

AN APPLICATION BY HOUSATONIC CABLE  
VISION COMPANY FOR A CERTIFICATE OF  
ENVIRONMENTAL COMPATIBILITY AND PUBLIC  
NEED FOR THE ERECTION OF A COMMUNITY  
ANTENNA TELEVISION TOWER IN THE TOWN  
OF NEWTOWN, CONNECTICUT.

POWER FACILITY  
EVALUATION COUNCIL  
DECEMBER 21, 1978

O P I N I O N

I. General

This application is for a certificate of environmental compatibility and public need for the construction of a community antenna television (CATV) tower and associated facilities on Reservoir Road near the center of Newtown, Connecticut. The proposed tower will receive microwave television signals from the Applicant's sending tower and head-end facilities in New Milford, Connecticut, and will then provide cable TV service to Newtown customers from the proposed tower by way of coaxial cable along the public way.

A public hearing on the application was held at the Edmond Town Hall on November 14, 1978. Prior to the hearing, members of the Council made ground inspections of the proposed site and the alternate sites for the proposed tower. In addition to advertised notice, notice was mailed in accordance with law.

The applicant presented testimony and exhibits to support its claim that the tower was needed, that the construction of the tower as proposed would not significantly adversely affect the environment, and that the proposed tower site is preferable to the alternate sites studied.

Those opposed to the tower presented testimony, exhibits, and unsworn statements to the effect that the tower was not needed, that it did have a significant adverse environmental effect, and that other sites might be environmentally preferable.

II. Environmental Impact

The Council carefully considered the proposed tower and site and concludes that a tower of the type proposed, on the site selected, does not have a significant adverse environmental effect. The tower will only be 40 feet high and 10 feet wide at the top. Existing vegetation will restrict its visibility from nearby residences and from distant locations. No vegetation outside of the 25 square foot leased area needs to be trimmed. No equipment will be stored on the site. No fans, generators, or motors will be located at the site. No personnel will be stationed at the site. Travel to and from the site will be limited to periodic inspection and maintenance. The tower will be

surrounded by a fence and a gate will be placed across the access road. The proposed tower will be located on a site that already has a water tank 16 feet high.

The proposed site on Reservoir Road is preferable to the other sites studied. It is high enough to receive unobstructed signals from New Milford yet low enough to be relatively unobtrusive and shrouded by trees. Other sites were not equal to or superior to the proposed site for one or more of the following reasons: (a) the site was not available for purchase or lease, or there was no access to the site; (b) homes existed on or very near to the tower location; (c) site locations were exposed and highly visible; and (d) obstructions in the microwave beam path from New Milford blocked the signal or required significantly higher receiving towers. In addition, all such alternate locations were further from Edmond Town Hall, the most likely center for local program origination.

The Council's conclusion that this tower will not have a significant adverse environmental effect is concurred in by all state agencies commenting on this application. It is also worthy of note that no local or regional official or agency having planning or environmental responsibilities spoke in opposition to the tower, notwithstanding the fact that it did not conform to local planning and zoning regulations.

To say that a structure will not have a significant environmental impact, however, is not to say that it will have no impact. The proposed tower is not invisible, but its visual impact is not deemed significant particularly when compared with the alternatives. Perhaps the effect most feared by those speaking in opposition was that of microwave radiation. The health effects of non-ionizing radiation from microwaves are not definitively established and are still subject to differing opinions by experts. The Council is mindful that it should proceed slowly in approving technological innovations where one cannot state with certainty that there is no risk to human health. But from what is known, the Council concludes that this tower will not adversely affect the health of those subject to the microwave beam path. To begin with, the tower is merely a receiving tower. It will not emit microwaves and the Council will so state in its order. More importantly, however, the power density of the signals received at the tower will be very low, (.0005 microwatts per square centimeter). This is two thousand times lower than the Russian environmental safety standard. Twenty million times lower than the American occupational safety standard. We believe that the American standard is sufficiently analogous and the margin of safety sufficiently great to be applicable

to this tower. Using another comparison, the power density received at the tower is two million times lower than the radiation levels permitted for microwave ovens.

### III. Need

It is not in the Council's jurisdiction to pass on the question whether the citizens of Connecticut in general, or the residents of Newtown in particular, need cable TV. Those decisions have been predetermined by the General Assembly in authorizing and regulating cable TV, and by the Public Utilities Control Authority in awarding the Applicant a certificate of public need and convenience to service the Newtown area. Rather, the Council's role is a much more limited one, that of determining whether the proposed tower is needed to provide such service. It is that question which has troubled some members of the Council. Because, if the residents could be served as well by a different tower, or by coaxial cable, then there would be no need for the proposed tower.

It should also be noted that in reaching its decision on this matter, the Council is charged with balancing need for this tower against its adverse effects. While such adverse effects are not deemed substantial, they do exist and the Council has a continuing duty to mitigate those effects consistent with its overall charge to reach a balanced decision. Since all impacts of the tower can be eliminated by eliminating the tower, the Council has considered alternative methods of providing cable TV service to the residents of Newtown.

Two methods have been suggested as ways to eliminate the proposed tower and still provide adequate cable TV service to Newtown. The first is by coaxial cable along the public way. The present state of technology makes extended coaxial service impractical, both as a matter of picture quality as well as of maintenance and operation. Therefore, since the area of Newtown to be served initially is within reach of coaxial cable from the Applicant's Brookfield tower, the ultimate service area is beyond current coaxial service cable capabilities. The Applicant expects to build a tower in Monroe. Therefore, in the future Newtown could receive cable TV from two coaxial service cables, one from Monroe and one from Brookfield, without exceeding current coaxial capabilities and without the need for a tower in Newtown. Such a system, however, would still have problems of picture quality and system maintenance and would also cost significantly more to provide CATV service to Newtown than would a tower located in Newtown. There is something to be said for technology forcing a decision, i.e., one dictating coaxial cable service for all of Newtown with the assumption that necessity will be the mother of technological invention so that extended coaxial service will be available when needed. However, such a decision may be appropriate only when it

exerts pressure on an Applicant that controls or can greatly influence technological advances. Such is not the case here.

The second possible method of avoiding a tower in Newtown is to review the Applicant's entire franchise area to determine the minimum number of towers necessary to provide service for that area. At present the Applicant proposes to build four receiving towers, one each in Brookfield, Newtown, Monroe, and New Fairfield. If one were to carefully analyze the franchise area, a system might be devised whereby only three towers would be necessary to serve the area within existing coaxial cable capabilities. This suggestion is appealing. At this stage of the proceeding, however, and on the state of the record before it, the Council does not believe it possible or prudent to embark on such an undertaking. If and when the Applicant comes in for a certificate to erect another tower, the time might be ripe for such an extended inquiry. If it were then determined that a different combination of towers could eliminate the need for the Newtown tower, an appropriate decision might be to issue a permit for such new tower on the condition that the unnecessary tower be eliminated.

#### IV. Conclusion

The Council has concluded, based on its consideration of the entire record, including its field inspections, that a community antenna television receiving tower in Newtown, Connecticut is needed to provide adequate cable television service to Newtown, for system reliability purposes as more fully set forth above, and that the best location for such tower is that on Reservoir Road.

The Council recognizes and the record reflects that certain adverse effects on the environment may occur as the result of the granting of a certificate in this matter. The nature of these environmental impacts are detailed more particularly in the findings, but they are not sufficient to justify selection of an alternate site, or the denial of this application.

The record does not suggest that there would be any significant adverse effect on, or conflicts with, the policy of the State concerning ecological balance, scenic and recreational values, air and water purity, forests and parks or fish and wildlife. Constructing the proposed facility in accordance with the applicable requirements of the Electronics Industry Association Standard should adequately safeguard public health and safety.

The Council is of the opinion that the possible adverse effects or conflicts with the policies of the State referred to above do not constitute sufficient reason to deny the application. In arriving at this conclusion, the Council has carefully reviewed the evidence and recommendations presented

to it and finds that there is a need for the proposed receiving tower in order to insure adequate and reliable cable television service in the area, and that many of the potential adverse environmental effects of the proposed facility are of minimal significance, as detailed in the findings.

In analyzing the nature of the possible environmental impact of the proposed facility, the Council has recognized that until such time as a certificate of environmental compatibility and public need has been issued to the Applicant, a detailed site development and management plan was not warranted. It is for this reason that the Council feels it has a responsibility to require the Applicant to coordinate its specifications for construction of the facility, its detailed environmental inventory and its development and management plan with the Council prior to the initiation of construction activities. Such a plan will aid this Council in determining the most appropriate method of constructing and maintaining the proposed facility so that the least possible adverse effect of the environment will occur.

The record, as expressed in the Council's findings, indicates that the location of the proposed tower will not pose an undue hazard to persons or property in the area of the tower.

The Council believes that the tower is needed to provide adequate and reliable cable TV service to the Newtown area and that it does so at the lowest reasonable cost to consumers consistent with the need to protect the environment and ecology of the State and to minimize damage to scenic, historic, and recreational values.

Therefore, the Council concludes that a certificate of environmental compatibility and public need should be issued for the construction of the proposed community antenna television tower on the proposed site.