DOCKET NO. 31

AN APPLICATION OF VALLEY CABLE VISION, INCORPORATED, FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED FOR A MODIFICATION TO ITS EXISTING CATV TOWER.

CONNECTICUT SITING

COUNCIL

November 5, 1982

FINDINGS OF FACT

:

- 1. Valley Cable Vision, Incorporated, (VCV) in accordance with the provisions of section 16-50j-70 et seq of the Regulations of State Agencies, applied to the Connecticut Siting Council on June 21, 1982, for a certificate of environmental compatibility and public need for the modification of its existing head-end facility on Great Hill Road, in Seymour, Connecticut. (Record)
- 2. The fee of \$500.00 accompanied the application. (Record)
- 3. The application was accompanied by proof of service as required by section 16-501(b) of the general statutes of the state of Connecticut. (Record)
- 4. Affidavits of newspaper notices were filed as required by section 16-50e(f) of the General Statutes. (Record)
- 5. Council members and staff made a ground inspection of the proposed site on September 23, 1982. (Record)
- 6. Pursuant to section 16-50m of the General Statutes, the

 Connecticut Siting Council, after giving due notice thereof, held
 a public hearing at Center School, 100 Bank Street, Seymour,

 Connecticut, on September 23, 1982. (Record)
- 7. The parties to the proceedings are listed in the decision and order which accompanies these findings. (Record)
- 8. Limited appearances in favor of the application were filed by the Griffin Hospital in Derby, the Valley Regional Planning Agency,

- WLNV FM Radio, and the First Selectman of the Town of Seymour. A limited appearance against the proposal was presented orally by Josephine Sypniewski. (Record; Tr. p. 183)
- 9. Pursuant to section 16-50j(f) of the General Statutes, written comments were filed by the Department of Transportation (DOT),

 Department of Economic Development (DED), and the Department of
 Environmental Protection (DEP). (Record)
- 10. The applicant is a regulated public service company, as defined in section 16-1 of the General Statutes, with a franchise issued under section 16-331 of the General Statutes to provide Cable Antenna Television (CATV) service in the towns of Seymour, Ansonia, Derby, Oxford, Beacon Falls, Bethany, Naugatuck, and Shelton. (VCV Exhibit 1, p. 2)
- 11. The applicant proposes to modify its existing head-end facility by building a new CATV tower 250 feet high, transferring the equipment on an existing tower to the new tower, and dismantling the existing 200 foot high tower. In addition, the applicant proposes to construct a building at the base of the new tower to house the electronic equipment associated with the facilities on the new tower and possibly install a new generator, and to relocate, and perhaps replace, three existing receive-only earth stations presently on the site. A six to eight-foot screened fence will surround the tower and earth station equipment. (VCV Exhibit 1, pp. 7,8, Exhibit E revised; VCV Exhibit 2, p. 3; Tr. pp. 56-57,114)
- 12. The proposed tower will be capable of supporting twenty-five various antennae for VCV, five various antennae for Bridgeways

- Communications Corporation (Bridgeways), and five radio antennae for C-MED and Seymour Police and Fire Departments. (VCV 1, pp. 10-11; Tr. pp. 71, 132)
- 13. The replacement tower would support the following VCV equipment: six four-foot and two 10-foot parabolic UHF receive antennae; several two way mobile radio antennae; one high band and one low band VHF four-antenna array; one UHF/VHF search antenna; two log-periodic antennae; one eight-foot, and two ten-foot, microwave transmit antennae; and one five-foot microwave receive antenna.

 (VCV 1, pp. 10-11)
- 14. The tower would be able to support additional equipment. (VCV 1, pp. 10,11; Tr. pp. 71, 132)
- 15. The proposed tower would be three-faced and six feet wide; it would have two sets of guy wires and a pivot base resting on a concrete foundation. It will resist a wind load of 50 pounds per square foot, which will exceed the minimum design load recommended for this region. (VCV 1, p. 8; Tr. p. 96)
- 16. The proposed site is the VCV headquarters at 80 Great Hill Road in Seymour, Connecticut. The 4.14 acre parcel consists of the company's administrative offices, studio, tower, earth stations, head-end, and storage and parking areas. (VCV 1, pp. 2, 19,20, Exhibit E, revised Exhibit D)
- 17. An access road and utility service already exist. (VCV 1, p.11)
- 18. The proposed tower will be visible from the area surrounding the site. (VCV 1, p. 21; DEP comments, 9/23/82)
- 19. The additional height of the proposed tower will increase its visibility, especially in the Tomlinson Road area. (DEP comments,

9/23/82)

- 20. The existing tower is visible from various distant locations in the surrounding area. It is also visible from selected locations in the following nearby areas: Davis Road, Great Hill Road, Candlewood Lane, Dauria Drive, Tomlinson Road, and Laural Lane. (Tr. pp. 64-65)
- 21. The visual impact of the proposed tower will have the greatest effect on the residents immediately southeast of the site, who already have an unobstructed view of the tower, and those to the west along Tomlinson Road and Spindle Road. (DEP comments 9/23/82)
- 22. The triangular tower with a six foot face will have a cleaner appearance and a more uniform silhouette than the existing tower or a four-foot face tower with guying triangles and antenna mounts. (DEP comments 9/23/82; VCV 1, p. 9, F-1, F-2)
- 23. The land-use surrounding the site was open space and woods when the existing tower was erected. The surrounding land-use now is agricultural, residential, and light industrial. (VCV Exhibit 1, pp. 20,21; Tr. pp. 55,56)
- 24. The homes adjacent to the tower site located in Dauria Acres were built after the existing tower was built. (Tr. p. 142)
- 25. The applicant took an option on the existing tower site when the site was zoned for light industry. The site is now zoned R-40 residential which permits public utility structures with site plan approval. (VCV 1, p. 20; Tr. pp. 54,55)
- 26. The Seymour Planning and Zoning Commission is reviewing a site plan which deals with the building, shrubs, parking, lighting, and

- sewage. (Tr. pp. 152-153)
- 27. Power densities associated with the VCV equipment only will be .0052 milliwatts per square centimeter or less at 500 feet from the tower base. (Tr. p. 105)
- 28. Radiation from the proposed tower would be substantially less than the World Health Organization standard of 1.0mw/cm², the American National Standards Institute standards of 1.0 mw/cm² between 300-1500 megahertz and 5.0 mw/cm² between 1500-100,000 megahertz, the Environmental Protection Agency proposed standard of 0.10 mw/cm², and the OSHA standard of 10.0 mw/cm². (VCV 1, p. 30)
- 29. The applicant is willing to consider joint use of the proposed tower for radio facilities now located on Tomlinson Road. (Tr. p. 59)
- 30. No special scenic, historical, or recreational characteristics have been identified in the vicinity of the site. (VCV 1, p. 21)
- 31. The applicant intends to surround its vehicle parking area, the storage area, and the tower or station structures with fencing, probably a chain link fence with screening, 6'-8' high. (Tr. pp. 108,115,116; VCV 1, p. 11)
- 32. An abutting owner expressed concern regarding radiation from the proposed tower, adverse effect on property values, and the possibility of the tower falling on his property. (Reshetar 1, pp. 1,2)
- 33. The Great Hill Area Civic Association is concerned about radiation emitted from the proposed facility and the possibility that the tower will fall and damage personal property in the adjacent area.

 The Civic Association believes the application should be denied.

- (Great Hill Area Civic Association post-hearing correspondence 9/28/82, 10/19/82)
- 34. VCV's engineer, in 45 years of experience, has never seen or heard of a tower rated for a 50-pound wind load falling over completely. The Great Hill Civic Association commented that a tower fell straight over in a tornado in Windsor Locks, Connecticut, but tower specifications were not provided. (Tr. p. 96; Great Hills Civic Association, post-hearing correspondence)
- 35. VCV has discussed concerns with some neighbors and is willing to meet with others to address concerns. (Tr. pp. 115, 135)
- 36. A 250' tower would be required for Valley's proposed microwave interconnection with the Fairfield County cable system. The present 200' tower is inadequate for this purpose. (Tr. p. 43, VCV 1, p. 13)
- 37. A microwave link to area 9 from the existing tower would probably require two intermediate microwave relay stations, with construction of additional tower facilities. (VCV 1, p. 14)
- 38. Path studies were conducted to determine the best microwave interconnection with the area 9 franchise holder. The height needed to establish paths to several potential tower sites was determined to be 240 feet. VCV submitted preliminary path profile studies showing ample clearance to 100 foot or 200 foot towers at three possible sites. (VCV 1, p. 14, VCV 2, p. 4; VCV Exhibit 3; Tr. p. 43)
- 39. This interconnection could be implemented by the second or third quarter of 1983. (VCV 2, p. 4; Tr. p. 69)

- 40. An interconnection using cable instead of microwave would require a large number of amplifiers to maintain signal strength arranged in cascade. This amplifies not only the signal but the interference, resulting also in unacceptable picture quality. (Tr. p. 124)
- 41. A cable interconnection with Area 9 would be too long to be economically feasible, and the picture quality would be unacceptable.

 (Tr. p. 126)
- 42. In fifteen years of experience, the applicant has yet to see extension of cable for transmissions of cable TV pictures beyond 20-25 miles. (Tr. p. 126)
- 43. There are no alternatives better than microwave to minimize the number of towers or antennae needed to reach existing or proposed sites for VCV interconnections. (Tr. p. 60)
- 44. The VCV proposal does not include the microwave dish needed for the interconnection system. (Tr. p. 67)
- 45. Through the existing facility, Valley supplies other cable franchises in New Britain, Hartford, Meriden, and Manchester with New York T.V. off-the-air signals. (Tr. p. 60)
- 46. The existing statewide microwave interconnection system involves multiple connections with seven other CATV systems besides the applicant, who share programming by providing commercial insertion on two cable services carried by all those systems. (Tr. pp. 123-125, 66)
- 47. The microwave interconnection with other microwave sites in the system permits statewide distribution of live or taped local programming throughout the state, as evidenced by recent political

- candidate debates televised from Seymour High School. (Tr. pp. 45-46)
- 48. VCV interconnection with the Fairfield County head-end will also allow viewers to receive the sports channel which carries major league sporting events from New York City. (Tr. p. 67, VCV 1, p. 14)
- 49. Relays from Groton are transmitted through the existing facility to New Milford. (Tr. p. 60)
- 50. It is expected that other cable systems around the state will also be interconnected until the entire state is interconnected from any point. (Tr. p. 67)
- 51. VCV has no plans in the immediate future for adding channels to its service other than those obtained from the Fairfield County interconnections. (Tr. p. 50)
- 52. Because their head-end is located in the center of the franchise area, VCV is able to serve all of the area with trunk cable. (Tr. p. 125)
- 53. Service to VCV subscribers would be improved by the increased elevation of the antennae which are oriented toward the World Trade Center in New York City. (Tr. pp. 45,47; Valley 1, p. 14)
- 54. The 6-foot face tower would allow elimination of some of the hard-ware located on the existing tower, particularly star mounts used for placement of microwave dishes. The design would allow more space for future equipment and sharing of the facility. (Tr. pp. 43-44, 71; VCV 1, p. 14)
- 55. The existing 3-foot face tower is fully loaded. There is no climbing space inside it for workmen to service the antennae, and

- safety is a concern to VCV. The wider face tower would allow climbing inside, which is considered safer. (Tr. pp. 44, 141)
- 56. The proposal could allow a consolidation of telecommunication uses on a single tower, thereby achieving both environmental and financial savings. (VCV 1, p. 2, Tr. pp. 94-95)
- 57. VCV has received complaints regarding the quality of its service or reception, which the taller tower would serve to improve.

 (Tr. pp. 46-47)
- 58. Service would be interrupted when the old tower antennae are dismantled and reassembled on the new tower. This interruption will occur on one channel at a time and only for a matter of hours for each. To avoid this, off air reception from New York channels could be provided via an alternative antenna similar to a homeowner's broad band antenna, which would cause only momentary interruptions of service with some reduced quality. (Tr. pp. 50-51)
- 59. A plan to disassemble the old tower, pour a new foundation, and erect a new tower was rejected as economically unfeasible because this would put the facility off the air for a period of time, and other users would be unable to obtain the VCV signals. (Tr. p. 121)
- 60. CATV operation on the new tower could commence 136 days following Siting Council approval. (VCV 1, p. 24)
- 61. Designs for an alternate tower with a 4-foot face were submitted, but the 6-foot face is preferable for environmental, safety, and operational considerations. (VCV 1, p. 9)
- 62. VCV is agreeable to using a 3-guy support system instead of the

- proposed 2-guy system if the Council so ordered. Engineering design would not be a problem. (Tr. p. 45)
- 63. The relocation of the earth station dishes would be necessary to accommodate the construction of a new building facility on the site. (Tr. p. 147)
- 64. VCV is considering either relocating its three earth station satellite reception dishes or consolidating the three into a single reception antenna if the signal quality is acceptable.

 (Tr. p. 56)
- 65. If the three existing earth dishes are consolidated into one unit, it would be rectangular in shape and larger than any one existing dish; it would be approximately 28' by 10' to 15'. The three existing earth dishes would be dismantled and removed. (Tr. p. 148)
- 66. The rectangular earth antenna could independently track several satellites. (Tr. p. 150)
- 67. The cost of the tower, guys, and anchors is estimated at \$75,000.

 Various towers prices range from \$50,000 to \$80,000. (Tr. pp. 49, 122)
- 68. The delivered cost of the new tower, with construction, guy work, foundation, site preparation, transfer of equipment from the old tower the new tower, and dismantling of the old tower would total \$124,350. (Tr. p. 53; VCV 1, p. 16)
- 69. The cost of the tower could be financed by advance rental fees from Bridgeways so that VCV would not need to invest capital. VCV would own the tower. (Tr. 48, 122)
- 70. VCV has negotiated with Bridgeways regarding possible advance

- rental payments totaling \$174,350 for leased space on the tower. (VCV 2, p. 4)
- 71. VCV would have to pay the cost of the new tower if the Bridgeways' proposal is not included. (Tr. pp. 49, 52; VCV 1, p. 16)
- 72. The cost of erecting separate towers for VCV and Bridgeways, excluding antennae, associated equipment, and land acquisition, would be approximately \$265,000. A consolidated tower would cost approximately \$124,000. (VCV 1, p. 16-17)
- 73. Two separate towers would not be erected on the same site. (Tr. p. 51)
- 74. All revenues generated by the tower expansion will be reported to the DPUC in VCV's annual report. (Tr. p. 122-123)
- 75. VCV has not conducted nor is it aware of any economic studies assessing impacts on the surrounding area that might be attributable to their facility such as changes in land values. (Tr. p. 48)
- 76. VCV has received only one letter from the public regarding the placement of a new tower on its site. (Tr. p. 46)
- 77. The Cable Television Advisory Council for VCV's franchise area supports the application for the proposed tower. (Tr. p. 26; Cable TV Advisory Council Exhibit 1, p. 2)
- 78. The Seymour Ambulance Corporation will be improved by placing their antenna on the proposed tower. (Tr. pp. 177-178)
- 79. The South Central Connecticut Regional Emergency Medical

 Communications System (CMED) supports the proposed application.

 (Tr. p. 175)