

DOCKET NO. 153 - An application of the Connecticut Light and Power Company (CL&P) for a Certificate of Environmental Compatibility and Public Need for the construction of a new substation and its connection to an existing 115-kV transmission line on a 6.1 acre site owned by CL&P located about 1/2 mile south of Route 34 and about 640 feet to the east of Great Ring Road in the Sandy Hook section of the Town of Newtown, Connecticut.

Connecticut

Siting

Council

April 7, 1993

### Opinion

On May 29, 1992, the Connecticut Light and Power Company (CL&P) applied to the Connecticut Siting Council (Council) for a Certificate of Environmental Compatibility and Public Need (Certificate) for the construction, operation, and maintenance of a new substation and its connection to an existing 115-kV transmission line off of Great Ring Road in the Sandy Hook section of the Town of Newtown, Connecticut.

The Council held a public hearing on the proposed Great Ring Road site on September 15, 1992. On December 2, 1992, the Council reopened the proceeding and voted to hold an additional public hearing to receive new evidence on the effects of electric and magnetic fields and on potential alternative sites off of Still Hill Road and Hoseye Coach Road in the Town of Newtown. The Council held a public hearing limited to this new evidence on February 3, 1993.

We find that significant new electric loads will require new bulk-supply substation capacity in the Newtown area, possibly as early as the summer of 1993. These loads include the Newtown Jail, the Payday Associates Warehouse, additional load for air conditioning at the Fairfield Hills Hospital, and decentralized loads associated with commercial growth consistent with the land use zoning planned by the Town. Indeed, feeder lines from the existing Newtown substation have already begun experiencing voltage and overload problems during times of peak load. CL&P investigated upgrading its existing Newtown Substation and existing Stevenson Substation. However, expansion of either of these substations would offer only temporary relief, while negatively affecting reliability. Conservation and load management would not be sufficient to deny or postpone the need for this substation. The construction of a Sandy Hook Substation would solve CL&P's substation problems in the area, improve system reliability, and provide room for future growth.

Before proposing this new substation, CL&P performed an assessment of other site alternatives. The proposed substation site was finally selected by CL&P after consideration and justifiable rejection of several other potential sites in the Newtown area. These sites were rejected by CL&P for reasons including their proximity to residences, relationship to load center, lack of screening, impacts on wetlands, and poor access. Although CL&P did purchase this site before performing an assessment of alternative sites, our decision cannot be limited by this fact. Furthermore, we find the site selection process was adequate and is reliable. Additional information on two potential alternative sites was submitted during the reopening. We do not find compelling reasons to reject the proposed Great Ring Road site in favor of any potential alternative sites.

The potential alternative sites off of Still Hill Road and Hoseye Coach Road would incur greater environmental impacts than the proposed Great Ring Road site. Additionally, the owners of the Still Hill Road and Hoseye Coach Road properties are unwilling to consider any offers from CL&P to purchase these properties as substation sites. The Still Hill Road property would be nearer to an existing home than the proposed site, and would require access through a private driveway used by the owners of nearby residences. This driveway would require substantial tree removal, widening, and grading to allow the transportation of substation equipment. Although more remote from homes, the Hoseye Coach Road location contains substantial wetlands and the required widening and grading of this unimproved road would result in the removal of as many as 1000 trees.

While we have concern for the consistency of this proposed project with existing adjacent land uses, the proposed substation site is within a forested area, adjacent to an existing transmission line, and is 680 feet and 820 feet from the two nearest residences, respectively. Although the property line of the proposed substation would be within 200 feet of a potential home site of the Half Farm Estates subdivision, the future of this subdivision is now uncertain and it may never be developed. Furthermore, even if the subdivision were developed, the vegetative screening and physical distance that would separate the substation from homes within the subdivision would be sufficient to protect scenic resources and to protect public health and safety.

Based on reviews performed by the State Department of Environmental Protection, no known existing populations of Connecticut Species of Special Concern or federally endangered or threatened species would be affected by the construction of the proposed Great Ring Road facility. Additionally, no historic or cultural resources would be affected by the construction of the facility. In fact, the development of this site would not have any substantial effect on the natural environment of the site, including effects on air, water, inland wetlands, and ecological quality.

Electric and magnetic fields and their possible effects are a concern to the Council and to the citizens living in the vicinity of any transmission line and substation. However, the record in this proceeding indicates that at the edge of the transmission line right-of-way, the proposed facility in operation would not substantially change the electric fields, and magnetic fields at the right-of-way would actually decrease west of the substation where the nearest residences are located. Although the State of Connecticut has not established standards for exposure to electric and/or magnetic fields, there is no evidence for the Council to conclude that the proposed substation and transmission line connection would be hazardous to persons or property adjacent to or near the facility.

To limit the maximum level of public exposure to electric and magnetic fields for future loads, we will establish maximum exposure levels for electric and magnetic fields consistent with the intended operation of this facility. This shall not be construed to be the establishment of a standard for any other facility existing or proposed. Although the Council has not adopted any standard, we will order that CL&P bring this facility into compliance with any future State or federal standard, should such a standard be developed.

Based on its record in this proceeding, the Council finds that the effects associated with the construction, operation, and maintenance of a substation and transmission line connection at the proposed site off of Great Ring Road in the Sandy Hook section of Newtown, Connecticut, including effects on the natural environment; ecological integrity and balance; forests and parks; scenic, historic, and recreational values; air and water purity; fish and wildlife; and public health and safety are not disproportionate either alone or cumulatively with other effects when compared to need, are not in conflict with the policies of the State concerning such effects, and are not sufficient reason to deny the application.

Therefore, the Council will issue a Certificate for the construction, operation, and maintenance of the proposed Great Ring Road substation and transmission line connection. To ensure the site is properly developed, we will require CL&P to submit a Development and Management (D&M) Plan which will include plans to reduce the size of the enclosed substation yard with phased development based on future need; a plan to adequately identify and mark the property boundaries of the 6.1 acre parcel as the site of a high voltage electric substation; a selective tree cutting plan to preserve those trees which would be compatible for screening; a landscaping plan showing the locations and types of plantings to screen the facility; an erosion and sediment control plan to protect inland wetlands on the site, consistent with the Connecticut Guidelines for Soil Erosion and Sediment Control as amended; a provision to construct an architecturally-treated wall to attenuate any excessive noise, if and when necessary; provisions for noise monitoring and attenuation; and the installation of intrusion alarms and remote full-time substation monitoring.