pp. 80-81, 92-93)
20. Other sites might exist within the three search areas which would provide comparable coverage using less visible towers.
(Tr. 9/30/83, p. 51)
21. If the location of one tower site were changed, it might become necessary to change another site. (Tr. 9/29/83, p. 65)
22. SNET could not eliminate a cell site and still maintain its desired level of performance. (Tr. 9/30/83, p. 24)
23. The location of each of the 17 cells in the planned system affects the position of other sites on the grid, although the search area size allows some flexibility. (SNET Exhibit 1, Section IV, p. 3; Tr. 9/29/83, pp. 92-95)
24. The deletion of a tower from a proposed service area system could have an effect not only upon the system for which an FCC license is sought, but also on other adjacent systems because of technical

characteristics of cellular development. (Metromedia, Exhibit A, pp. 4-5)

25. If an individual cell needed to be relocated, the new coverage contour and location of frequencies could affect all the other cell sites in the grid, resulting in the need to relocate other cell sites within the NECMA. (Metromedia, Exhibit A, p. 4)
26. The selection of the northernmost tower site in the Hartford NECMA, which site would be necessary to provide the level of service SNET desires, would be influenced by the approval of the three proposed sites. Such approval would limit the location choices for the northernmost site and could support the reproposal of the withdrawn South Windsor site. (Tr. 9/29/83, p. 66; Tr. 9/30/83, p. 20)