



# STATE OF CONNECTICUT

## CONNECTICUT SITING COUNCIL

136 Main Street, Suite 401  
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PETITION NO. 281  
Northeast Utilities  
Southwest Hartford - Northwest Hartford 115 kV Line  
Hartford, Connecticut  
Staff Report  
April 1, 1992

On March 11, 1992, Daniel P. Lynch and Colin C. Tait of the Connecticut Siting Council (Council) and Robert K. Erling of the Council staff met Gerald F. Thompson and Joseph Russo of Northeast Utilities (NU) for a field review of this petition.

NU is petitioning the Council that no Certificate of Environmental Compatibility and Public Need would be required for its proposed modifications to an existing 115 kV underground pipe cable line because the proposed project would not have a substantial adverse environmental effect.

NU proposes to relocate approximately 800 feet of its existing Southwest Hartford-Northwest Hartford underground high pressure fluid-filled pipe cable line. The project is required because the Connecticut Department of Transportation (DOT) is moving a section of Albany Avenue approximately 50 feet to the north and rebuilding the arch of an existing bridge over the North Branch of the Park River at Scarborough Street in Hartford.

NU would install one new splicing manhole, rework an existing splicing manhole and install three 3000 kcmil insulated aluminum cables incased in an 8 5/8-inch diameter coated steel pipe. The new pipe would be installed between a new splicing manhole and an existing splicing manhole. The existing underground pipe would be swabbed, capped, and abandoned in place. The existing insulating fluid would be placed in 55 gallon drums and properly disposed of by NU. The existing cable would be taken out, shipped to the manufacturer, tested, and used for spare cable, if so determined by the manufacturer.

When the new pipe and manholes have been installed and the trench backfilled, the cables would be pulled through the pipe and splices made in the manholes. Next the pipe would be filled with an insulating fluid and pressurized by an existing pumping unit. The electrical insulating fluid used would be a synthetic, low viscosity fluid which is a copolymer of

polyisobutylene and butene. It is not defined as a hazardous material by the federal Department of Transportation, and does not contain polychlorinated biphenyls. To prevent or minimize any leakage of insulating fluid, the existing pumping stations are equipped with sensors which can detect loss of pressure and fluid flow, and which produce an alarm in the event of a leak.

The line would be de-energized if a leak is detected, and the leak located and repaired. Affected soil would be excavated, removed, and properly disposed of. The line would be installed within a coated steel pipe which has been cathodically protected to prevent corrosion and reduce likelihood of leakage.

After installation and backfilling have been completed, affected grassed areas, sidewalks, curbs, and pavement would be restored. NU expects the work to commence about September 30, 1992, with an expected completion date of December 10, 1992.

The cost of this project would be approximately \$762,000, which will be paid by the State of Connecticut (\$272,000) and NU (\$490,000).

Robert K. Erling  
Sr. Siting Analyst

RKE/cp

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