

AN APPLICATION BY NORTHEAST UTILITIES : CONNECTICUT SITING
FOR THE HARTFORD ELECTRIC LIGHT :
COMPANY FOR A CERTIFICATE OF :
ENVIRONMENTAL COMPATIBILITY AND : COUNCIL

PUBLIC NEED FOR THE RECONSTRUCTION
UNDERGROUND OF TWO EXISTING 345 kV
TRANSMISSION LINES AND ONE EXISTING
115 kV TRANSMISSION LINE WHICH CROSS
THE CONNECTICUT RIVER BETWEEN
MIDDLETOWN AND EAST HAMPTON AT
SCOVILL ROCK.

: October 1, 1981

O P I N I O N

I. GENERAL

Northeast Utilities (NU), on behalf of Hartford Electric Light Company (HELCO), applied to the Power Facility Evaluation Council (PFEC), now the Connecticut Siting Council (CSC), for a certificate of environmental compatibility and public need to modify the existing transmission lines that cross the Connecticut River at Scovill Rock between the Town of East Hampton and City of Middletown. The proposal calls for undergrounding six 115 kV cables and twelve 345 kV cables for approximately 4200 feet between east bank and west bank terminals. Four alternatives were also proposed: Alternatives "A" and "B" proposed two new overland routes to avoid the Scovill Rock Crossing; Alternative "C" proposed three variations of river bank structure replacement; and Alternative "D" proposed repainting the existing structures.

The applicant presented testimony and exhibits which it considered necessary to fulfill its obligation by prior agreements to "diligently prosecute" an application to the PFEC to underground the Scovill Rock Crossing lines. The applicant acknowledged early in the proceeding that it could not support the proposed undergrounding due to the high cost involved, and contended during the proceeding that to the extent a need to modify the crossing existed, it could be satisfied by one of the "C" alternatives involving replacement of existing structures.

A typical applicant for a certificate emphasizes how the need for a facility outweighs the environmental impact at the lowest reasonable cost to the consumer. In the immediate

proceeding, however, the applicant has strongly emphasized the high costs and adverse environmental impacts of the undergrounding proposal, as well as those of the overland alternatives. In a similar reversal of roles, those opposing the applicant strongly supported the proposal and emphasized the need to improve the river's quality by undergrounding the circuits. These unusual postures result from the long and involved history of this river crossing which dates to 1966 and includes several extensions of prior administrative orders to accomplish the undergrounding.

The Council is not here presented with a routine docket calling for a routine decision. The facts are complicated, the stakes are great, and novel claims have been asserted. Not only are we faced with the usual conflicting allegations of the parties as to need, cost, and environmental effects, but we must also honor statements of legislative policy, resolve claims of injustice, and guard Connecticut's finest natural resource from unnecessary degradation. These cross currents must be bridged to arrive at a reasonable and equitable decision on this docket.

II. NEED

The question of need received detailed consideration throughout the proceeding, and it is the Council's opinion that a need exists to modify the existing crossing at Scovill Rock. There is a manifest need for a river crossing to transmit bulk power from generating stations east of the river to load centers west of the river. The crossing at Scovill Rock is one of the major facilities fulfilling that need. The crossing, however, is now under a Department of Environmental Protection (DEP) order to be placed underground or removed by May 31, 1983, unless this Council orders otherwise. Thus, the Scovill Rock Crossing, for all its importance, has only an uncertain future without action by this Council. There is a need for a permanently certified crossing at this point, and the major decision before this Council is to determine whether that link should be overhead or underground.

Without deciding the relative reliability of underground and overhead lines, both would satisfy system reliability requirements.

Finally, the Council also notes that a permanent certificate modifying the existing crossing according to one of the overhead proposals would improve the existing scenic vista without adding adverse environmental effects, thereby minimizing damage to scenic, historic, and recreational values. The public would also benefit from the resolution of the prolonged controversy that has plagued this crossing.

III. ENVIRONMENT

Any discussion of the underground/overhead issue must start off with a review of the Council's organic act, the Public Utility Environmental Standards Act (Connecticut General Statutes sections 16-50g et seq). That act refers to underground transmission lines in several places. Section 16-501(a)(1)(E) requires an application for a line to include "a justification for overhead portions, if any", and cost studies and effects of undergrounding. Section 16-50p conditions certification upon a finding that "the overhead portions of the facility, if any, are consistent with the purpose of this chapter." Section 16-50r(a)(7) mandates annual utility forecasts to describe "steps taken...to eliminate overhead transmission lines in accordance with the regulations and standards described in section 16-50t. Section 16-50t(a)(3) authorizes the Council to adopt regulations or standards relating to "the elimination of overhead electric transmission and distribution lines over appropriate periods of time in accordance with existing applicable technology and the need to provide electric service at the lowest reasonable cost to consumers." While not dictating undergrounding, these sections express a legislative policy preferring underground lines to overhead lines provided the cost is not unreasonable. This policy creates something of a burden for a proponent of overhead lines to overcome. In a metaphor suitable to this docket, such a proponent must, like the Atlantic Salmon, swim upstream against the current.

Given the legislative policy favoring undergrounding, where better to do it than the Connecticut River, our greatest natural resource? This is not the usual case where the visual impact can be characterized as local. The Connecticut River is a state-wide asset, open to all people, all generations, and its value will only increase over the decades as Connecticut becomes more and more developed. It is a unique resource with great public benefit and it is hard to imagine a place more deserving of the visual benefits of undergrounding. Nevertheless, the Council must under its statutory duty also examine and balance issues of cost and environmental consequence.

The environmental effects of the specific proposal and the various alternatives, include both positive and negative aspects. These impacts are detailed more fully in the findings. Briefly, undergrounding the lines would remove towers and lines next to and over the river with consequent improvement in visual purity. On the other hand, undergrounding is not itself without adverse effects, perhaps more so under water than under land.

Overhead lines themselves are visually intrusive but cause no other adverse impacts where new rights of way are not involved. Alternatives A and B do present substantial environmental impacts because of the acquisition and clearing of new right of way, condemnation of buildings, river crossings elsewhere in this area, several new road crossings and wetland disruptions, and encroachment on several residences. The C alternatives will not be without impacts, but none approach those of either the undergrounding proposal or the overland alternatives. Straightening and widening of the Hurd Park Wood Road for C tower construction will require minor clearing, but may actually benefit the Department of Environmental Protection by improving access to areas of the Hurd and Seymour Parks. Otherwise, clearing, foundations, and access road requirements will be minimal and may be addressed through a Development and Management (D&M) Plan. The archeological resources may also be protected

to the extent necessary by the D&M plan. Therefore, the Council's opinion is that the impacts of the C construction do not outweigh the need to modify the existing crossing.

While the Council was divided on the weight to be given to the environmental impacts of the various alternatives, the Council was united in its belief that the decision on undergrounding turns on the costs involved not the environmental impacts. In the instant proceeding, costs undoubtedly reflect the effects of inflation since Docket No. 10, an earlier application involving this crossing. A portion of the expense now anticipated can be directly attributed to the delay since the Department of Environmental Protection's Stipulation and Agreement mandating undergrounding to which the applicant was a signatory. Indeed, counsel for the applicant admitted that the applicant might well have undergrounded the crossing for the original \$10 million but does not now support undergrounding at a cost of \$26 million. (Tr. 1/7/81, p. 157, 158). While the Council may recognize the frustration of parties who see a hard-won victory slip from their grasp because of the applicant's delaying tactics, this application cannot be transformed into a rehearing of an earlier docket or into a dispute solely between private parties. The Council must hew to its legislatively mandated balancing of present costs and present technology with environmental effects.

The present costs for undergrounding presented to the Council range from \$15-26 million. The applicant estimates a total cost around \$26 million. Given the applicant's true posture as opposing undergrounding, its cost estimates are not likely to be underestimated; and, if ever ordered to proceed, it might find ways to economize. Other parties dispute the applicant's figure, primarily on the basis that the prior application proposed a different technology which they claim is just as reliable but significantly less expensive, perhaps in the area of \$16-18 million. A further reduction in cost to the applicant might result from recoupment under the Connecticut Yankee Transmission Agreement. The Council,

nonetheless, is still faced with a cost of over \$15 million to balance against purported benefits.

Having said all this, the decision on undergrounding remains - how much is too much? Like Banquo's ghost, the ghost of Docket No. 10 haunts this docket, but the cost figures here involved, even when discounted as discussed above, are simply too great. The Connecticut River should be preserved at some cost, not at all cost. Therefore the Council's opinion is that the modification should go above ground, although the discerning reader may detect a certain lack of enthusiasm.

The final issue to be decided is which alternative best satisfies the Council's obligation to minimize damage to scenic, historic, and recreational values. The Council dismisses the overland alternatives A and B because of the overwhelming impacts that the many miles of new right of way would impose at costs which approach those of undergroundings. These impacts and costs are detailed in the Findings of Fact and need not be repeated here.

During the proceeding considerations were given to technical modifications to the alternative C proposal, resulting in refinements that would effect substantial esthetic improvements over both the existing lattice towers and the original modification proposal utilizing a single steel H-frame structure on each bank. The two refinements are essentially equivalent in cost, reliability, and construction impacts, and each offers environmental improvements that would meet the public need for such modification.

In the Council's opinion the C-2 alternative, utilizing a single steel pole structure and special anchor structures on each bank, with extra high tension conductors, is the environmentally preferable choice for both the neighbors and the public. Not only will this modification reduce the cluttered appearance of development that the existing crossing imposes, it will also narrow the utilized right-of-way at the river banks. Moreover, on the east bank the new structure

will be ten feet shorter than the tallest existing structure. The visual intrusion caused by their silhouettes will be reduced by the replacement of six structures with two, and by careful selection of final structure color. To its nearest neighbors, the modified crossing will be less obvious, and the improvement will be evident from other vantage points as well. The Council's action will fulfill its responsibility to the entire state by minimizing the impact of this necessary facility on the Connecticut River.

Constructing the proposed facility in accordance with the applicable requirements of the Department of Public Utility Control and the National Electrical Safety Code should adequately safeguard public health and safety. The modification as certified conforms to the 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 record, as expressed in the Council's findings, indicates that the modification will not pose an undue hazard to persons or property along the area traversed by the line.

The Council has studied and recognizes the value of the lower Connecticut River to the entire state. Truly, it is not just an amenity, but in Justice Holmes's words, a treasure, and the Council is convinced that this decision will confine the damage that the Scovill Rock Crossing causes this treasure. In this regard, the decision is consistent with the policy of the state concerning ecological balance, historic, scenic, and recreational values, air and water purity, forests and parks, and fish and wildlife.

In analyzing the nature of the probable environmental impact of the proposed facility, the Council has recognized that until such time as a certificate of environmental compatibility and public need has been issued to the applicant, a detailed right of way development and management plan cannot be prepared. Thus, the precise route of the modification and much of the detail necessary to evaluate more particularly and to limit the extent of its adverse environmental

impact is presently unavailable. It is for this reason that the Council believes it has a responsibility to require the applicant to coordinate its specifications for construction of the facility, its detailed environmental inventory, and its right of way maintenance and use plan with the Council prior to the initiation of construction activities. Such a plan will aid the Council in determining the most appropriate method of constructing and maintaining the proposed facility so that the least possible adverse effect on the environment will occur.

The Council believes that this modification will assure adequate and reliable service consistent with the need to protect the environment and ecology of the state and to minimize damage to scenic, historic, and recreational values, at the lowest reasonable cost to consumers.

Therefore, the Council concludes that a certificate of environmental compatibility and public need should be issued for the modification of the existing transmission crossing at Scovill Rock utilizing alternative C-2 structures.