

AN APPLICATION BY HOUSATONIC CABLE  
VISION COMPANY FOR A CERTIFICATE OF : POWER FACILITY  
ENVIRONMENTAL COMPATIBILITY AND PUBLIC :  
NEED FOR THE ERECTION OF A COMMUNITY : EVALUATION COUNCIL  
ANTENNA TELEVISION TOWER IN THE TOWN :  
OF NEWTOWN, CONNECTICUT. : DECEMBER 21, 1978

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

I. PROCEDURES

1. The Housatonic Cable Vision Company acting by its attorney Elizabeth Leete of Louden, Byrne, Shechtman, Slater and Rose applied to the Power Facility Evaluation Council on September 12, 1978 for a certificate of environmental compatibility and public need for erection of a community antenna television tower in the town of Newtown, 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 said General Statutes of the State of Connecticut. (Record)
4. Affidavits of newspapers noticed as required by statute in section 16-501-1 of the regulations of Connecticut State Agencies were also filed. (Record)
5. Council members and staff made ground inspection of the proposed site and the alternate sites on October 5, 1978. (Record)
6. Pursuant to section 16-50m of said General Statutes of the State of Connecticut, the Power Facility Evaluation Council, after giving due notice thereof, held public hearings at Edmond Town Hall, 45 Main Street, Newtown, Connecticut on November 14, 1978. (Record)
7. The parties to the proceedings are the applicant, the Housatonic Cable Vision Company, and those other persons whose names are listed in the Decision and Order which accompanies these findings. (Record)
8. The following state agencies filed written comments with the Council pursuant to section 16-50j(f) of the General Statutes of the State of Connecticut, The Department of Commerce, Council on Environmental Quality, The Department of Transportation, Department of Health, Department of Environmental Protection, Public Utilities Control Authority, and the Office of Policy and Management. (Record)

9. The Public Utilities Control Authority awarded Housatonic Cable Vision Company a Certificate of Public Convenience and Necessity to provide cable television service (CATV) in October 14, 1976. The town of Newtown is in the subject franchise. (Record)
10. The Public Utilities Control Authority and The Department of Health have approved the lease of four-tenths of an acre of Newtown Water Company land for this tower. (Exhibit G)

## II. ENVIRONMENTAL

11. The Company will serve its entire franchise area from its head-end structure in New Milford which sends signals to receiving towers in New Fairfield and Brookfield, and is capable of sending signals to proposed towers in Newtown and Monroe. (Tr. p. 243)
12. The proposed site is a 25'x25' parcel of land at the base of a 16' tall rectangular concrete water tank. The site is located at the end of Reservoir Road in Newtown. (Exhibit 9, pp. 6,7)
13. The applicant indicated that no vegetation outside of the 25'x 25' leased area would be trimmed. (Tr. 241)
14. Existing vegetation restricts visibility of the tower from distant vantage points. Nearby homes and residential areas will be screened from the tower by existing evergreen and deciduous vegetation. (Exhibit 3, pp. 2, 3; Exhibit 9, p. 8)
15. In searching for a tower location, the company sought a high but unobtrusive site which was shrouded by trees, and capable of receiving a signal from New Milford. The company used a topographic map and made field surveys of Newtown by ground and air. An engineer from Hughes Microwave Communication Products was consulted on some possible sites. (Tr. p. 79-82; 125)
16. All four alternate sites would require a tower at least 60' tall; all are located in open fields, and all four sites are more than three miles from the proposed center of local program origination. (Exhibit 6, p. 1-2)
17. The Palestine site was examined by a representative of Hughes Microwave Communication Products and rejected because of an obstruction in the near field. A tower at this site would have to be 95' high. (Tr. p. 135, 136; Exhibit 9J revised; Exhibit 11)

18. The Eden Hill site was rejected by the applicant because of obstructions in the microwave beam path between this site and New Milford. (Exhibit 9J revised)
19. The Ox Hill site is not a viable alternative because the owner is unwilling to sell the land. (Exhibit 9J revised)
20. The Dug Hill site was rejected as an alternative because it was highly visible. (Exhibit 9J revised; Tr. p. 130)
21. The seven alternate sites A,B,C,D,E,F, and G, presented by the Public Utilities Control Authority were investigated by the applicant. None is considered to be equal or superior to the Reservoir Road site because (a) there is no access to two of these sites, (b) there are houses on or very near some of the sites, and (c) these sites would be highly visible and not suitable for a tower shorter than the one proposed. (Tr. p. 81, 82, 83, 103-104, 123)
22. A single tower at the proposed site will have no more impact on future land use or zoning than the existing water tank alone will have. (Tr. p. 129)
23. The proposed tower is not inconsistent with planning objectives established by the Office of Policy and Management. (Exhibit 1)
24. The Department of Transportation and The Department of Health, raised no objection to the proposed tower. (Exhibit #4; Record)
25. The Department of Commerce, Department of Environmental Protection, and the Public Utilities Control Authority indicated that the proposed tower would have no significant adverse environmental impact. (Exhibit 2; Exhibit 3; Record)
26. The applicant stated he would welcome shared use of the proposed tower. Other towers were not considered for a shared function because microwave towers must be exceptionally stable. Previous studies indicate that radio, television, and police towers are not suitable for microwave facilities. The applicant indicated that the tower is not intended to have any transmitting facilities. (Tr. 245, 236; Record, Applicant's Letters of 10/2/78 and 11/13/78)
27. The power density received at the proposed tower site will be .0005 micro-watts per square centimeter which is two thousand times lower than the

- Union of Soviet Socialist Republics (U.S.S.R.) environmental safety standard, twenty million times lower than the United States occupational safety standard, and two million times lower than the radiation levels permitted for new microwave ovens. (Tr. p. 77, 78, 79, 208, 199)
28. No adverse health impacts are known to result from exposure to non-ionizing radiation at levels calculated for the proposed site. (Exhibit 3, p. 3)
29. The microwave density proposed at the site will not have a known significant impact on the environment. (Exhibit 9, p. 12)
30. Reducing the level of non-ionizing radiation in Newtown by reducing the transmitter power is not feasible without reducing the signals to all other receiving towers. (Tr. p. 241)
31. No equipment or parts will be stored at the site. No fans, generators, or motors will be located at the site. (Tr. p. 127-128)
32. The site will be visited by company personnel approximately three or four times a year. (Tr. p. 128)
33. The tower will be surrounded by a fence, and a gate will be placed on the tower's access road. (Tr. 129)
34. The construction area will be rehabilitated. (Tr. p. 130)
35. The area surrounding the proposed site is zoned for residential development. A tower at this location is not consistent with local zoning laws and does not meet local setback regulations. (Exhibit 9, p. 7; Tr. 202; Berry's Brief)
36. The tower conforms to the Electronics Industry Association Standard and the standard for radial icing. (Applicant's letter of November 13, 1978, p. 3)
37. No town official, regional, or town agency spoke in favor or against the proposed tower. (Record)

III. NEED

38. The cable will be routed along the public way. (Tr. 237, 238, 244)

39. The proposed tower site on Reservoir Road is nine tenths of a (0.9) mile from Edmond Town Hall, the most likely source of local programming. (Tr. p. 80; Record)
40. The company has provided for local access channels in New Fairfield and Brookfield for local programming. (Tr. p. 92)
41. Two-way capability from Edmond Town Hall can be provided to the proposed tower through a cable on the existing telephone poles. The cost of providing two-way capability in this mode is estimated to be \$3,640 for the proposed Reservoir Road site and is expected to be greater for all other alternative sites (\$3,870 to \$10,670), (Exhibit 12; Tr. 234)
42. The number of customers served in the town would not be affected by the site chosen for the signal receiving tower. (Tr. 239)
43. Factors involved in considering coaxial cable service are picture quality, maintenance, and local access channel capability. (Tr. p. 91)
44. The Federal Communications Commission maintains certain specifications that must be met for the quality of customer set reception, one of which is the amount of noise (interference) in the signal. (Tr. p. 90)
45. System manufacturer, Scientific Atlanta, states 32 amplifiers is the limit for cascade beyond which picture quality will be unacceptable. (Tr. p. 89)
46. Maintenance costs on this coaxial cable system with thirty two amplifiers are higher than for a system with fewer amplifiers because the use of thirty-two amplifiers assumes perfect performance of the system which would require continuous maintenance. (Tr. pp. 89, 90, 250, 251)
47. Amplifiers which operate better or which improve picture quality are not available even at higher cost. (Tr. p. 91)
48. Newtown could be served by two coaxial cables, one south from Brookfield and one north from Monroe, but at approximately double the cost of providing the same service by microwave to the proposed tower at the Reservoir Road site in Newtown. (Tr. p. 252-253)
49. The Federal Communications Commission specifies stations which cable TV must carry. These specifications cannot be met by using

- earth station reception for Newtown. (Tr. p. 251, 252)
50. Coaxial cable service from the Brookfield tower would require at least 40 amplifiers to serve all of Newtown. The initial area could be served with 30 amplifiers from Brookfield. (Tr. p. 108; p. 244)
51. Federal Communication Commission licenses microwave service only from point to point. A two-hop service cannot be licensed under present rules. (Tr. p. 131)
52. The company has no existing tower in Monroe. (Tr. p. 208)
53. Providing CATV signals to the Town of Newtown by way of trunk cable is economically impractical. Microwave transmission is the only other economical and practical means of distributing the CATV signals. (PUCA Comments 10-31-78 p. 1)