DOCKET NO. 63

AN APPLICATION OF THE DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED FOR THE CONSTRUCTION OF MICROWAVE TELECOMMUNICATION TOWERS IN THE TOWNS OF GLASTONBURY AND MONTVILLE, CONNECTICUT.	:	CONNECTICUT SITING COUNCIL
	:	August 4, 1986

O P I N I O N

The Department of Environmental Protection (DEP) applied to the Connecticut Siting Council (Council) for a certificate of environmental compatibility and public need (certificate) for the construction, maintenance, and operation of telecommunication towers and associated equipment in the Towns of Glastonbury and Montville on April 24, 1986.

The two towers would be part of a statewide emergency telecommunications network which would carry the radio signals of various state agencies. Among the agencies participating with the DEP in the proposed system are the Connecticut State Police, the Department of Health Services, the Office of Civil Preparedness, the Capitol Region Chiefs of Police Association, and the Connecticut Army Reserve National Guard.

The Glastonbury tower would be used to facilitate communications between broadcast tower sites in Avon, Hartford, Colchester, Sterling, and a planned future site in Middlefield. The linking of these sites would allow the various state agencies listed above to have a dependable secure microwave system to serve functions such as personnel dispatching, transmitting radiological data in a nuclear emergency, coordination between local officials during a natural disaster, and improvement of the law enforcement radio system used by 30 police departments in the Hartford area.

The Glastonbury tower in this system would be a 120' self-supporting tower located on John Tom Hill near 12 other existing towers ranging in height from 100' to 250'. Upon construction of this tower, DEP would dismantle its existing nearby fire tower.

The existence of this number of broadcast facilities on John Tom Hill raises some concern regarding the ambient level of electromagnetic radiofrequency (RF) power densities at this site. RF power densities at this site would be 0.01239 uW/cm^2 at the tower base and 0.006713 uW/cm^2 at the nearest residence. The DEP has indicated it would be willing to conduct an RF power density study of the John Tom Hill area subsequent to the installation and operation of this facility.

The Council has determined that the public need for the Glastonbury site in the emergency system outweighs its environmental effects. The Council will therefore grant a certificate of environmental compatibility and public need for the Glastonbury tower. The Council will require the DEP to conduct a study to determine the RF power density levels on John Tom Hill, as part of the Development and Management Plan for this site.

At the present time, there is no reliable two-way radio system directly linking the Emergency Operations Center (EOC) in Hartford with the state's nuclear power plants, a requirement of the Nuclear Regulatory Commission. The establishment of a point to point microwave system would allow direct non-telephone communications between the EOC and the state's nuclear power plants. Presently, the DEP uses telephone lines to dispatch radiological personnel in emergency situations, despite the system's unreliability and lack of security, and in violation of Federal Emergency Management Administration regulations.

To rectify this situation, the DEP has proposed the construction of a 260' self-supporting telecommunications tower at the State Police Troop E barracks in Montville. This tower would provide an unobstructed microwave path to a future dish to be located on an existing tower on Vinegar Hill in Ledyard.

The Montville tower facilities would be used to coordinate the activities of those state agencies required to respond to an emergency at a nuclear power plant. Voice and data communications between State Police barracks in Montville and Colchester would be established without dependence on telephone lines in an emergency. In addition, this system would upgrade routine State Police communications.

The Montville tower would be obstruction-marked and lighted with high intensity white obstruction lights 24 hours a day. However, the tower would not be visible from the nearest residences located over 1500' away, because of screening by trees and the topography of the area.

The State Police investigated the use of existing towers on nearby Mohegan Hill, but determined that none of these towers would be capable of supporting the proposed equipment. The only alternative to tower construction would be the use of telephone lines, which have lower reliability and lack security.

The power density on the roof of the Montville State Police barracks would be 0.000412 uW/cm^2, a very low level, and the power density at the nearest residence would be an even lower 0.0000463 uW/cm^2. In view of these low levels, the Council will not require a power density study at this site.

The Council recognizes the importance of upgrading the reliability and security of the state's emergency telecommunication system, and has determined the public need for the Montville tower outweighs its environmental effects. Therefore, the Council will issue a certificate of environmental compatibility for the Montville tower.