DOCKET NO. 24

AN APPLICATION BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED FOR THE CONSTRUCTION OF A MICROWAVE TELECOMMUNICATION FACILITY IN THE TOWN OF BLOOMFIELD, CONNECTICUT.	:	CONNECTICUT SITING COUNCIL November 13, 1981

O P I N I O N

I. GENERAL

The Department of Environmental Protection filed an application for a Certificate of Environmental Compatibility and Public Need for the construction of a telecommunication tower on state owned property on Talcott Mountain in Bloomfield, Connecticut. The proposed tower will be shared by the Department of Environmental Protection, the Department of Transportation, the Department of Public Safety, and the Capitol Region Council of Governments. The proposed tower will support three microwave and four UHF antennas.

A public hearing on the application was held at the Bloomfield Town Hall Council Chambers, 800 Bloomfield Avenue, Bloomfield, Connecticut, on September 17, 1981. Prior to the hearing, Council members and staff inspected the proposed site. Notice of the hearing was duly advertised, and notice was mailed in accordance with law.

The applicant presented testimony to support the application. The applicant contends that the proposed facility is necessary and that the adverse environmental impacts will be negligible. Several members of the

public and representatives of land use agencies of the town of Avon attended the hearing; some made limited appearances in favor of the facility, and some parties to the proceeding spoke against it. The Council received written comments from the Town of Avon and the Town of Simsbury.

II. ENVIRONMENTAL

The Council concludes that the proposed facility may have some adverse environmental effects.

The impacts on natural systems will not be significant. The proposed site is level and clear, so no additional clearing or grading is necessary. Construction of the tower and building foundation will disturb only a small amount of soil which will revegetate within one growing season. Establishing fifty feet of new access road and building nine hundred feet of pipe for utility services will have negligible impacts if normal erosion control methods are used.

Similarly, land-use impacts will be minimal. The proposed site is in a state park which is used for passive recreation such as hiking, exploring the King Philip Caves, and viewing the surrounding landscape from the ridge and Heublein Tower. The proposed tower and equipment enclosure will occupy a very small parcel of land and should not interfere with these uses. Also, the

proposed facility will have no impact on architectural, historical, or archaeological resources listed in or eligible for the National Register of Historic Places.

The major impact of the proposed facility will be visual. The top of the tower will be visible from some locations in Avon and Simsbury, and the visibility will be accentuated by the addition of the microwave dish antennas. The most prominent views of the tower will be from the west. The top several feet of the tower, including the microwave dish antenna, will present a silhouette against the sky when seen from sections of Nod Road, Old Meadow Plains Road, and Route 10 near the Avon-Simsbury town line. The tower will become increasingly less visible as one travels north or south of the Avon-Simsbury town line. Also, the top of the tower will be visible from look-outs in Heublein Tower but most likely will not be visible from ground level locations within the park. The tower will probably not be visible from the east since the site is surrounded by trees, some of which will need to be trimmed for the beam path. Trimming will not increase the tower's visibility from the east, because the topography falls away from the ridge plateau on which the tower will stand. Thus, the tower will be effectively screened from lower viewpoints to the east.

The tower and the site were selected to mitigate the visual impacts. The tower will be only 60 feet tall,

approximately 20 feet higher than mature trees in the area, and will be no higher than necessary to provide the intended services. The site itself was selected to provide the services with the lowest tower possible and still remain distant from the major viewpoints within Talcott Mountain State Park, particularly the Heublein Tower. The site is 1000 feet south of the Heublein Tower. Also, the proposed site is screened by a natural rise in elevation to the west and by the trees which surround the site.

In addition, the proposed facility will not increase the number of towers on Talcott Ridge because the Regional Access Frequency System Tower, now adjacent to Heublein Tower, will be dismantled and removed. Nevertheless, two of the three existing towers, the 100 foot Department of Motor Vehicle Tower and the 80 foot FBI Tower, will remain between the proposed tower and Heublein Tower after the new facility is constructed. Thus, the tower will have little or no impact on areas to the east, and the impacts to areas west of the site and in Talcott Mountain State Park will be mitigated to the greatest extent possible.

Furthermore, the Council believes the proposed facility should be located at the proposed site. Locating a tower at a higher elevation on the ridge would bring it closer to the Heublein Tower and make it more visible from the heavily used portions of the park. A

site with a lower elevation would require a higher tower which would increase the visual impact to the east as well as the west.

The proposed site also provides an unusual opportunity to consolidate numerous services of several agencies on one facility, and at the same time permits the removal of an existing tower. Thus, there is no net increase in towers, and the possibility of providing similar services with several towers is eliminated. Numerous alternate sites, microwave beam paths, and existing facilities, described in detail in the findings, were investigated. No other site, facility, or beam path permits the consolidation of so many services at one site.

For reasons not clear from the record the Department of Motor Vehicle did not participate in the planning of the new Department of Environmental Protection tower and no intermodulation study was made in order to determine whether the Department of Motor Vehicle's frequencies would be compatible with the frequencies that will be transmitting from the new Department of Environmental Protection tower. If such a study had been made, and if the Department of Motor Vehicle frequencies had been found to be compatible, the new tower might have been designed to accommodate the Department of Motor Vehicle whip antenna. This could have resulted in the elimination of two towers, a net

reduction of one tower on this beautiful ridge line.

UHF transmissions from the Regional Access Frequency System are used by the State Police, numerous municipal police departments, Emergency Medical Services, the Department of Transportation, and the Department of Environmental Protection. The proposed site provides excellent UHF radio coverage within the Greater Hartford Area for these users. Other sites to the north and south were investigated and found inadequate for the intended purposes. State Police transmitters and receivers are located within Heublein Tower and must remain reasonably close to the Regional Access Frequency System to insure a reliable connection between the two systems. Similarly, the microwave antenna cannot be separated from the UHF transmission system and serve the intended purposes with reliability. UHF transmission will be sent to the proposed site on microwave directly from Hartford or via the John Tom Hill facility. The proposed site provides the necessary microwave links, a reliable microwave/UHF interface and, in addition, extends the public services by providing the microwave link to Mohawk Mountain for similar UHF transmissions from that site. The proposed site provides the necessary characteristics required for the complex interface of several systems which ultimately provide numerous important services. The Council commends the participants' efforts and cooperation in providing such consolidation on one facility. This sharing

will improve services the agencies provide the public, reduce long run costs for each agency, and reduce the number of towers necessary to provide similar service.

The Council continues to consider carefully the possible health effects of electromagnetic radiation. This issue was addressed during the course of the proceeding, and the Council finds that the proposed facility will not present a health hazard to the public. In this case, the transmitting antennas will be mounted fifty feet or higher above ground, so the power densities at ground level will be far below known and generally accepted standards. The record does not suggest that the proposed facility will have any adverse health impacts. In addition, the facility will be surrounded by a chain link fence, the radio building will be locked and protected by an alarm, there will be no climbing pegs on the tower legs, and the facility will be built and operated to conform to the Electronics Industry Association Standards.

II. NEED

Having concluded that the proposed facility may have substantial adverse environmental effect, the Council considered the public need for the facility to provide essential state services with minimal environmental damages, and concludes that the need is present.

As noted above, the proposed facility will allow the consolidation of several essential state telecom-

munication requirements on one tower, a sharing arrangement that the Council encourages and commends. The Council also recognizes the applicant's unsuccessful efforts to enlist the Department of Motor Vehicles into the agreement to allow removal of another UHF antenna support tower from the vicinity of the Heublein Tower.

The facility will provide benefits beyond minimizing the number of towers necessary for essential services, including present and potential economies to the state and improved, more reliable emergency response and operations by the agencies involved. It will facilitate communications by the DEP to the western part of the state to coordinate forest fire fighting; provide two-way voice and data communication for the DOT which will enhance passenger safety and fleet monitoring; coordinate emergency responses by the State Police; improve RAFS radio network; increase interactions by capitol region police departments; and provide 96 radio channels for potential use by state agencies.

The facility's total cost will be $82,000, $30,000 of which represents the cost and installation of the tower itself . Much of the funding will come from the Federal government.

IV. CONCLUSION

The Council concludes that although the visual impact of tower structures in Talcott Mountain State Park may increase, the need for improved and reliable com-

munications to provide essential safety, environmental protection, and transportation services outweigh this impact. The facility will be sited to minimize the intrusion, one of three existing towers will be removed, and the Council finds no intention on behalf of the applicant to enlarge the facility or add additional facilities in the future. Other than visual, the environmental effects of the proposed facility, including potential exposure to electromagnetic radiation, are expected to be negligible, and possible construction impacts will be addressed by a development and management plan as required by the Council's Decision and Order.

The Council notes that its decision sets no precedent for land use in the Talcott Mountain State Park, and that any modification of the existing facility, or any additional facilities, will require Council review consistent with its obligations pursuant to section 16-50g et seq. of the General Statutes.

Therefore, the Council concludes that a certificate of environmental compatibility and public need should be issued for the construction of a telecommunication tower as proposed.