



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

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Petition No. 317
City of Norwich Department of Public Utilities
Replacement of Equipment at Dudley Street Substation
Norwich, Connecticut
Staff Report
March 11, 1994

On February 18, 1994, the City of Norwich, Department of Public Utilities (NDPU) submitted a petition to the Connecticut Siting Council (Council) requesting a ruling that a Certificate of Environmental Compatibility and Public Need is not required for the proposed upgrade of equipment to its Dudley Street substation in Norwich, Connecticut.

On March 7, 1994, Mortimer A. Gelston, Chairman of the Council and Fred O. Cunliffe staff of the Council met Paul Woronik, David Upp, and Chuck Norris of NDPU at the site of the proposed upgrade.

The Dudley Street substation serves the west side of Norwich. The substation originally housed a 69/13.8/4.8 kV, 10 MVA transformer. In 1968, NDPU converted the transmission facility from 69-kV to 115-kV and installed a 115/13.8 kV, 16.7 transformer and associated switchgears. Because the substation has recently experienced an overload (1993 summer peak), and a new strip mall and Walmart is scheduled for construction in 1994, the proposed upgrades are needed to provide efficient and reliable service.

NDPU proposes to upgrade the Dudley Street substation by replacing the existing 16.7 MVA and 10 MVA transformers with a 40 MVA unit and associated switchgears. This would allow for a consistent, more efficient, and higher transformation capacity from 115-kV to 13.8-kV. NDPU would remove the older, inefficient transformers and replace the associated bus structures, which consist of seven wood poles that stand approximately 30 feet high, with two new wood poles of comparable height. The crushed stone surface that now covers approximately one-third of the substation yard would be extended to cover the eastern half of the fenced substation yard.

NDPU would construct a concrete containment barrier underneath the new transformer to retain non-hazardous mineral oil in the event of a spill or leak. The transformer would be electronically monitored for changes in temperature and amount of fluid.

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No construction would take place outside the fenced perimeter except for the planting of arborvitea along the southeast property boundary facing the road. Staff recommends extending these plantings along the northeast property boundary to provide a buffer to an adjacent residence.

NDPU contends that the proposed petition for the substation upgrades would not be a significant change or alteration, does not qualify as a modification as defined in Connecticut General Statutes section 16-50i, and that the equipment proposed would have no adverse environmental effect.

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Siting Analyst

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