## DOCKET NO. 48

AN APPLICATION SUBMITTED BY THE UNITED ILLUMINATING COMPANY FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED FOR THE CONSTRUCTION, MAINTENANCE, AND OPERATION OF A 115 KV TRANSMISSION LINE AND ELECTRIC SUBSTATION IN THE CITY OF BRIDGEPORT.

CONNECTICUT SITING

: COUNCIL

:

: August 29, 1985

## OPINION

United Illuminating Company (UI) applied to the Connecticut Siting Council on April 11, 1985, for a certificate of environmental compatibility and public need for the construction, maintenance, and operation of a 115 kV transmission line and electrical substation in Bridgeport, Connecticut. A public hearing on the application was held in Bridgeport on July 8, 1985. Members of the Council made an inspection of the project area on May 28, 1985.

The applicant presented testimony and exhibits to support its claims that the transmission line and substation are necessary and will not cause adverse environmental effects sufficient to deny the application. The substation and transmission line are necessary to conduct electricity generated by the Connecticut Resource Recovery Authority (CRRA) refuse-to-energy facility, previously certificated by the Council in Docket No. 49.

The 115 kV substation, which will be located adjacent to the CRRA facility, will not be visible from surrounding areas because of screening by the much larger CRRA facility. The potential effects of the nearby CRRA cooling tower on the reliability of the substation were studied by UI. Another study conducted for UI recommended a separate distribution feeder for additional protection against station blackout. The study recommended the use of insulators for 138 kV and equipment bushings

for 161 kV to protect against corrosion. Although the Council will not order these modifications to the plans, UI is encouraged to consider the recommendations carefully.

UI presented both overhead and underground line options to connect the substation to the existing Ash Creek to Pequannock 115 kV line, and the Council will require UI to build an overhead transmission line system. The Council believes that an overhead transmission line would not have an adverse effect on National Register of Historic Places resources in Bridgeport and that such a system would be compatible with the industrial character of the area. No persons live along the proposed overhead line route, no wetlands or native plant communities exist there, and there would be no electric field effects from the overhead line.

The Council has determined that the proposed Howard Avenue route, which is the shortest and most direct, is also the route with the least potential environmental impacts. The Council considered the visual impacts of the proposed line and pole structures along this route and found they would be limited to Howard Avenue, Route I-95, the railroad line, and immediately adjacent areas. These views, in the Council's opinion, would not be sufficient to justify the construction of an underground system. The Council does not anticipate any long-term impacts on land use, population, or recreational resources as a result of the construction of this line.

The Council believes that the much greater cost of an underground system is not justified in this instance, even though the additional costs for an underground line would be paid by increased tipping fees to towns participating in the Bridgeport CRRA refuse-to-energy project, not

by increased electricity rates. In addition, an outage in an underground system could take much longer to repair than an outage in an overhead system.

The Council realizes that, without this transmission line, the Bridgeport CRRA facility cannot truly function as a refuse-to-energy facility; the two projects are not independent. UI is negotiating to purchase the net electricity produced by the CRRA facility. In its decision in Docket No. 49, the Council determined that the refuse-to-energy concept would represent a significant contribution of diversified, non-oil, small scale baseload generation to the state's energy capacity mix. This transmission line and substation will allow that potential to become reality. Combined with the CRRA refuse-to-energy facility in Bridgeport, this project will also help to assure adequate and reliable electrical service to southwestern Connecticut at reasonable cost and with minimal environmental effect.

Based on the foregoing, the Council concludes that a certificate of environmental compatibility and public need is warranted for the proposed transmission line and substation, and hereby directs that such certificate be issued subject to the terms, limitations, and conditions of the Decision and Order that accompanies this Opinion.