



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

136 Main Street, Suite 401
New Britain, Connecticut 06051
Phone: 827-7682

Petition No. 278
Proposed Modifications to Existing
Transmission Lines and Substations in the Towns of
Montville, Ledyard, Preston, and Groton, Connecticut
December 31, 1991

On December 27, 1991, Council Chairman Mortimer A. Gelston, Council member Daniel P. Lynch, Jr., and Stephen M. Howard of the Council staff met with Robert Carberry and Gerald F. Thompson of Northeast Utilities and Warren Ott of the City of Groton Department of Utilities to begin review of the petition.

Northeast Utilities plans to increase the voltage of an existing 69-kiloVolt (kV) transmission line to 115-kV. Modifications along the transmission line would include redirection of the 115-kV conductor within the right-of-way (ROW) to new terminal positions in the Montville and Buddington substations, replacing existing taps at Ledyard junction and the Gales Ferry substation with new taps, making insulator changes along the line where necessary, and performing pole maintenance work. Modifications to the existing Montville, Gales Ferry, and Buddington substations, including the placement of new terminal structures, transformers, circuit breakers, and associated control and protective relay equipment, would be made in order to accommodate the new 115-kV line.

All components that would be replaced on the transmission line would be replaced with equivalent components and would not change existing structure heights. All substation modifications would take place within existing substation boundaries.

On the edge of the ROW nearest to the existing 115-kV, 1280 line, the proposed modifications would not change the electric field; however, the magnetic field would be reduced by an average of one to four milliGauss (mG).

On the edge of the ROW closest to the proposed upgraded line, the proposed modifications would increase the maximum electric field to approximately 0.6 kiloVolts per meter (kV/m); however, the magnetic field would be slightly reduced.

The proposed substation modifications would not increase sound levels at the substation property lines during normal substation operation.

Access to the transmission line ROW and substations would be from existing roads with no steep slopes or wetland crossings. Some additional temporary access points would be necessary for maintenance activities.

Construction would begin in March of 1992 with most of the work expected to be completed by January of 1993. The City of Groton Department of Utilities expects to finish the remaining work at the Buddington Substation by March of 1994.

Northeast Utilities, as agent for the Connecticut Light and Power Company and the City of Groton Department of Utilities, contends that the proposed modifications would not result in a substantial adverse effect on the environment or ecology, nor existing scenic, historical, or recreational values, and therefore, would not require a Certificate of Environmental Compatibility and Public Need from the Council.

Staff recommends Council approval of the petition as submitted.

Stephen M. Howard
Siting Analyst

5732E