

An application of the Department : Docket 128  
of Public Safety, Division of :  
State Police, for a Certificate of : Connecticut  
Environmental Compatibility and Public : Siting  
Need for the construction, operation, : Council  
and maintenance of a telecommunications :  
tower and associated equipment in the :  
Town of Wilton, Connecticut. : April 30, 1990

#### OPINION

The Department of Public Safety, Division of State Police (State Police), applied to the Connecticut Siting Council (Council) on September 29, 1989, for a Certificate of Environmental Compatibility and Public Need (Certificate) to construct, maintain, and operate a telecommunications tower, associated equipment, and building in the Town of Wilton, Connecticut.

The Federal Communications Commission (FCC) has recognized a need for effective public safety communications and has therefore established a National Plan for frequency allocation in the 800 MHz spectrum. The State Police with other public agencies, from New Jersey, New York, and New England states, cooperated in designing plans through both the Tri-State and the New England region for application of FCC licenses.

The State Police plan to replace their existing outdated, overburdened two-way radio system with a modern arrangement using point-to-point microwave and a 800 MHz two-way mobile telecommunications system. This proposed system would be able to support mobile data terminals, voice encryption, higher transmission speed for computer operation, operation of 2000 mobile units, and future expansion of the system. These features are not provided by the existing two-way radio system, nor could they be accomplished by upgrading the system.

The proposed application primarily addresses the implementation of a 800 MHz two-way radio system, limited continued operation of an existing 960 MHz link, and development of a point-to-point microwave telecommunications system linking centers of dispatch of each existing troop, district command, headquarters, and other fixed locations within the State. The proposed system would allow the State Police to operate an independent, efficient, and more reliable communications network than the existing system which is susceptible to a greater number of potential outage risks.

Alternate locations for the proposed facility were explored and rejected for various reasons. While the proposed 180-foot tower would replace an existing 180-foot tower and antennas,

some alternate sites would require greater tower heights ranging from over 200 feet to over 700 feet requiring special aviation markings. Other alternative sites would be within densely populated areas or would be disruptive to the State Police 960 MHz radio link. Furthermore, the existing site has been operating as a telecommunications facility for 50 years by the State Police. Although the site is within a residential zone, the tower site has become part of the landscape which has subsequently been developed for residential purposes. Consequently, the proposed tower would not significantly affect or cause any substantial change to the environment of the existing site.

The wetlands that are located nearby would not be affected by the construction of this tower. However, the existing access road that serves the site and nearby abutting landowners would be improved as per an agreement between the State Police, Southern New England Telephone, and abutting landowners. These improvements would be performed in accordance with Connecticut Guidelines for Erosion and Sedimentation Control to avoid the possible sedimentation and increased runoff to areas downhill of the site.

The fall zone of the proposed tower would encompass property owned by the State of Connecticut and all abutting property owners. This relationship has existed for many years and is the result of development of the abutting properties since the development of the telecommunications site in 1940. The State Police equipment building would be the only structure within the fall zone.

The Council generally prefers monopole type towers which have a thinner appearance and are less visually obtrusive except when tower sharing requires the structural strength of a lattice tower. The Council believes the proposed lattice tower in this application is appropriate to support the proposed microwave dish antennas and various other antennas including the sharing of the tower by local, State, federal, and private entities. This relationship of sharing towers for the greatest number of uses possible would ultimately eliminate the construction of additional towers elsewhere. Not only would this meet the Council's long-term goal, but it would meet a legislative intent for the purpose of the Council.

Electromagnetic radio frequency power density is a serious public health and safety concern of the Council and those who live in the area or attend the nearby Miller-Driscoll school. However, the power density from the antennas would be approximately nine times below the American National Standards Institute safe limit standard, at the base of the tower, and it would become much lower as distance from the tower increased.

This standard has been adopted by the Department of Environmental Protection (DEP) as the State standard and the Council will order that if such State standard changed, the tower and associated equipment must be brought into compliance. It is worth noting that the facility would be in compliance with every other power density standard considered during the proceeding including standards promulgated by organizations, states, and countries such as the National Council of Radiation Protection, United Nation's World Health Organization, State of Massachusetts, Canada, West Germany, the United Kingdom, and the United Soviet Socialist Republics. Although substantial and genuine concern was expressed by local residents over electromagnetic radio frequency emissions from this tower, based upon the above standards, the Council finds that the facility will not pose an undue health or safety hazard to persons, including the students and staff of the Miller-Driscoll school, or properties adjacent to the facility.

Based on its record in this proceeding, the Council finds that the effects associated with the construction and operation of a telecommunications tower and associated equipment at the proposed site, including effects on the natural environment; ecological integrity and balance; public health and safety; scenic, historic, and recreational values; forests and parks; air and water purity; and fish and wildlife are not significant either alone or cumulatively with other effects, are not in conflict with the policies of the State concerning such effects, and are not sufficient reason to deny the application, and therefore the Council will issue a certificate for this proposed facility.

The Council will require the State Police to submit a D&M plan for approval prior to the commencement of any construction or clearing at the proposed Wilton site. This D&M plan shall include detailed plans for the site's preparation, tower placement and foundation, architecture of the equipment building and fence, access road, and erosion and sedimentation controls.

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