

DOCKET NO. 115 - An application of the United Illuminating Company for a Certificate of Environmental Compatibility and Public Need for the construction of two 115,000/13,800 volt substations and connecting underground transmission lines in New Haven, Connecticut.

Connecticut

Siting

Council

February 5, 1990

ORIGINAL

OPINION

The United Illuminating Company (UI), applied to the Connecticut Siting Council on June 23, 1989, for a Certificate of Environmental Compatibility and Public Need (Certificate) for the construction of two new 115,000/13,800 volt (115 kV/13.8 kV) substations and two 115 kV underground transmission lines connecting these two substations into the UI transmission system, and to modify two existing substations. A public hearing on the application was held in New Haven, Connecticut, on October 4, 1989. Members of the Council made an inspection of the proposed substation sites and the proposed transmission line routes on October 4, 1989.

Under Sections 16-50p of the General Statutes of Connecticut (CGS), in deciding this application, the Council must consider the need for the proposed substations and connecting transmission lines and the nature of the probable environmental impact, including significant adverse effects, whether alone or cumulatively with other effects, on, and conflict with the policies of the State concerning, the natural environment, ecological balance, public health and safety, scenic, historic, and recreational values, forests and parks, air and water purity, and fish and wildlife. The Council may not grant a Certificate unless it finds that these adverse effects or conflicts with state policies are not sufficient to deny the application and that the location of the line will not pose an undue hazard to persons or property along the area traversed by the line. The Findings of Fact which accompany this Opinion contains the Council's findings regarding the need for the facility, its adverse effects and hazards, and its consistency with relevant state policies.

The proposed substations and connecting underground transmission lines are needed to resolve a number of identified problems which exist at the English Generating Station and Grand Avenue Substation Complex relating to aging and deteriorating equipment, operation and maintenance, safety of personnel and equipment, and reliability of service to customers during times of increasing demand. The proposed

Grand/Goffe Project (Project) would enable UI to maintain its system reliability and support electricity demand by providing additional capacity for projected load growth in New Haven. The design of the Project would allow UI greater flexibility throughout its distribution system serving the area.

The Council considered and compared the costs, design, and environmental compatibility of potential alternate substation sites and several alternate transmission systems and routes linking the proposed substation facilities. The Council also considered that UI would need to upgrade its transmission equipment and distribution facilities in the near future without construction of the proposed Project. Given the higher costs associated with these alternatives and construction conditions specified by the City of New Haven, as submitted in the application, the Council opines that UI optimized its Project choices by proposing the best available system improvements at lowest possible cost to the ratepayers. The proposed Project would be more reliable for customer service, at lower cost and therefore would be superior to other alternate systems.

Because of these reasons, the proposed Project is consistent with State energy policy and public need for reliable electricity at the lowest reasonable cost.

The transmission lines have been carefully planned within fully underground routes, primarily through city streets and roads. As such, the effects on the natural environment including ecological balance, air and water purity, and fish and wildlife will be minimal. Cultural resources including scenic, historic, and recreational values and effects on forests and parks would also be unaffected.

While the construction and modification of the substations would be above ground, the sites selected are either sites of existing substation equipment or, as is the case of the proposed Broadway substation, would be within a commercial area. UI has taken additional steps to provide an architecturally treated wall around the proposed Broadway substation so that the substation would blend into the area. With the removal of the existing unkept building on the site, the architecturally treated substation would actually improve the visual character of the area.

There have been no substantiated contentions that electric or magnetic fields produced by the 60 cycle current would pose an undue health hazard. Although the project would be operating within normal industry standards, the Council will order the Certificate Holder to comply with any future electric and magnetic field standards that are adopted by the State. At this time, the Council finds that the operation of the line and substation would not pose an undue health hazard to anyone in the near proximity of the lines or substations.

In summary, the Council feels that the substation locations and architectural treatment of the proposed Broadway substation, and the underground construction of the line over the proposed route, were prudently chosen and would not have significant effects on the natural or cultural environment, would not be in conflict with State policies, and would not result in an undue hazard to persons or property along the line.

Nonetheless, the Council is concerned with potential impacts on the Mill River from possible erosion and sedimentation from construction; removal of vegetation for the new line; construction of an Amtrak railroad pipe bridging structure and its security from intruders; restoration of city streets, curbs, and sidewalks; potential environmental damage from undetected leaks from a future transfer of dielectric cooling fluid into the pipe cable of the proposed High Pressure Gas-Filled transmission line; substation visibility and operating noise; and construction activity on residential, educational, and historic districts. Given the Project was planned in consultation with City of New Haven and Yale University officials, the Council believes that measures minimizing the environmental impacts as specified through a detailed development and management (D&M) plan would be acceptable if properly implemented.

By imposing a comprehensive Decision and Order with a condition adopting UI's proposed plan, and a D&M plan to confirm compliance with the Council's Decision and Order, the Council feels that the substations and transmission lines could be developed without significant long-term effects on the cultural and natural environment.

Based on the foregoing, the Council concludes that a Certificate of Environmental Compatibility and Public Need is warranted for the construction of the proposed substations, transmission lines, and modifications to existing substations, and hereby directs that such a Certificate be issued subject to the terms, limitations, and conditions of the Decision and Order that accompanies this Opinion.