

AN APPLICATION OF THE CONNECTICUT LIGHT AND POWER COMPANY FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED FOR RECONSTRUCTION OF A 115 kV ELECTRIC TRANSMISSION LINE BETWEEN TRUMBULL JUNCTION IN TRUMBULL AND OLD TOWN SUBSTATION IN BRIDGEPORT. : CONNECTICUT SITING COUNCIL : May 7, 1986

O P I N I O N

The Connecticut Light and Power Company (CL&P) applied to the Connecticut Siting Council (Council) for a certificate of environmental compatibility and public need for the reconstruction of an existing overhead 115 kV electric transmission line from Trumbull Junction in Trumbull to Old Town Substation in Bridgeport. The existing transmission line, built in the 1950's, would be reconstructed over a 3.1 mile distance along the center line of the right-of-way.

The transmission lines of southwestern Connecticut have been approaching maximum load capacity for ten years. The southernmost of the two circuits on this line might overload under certain conditions by the summer of 1988. The northern circuit could reach its capacity by 1990, thus jeopardizing the reliability of electric power to southwestern Connecticut. The Council believes the power transmission system of this area of the state is vulnerable to overloading under a wide range of loading conditions.

CL&P had originally planned to build 345 kV circuits in this area, but in 1982 the company decided instead to reinforce the existing 115 kV system with a new higher capacity system. This included the rebuilding of the Plumtree-Ridgefield Junction 115 kV line and the planned reconstruction of the Trumbull Junction-Old Town line. Anticipating the reconstruction of this line, the company included such plans in its 1985 Forecast of Loads and Resources for 1985-1994.

One of the Council's concerns is the adequacy and reliability of electrical service. The proposed rebuild of this line, using larger conductors, would increase the reliability of electric service to southwestern Connecticut until 1992, at which time additional rebuilding may be required. The growth rate in energy demand in the area served by the existing line averaged 2.8% annually for the period 1980-1985, and Northeast Utilities forecasts growth at an annual average rate of 3.7% for the 1985-1989 period.

The reconstruction of the line as proposed requires replacing the existing conductors and structures with heavier load-carrying conductors, thus increasing the current capacity, but not the voltage, of the existing line. Each existing lattice tower structure would be replaced with a new steel pole structure. New, heavier diameter conductor would replace the existing conductors, and new wires would replace the two lightning shield wires.

The Council considered the potential environmental impacts of the reconstruction of this line and found them to be minimal. Although the steel pole structures would average some 10'-15' taller than the existing lattice structures, they would have narrower bases and would present a cleaner, less cluttered view along this line. The reconstructed line would be in accordance with National Electric Safety Code Standards and Department of Public Utility Control Regulations covering transmission lines. The line would be reconstructed in accordance with Federal Power Commission guidelines for the protection of natural, historic, scenic, and recreational values in the design and location of right-of-way and transmission facilities.

The proposed reconstruction is within a heavily developed area, including residential, commercial, industrial, and recreation uses. The Council believes that the possible effects of such construction-related impacts as blasting, noise, erosion, herbiciding, and tree cutting would be kept to a minimum, and will require that they be more specifically addressed in a Development and Management Plan (D&M). The Council will also require CL&P to specify in the D&M plan methods of protecting the ten wetlands along this right-of-way. Gaps in the access road will be left along each section of right-of-way between roads to reduce access across lawns, wetlands, and steep slopes wherever possible.

The Council found that there were no designated or eligible scenic, historic, or archaeological resources which would be adversely affected by the rebuilding of this line, nor would any species of special concern be likely to be affected. The Council finds that the public need for this line outweighs any potential environmental effects and concludes that a certificate of environmental compatibility and public need is warranted for the reconstruction of this transmission line. The Council hereby directs that such certificate be issued subject to the terms, limitations, and conditions of the Decision and Order which accompanies this Opinion.