

5. The parties to the certification proceedings are the applicant, The United Illuminating Company, the persons entitled to receive a copy of the application under §16-501(b) of the 1971 Supplement to the General Statutes of Connecticut, and Mrs. Tanya Malse, member of the Clean Air Committee, Conservation Commission, City of Shelton. (Transcript, pp. 4, 22)
6. On October 31, 1972, the Council made a ground inspection of the proposed relocation site. (Transcript, p. 34)
7. No limited appearances were made pursuant to §16-50j-15 of the Regulations of Connecticut State Agencies.
8. The Applicant's Derby - Shelton transmission line supplies most of the Ansonia, Derby and Shelton areas. (Transcript, p. 14)
9. Based on the trend of continued growth in the demand for electric energy in this area, present forecasts indicate that the existing line will be adequate until 1977. (Transcript, pp. 14, 28)
10. Investigation of the feasibility of reconductoring the line to provide the increased capacity needed in 1977 has included a study of the clearance of the lowest existing wires over the Housatonic River. (Transcript, p. 14)
11. At present electrical levels the lowest existing wires of the Derby - Shelton line sag to a clearance of approximately 27 feet above the waters of the Housatonic River. (Transcript, p. 15)
12. 1977 load levels would cause the wires to sag an additional one foot due to the increased capacity of the line. (Transcript, pp. 15, 25, 26)
13. The proposed replacement project is designed to increase the clearance between existing transmission wires and boats using the Housatonic River. (Transcript, p. 13)
14. There are no applicable national or Connecticut codes which specify minimum vertical clearances for conductors over water. However, Massachusetts has adopted a code which specifies a

minimum height of 40 feet for 115 KV conductors operating at maximum continuous operating temperature over bodies of water used for recreational boating. (Transcript, pp. 15, 27)

15. Neither the existing structures or conductors are strong enough to support the increase in line tension necessary to increase the Housatonic clearance to Massachusetts code levels. (Transcript, p. 15)

16. Three existing lattice steel towers will be removed and replaced with three tubular steel poles with upswept arms. (Transcript, p. 10; Applicant's Exhibit No. 3)

17. Each of the proposed steel towers will be located adjacent to an existing tower, specifically, towers 359, 360 and 361. These towers are located on the Shelton bank, the Derby bank, and in the Applicant's Derby substation yard respectively. (Transcript, p. 11)

18. Six existing 4/0 copper conductors, approximately one-half inch in diameter, and two existing copperweld static wires, approximately three-eighths inch in diameter will be removed and replaced with six 1590 MCM ACSR conductors, approximately one-half inch in diameter, and two alumoweld static wires approximately one-half inch in diameter. (Transcript, p. 11)

19. During the replacement operation, when portions of the existing line must be removed from service, a single circuit temporary wood pole transmission line approximately 3,400 feet in length is also proposed. (Transcript, pp. 11, 29, 31)

20. The proposed temporary line would run from the Derby substation westerly across the Housatonic River below Derby Dam to the Penn Central Trans. Company Railroad right-of-way, then northwesterly along and over the railroad tracks to the first transmission structure, No. 359, on the Derby side of the River, and then westerly, paralleling

the existing transmission line to transmission structure No. 358. (Transcript, p. 12, Applicant's Exhibit No. 2)

21. The proposed temporary line would consist of three 336.4 MCM ACSR conductors approximately three-quarters of an inch in diameter, and one alumoweld static wire approximately one-half inch in diameter. Space, circuit and right of way factors preclude using the temporary crossing location as the site for the permanent line. (Transcript, pp. 12, 31)

22. The proposed temporary line is needed for approximately six months, after which the line and its supporting structures will be removed and the area restored to its previous state. (Transcript, p. 12)

23. The height of the proposed temporary wires over the Housatonic River would be approximately 40 feet. (Transcript, p. 16)

24. The estimated total cost of the project is \$620,000. (Transcript, p. 12)

25. The voltage and capacity of the temporary line, as well as the reconducted permanent line, will be 115 KV and 100 MVA normal firm rating, respectively. (Transcript, pp. 12, 13)

26. The route for the proposed project will be the same right-of-way as the existing facility. (Transcript, p. 16)

27. The route selected, which traverses an industrial area, has been in use since 1925 and is compatible with the existing environment, which includes multiple uses of the land involved for parts of the route. These multiple uses are transportation by rail and water, supply of industrial process water by canal, supply of city water from wells, parking for industrial workers and transmission of electric energy. (Transcript, p. 16)

28. The proposed route of the temporary line does not parallel the existing line at its river crossing location because there is insufficient land area for a temporary supporting structure on the Derby side of the River, and construction of a temporary wood pole line at that point is not practically feasible. (Transcript, p.16)

29. An alternative route north or south of the proposed River crossings is possible but would be dependant on the availability of necessary additional rights-of-way. Additionally, such an alternate would mean longer transmission lines, greater cost and probably greater environmental impact. (Transcript, p. 17)
30. The proposed temporary and permanent replacement facility will result in the modernization of the appearance of the existing permanent transmission line. (Transcript, pp. 17, 18)
31. The greater clearance provided for watercraft using the Housatonic River will enhance recreational and safety values in the area. (Transcript, p. 18)
32. The height of the new river crossing poles will be nearly the same as the old towers and the number of conductors and static wires will remain unchanged, the only alteration in appearance being that caused by the substitution of the modern design tubular steel poles with upswept arms for the lattice steel towers. (Transcript, p. 18)
33. The lines will conform with the Federal Power Commissions "Guidelines for Protection of Natural Historic, Scenic and Recreational Values in the Design and Location of Rights-of-Way and Transmission Facilities." (Transcript, pp. 18, 19)
34. The proposed completed facility will pose no undue hazards to personal property along the area traversed by the line. (Transcript, p. 19)
35. The proposed line conforms to a long-range plan for expansion of transmission facilities of the United Illuminating Company and other systems serving Connecticut and interconnected systems and will conform with applicable state and local laws and regulations. (Transcript, p. 19)
36. The estimated cost to provide an equivalent capacity of power through underground pipe type cables exclusive of land and/or right-of-way acquisition is \$2,130,000., or approximately \$750./foot. (Transcript, pp. 19, 37)

37. This cost could increase if a substantial amount of rock were encountered. (Transcript, p. 19)
38. An advantage to undergrounding would be the reduction of the visual impact of the line. (Transcript, p. 20)
39. Disadvantages associated with undergrounding include much higher costs, the necessity of acquiring land and/or rights-of-way, and the need to install facilities for termination of the underground and for transition to the overhead on the Shelton side of the River. These facilities would occupy more space than the existing tower or proposed pole and would have a greater visual impact. (Transcript, p. 20)
40. The applicant does not own the rights to install underground transmission on the existing right-of-way. (Transcript, p. 20)
41. Undergrounding could have an undesirable impact on the environment and ecology of the area because of the excavation of the river banks and any dredging or plowing of the riverbed found necessary. (Transcript, pp. 21, 33)
42. Pursuant to §16-50j(f) of the 1971 Supplement to the General Statutes of Connecticut, the State Department of Health submitted a letter dated June 27, 1973 stating that from a public health standpoint the proposal should be satisfactory in that the proposed line would not cross any public water supply reservoir or watershed.
43. Pursuant to §16-50j(f) of the 1971 Supplement to the General Statutes of Connecticut, the Council on Environmental Quality submitted a letter approving the application, dated June 20, 1973, summarized as follows:
- (a) Anticipated load requirements will materialize.
 - (b) Use of a route in existence for forty-eight years is proposed.
 - (c) Use of tubular steel poles will lessen net environmental impact.
 - (d) This line does not merit the additional cost and environmental impact that underground construction would require.

(e) The minor visual impact of the temporary line will be for an estimated six months only.

(f) The sag issue is secondary to the need for greater transmission line capacity although raising this line will be a significant safety advantage.

44. Pursuant to said §16-50j(f) of the 1971 Supplement to the General Statutes of Connecticut, the Department of Environmental Protection submitted written comments dated June 22, 1973, summarized as follows:

(a) Raising of the river clearance from 27-29 feet above the water to 40 feet would improve recreational navigation.

(b) The Department does not support the undergrounding alternative because too few visual benefits would be gained.

(c) Possible construction effects on the River such as erosion should be considered.

(d) The proposed route is compatible with adjoining land uses and any alternative might have additional environmental impact.

(e) There will be little air or water quality impact.

(f) From a fish and water life standpoint the proposed line presents little disturbance.

(g) Minimal to no impact on wildlife.

(h) The proposed construction will not disturb forested areas.

(i) The temporary line will parallel Riverside Park but will present minimal hazard to children using the park facility.

(j) The Power Facility Evaluation Council should conduct a site inspection after removal of the secondary structures.