DOCKET NO. 108 - An application of The : Connecticut

Connecticut Light and Power Company for a Certificate of Environmental Siting : Compatibility and Public Need for the construction of a 69-kV transmission

line to interconnect the 14-MW Southeastern Connecticut Regional Resources Recovery

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Authority Project in Preston, Connecticut. : August 30, 1989

Council

OPINION

The Connecticut Light and Power Company (CL&P) represented by its agent, the Northeast Utilities Service Company (NU) applied to the Connecticut Siting Council on March 10, 1989, for a Certificate of Environmental Compatibility and Public Need for the construction of a partially overhead and partially underground 69-kV transmission line to interconnect the 14megawatt (MW) Southeastern Connecticut Regional Resources Recovery Authority Project (SCRRRA) to CL&P's existing #400 transmission circuit at Hallville Junction in Preston, Connecticut.

The proposed line is necessary to provide the SCRRRA facility with electricity and to enable the facility to transmit approximately 14-MW of electricity to the CL&P's transmission The SCRRRA facility is under construction and is expected to commence operation in 1991. Although CL&P would construct, operate, and own the new transmission line and associated equipment, the SCRRRA would pay for all construction and maintenance costs.

Under Section 16-50p of the General Statutes of Connecticut (CGS), the Council in deciding this application must consider and balance the public need for the proposed construction of the 69-kV electric transmission line with all probable

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environmental impacts created by the construction and operation of this line. The Council may not grant a Certificate of Environmental Compatibility and Public Need unless it finds that these adverse effects or conflicts with State environmental policies are not sufficient to deny the application. The Findings of Fact which accompany this Opinion contain the Council's findings regarding the need for the facility, its adverse impacts, and its consistency with relevant State policies.

The proposed interconnection is necessary to allow operation of the SCRRA resource recovery project which was granted a Certificate of Environmental Compatibility and Public Need by the Council on October 6, 1987 (Docket 74).

The Council is most concerned with the visual effects induced by the construction of a separate overhead transmission line including the impacts on adjacent wetland habitat from possible erosion and sedimentation and the removal of trees and brush within the right-of-way (ROW) of the new line.

The Council considered the adequacy, reliability, and costs of the proposed partially-overhead and partially-underground line; its effects on CL&P's electrical transmission service; and the environment. While both the overhead and underground sections offer adequate reliability, installation of the overhead portion of the line would impose a substantial visual impact on the project area and in particular, a visual impact on the sensitive scenic, recreational, and historically significant Poquetanuck Cove natural area. In addition, the clearing of trees and brush would be adjacent to an important conservation area where wildlife may potentially be affected.

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Installation of the underground portion of the line would use cable installed in duct banks along the shoulder of public roadways and would have potential effects on archaeological resources that are present in the general area of the route. Entrenching operations would create temporary and short-term inconveniences through traffic disruptions, noise, dust, and restricted access to property owner's driveways. However, the underground line would not have a visual effect on scenic Poquetanuck Cove, the historic Village of Poquetanuck, and the project area. In addition, an underground line would not involve extensive ROW tree cutting and brush clearing, and would not take place in a regulated wetland area.

The Council considered the environmental impacts and costs of several alternative routes and various system designs for the interconnection, including undergrounding the line over the entire proposed route. Dielectric cable would be suited for the relatively short distance of the proposed underground section but would be less reliable than a High Pressure Oil Filled (HPOF) system over a longer distance. The applicant proposed an alternative underground system based upon HPOF cable, encased in pipe and enclosed in duct banks over the entire distance from the SCRRRA facility to Hallville The Council is concerned that an oil spill from such Junction. a system would be detrimental to the Poquetanuck Cove natural However, such a system encased in concrete environment. ducting, properly installed with leak and pressure loss detection equipment, would greatly reduce the risk of an accidental oil spill into the surrounding environment.

Although the area is potentially rich in archaeological resources, the Council is confident that with proper care these resources can be identified, collected, and preserved.

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Although the HPOF underground system would be approximately \$754,000 more than the proposed line, this cost would be borne by the participating communities of the SCRRRA which is responsible for the proposal. The Council believes that the unique character of the area including Poquetanuck Cove should not be sacrificed for this additional cost. In fact, this cost should be considered a reasonable development expense for the responsible operation of the SCRRRA facility.

The Council also considered several optional underground or overhead systems including upgrading the existing distribution lines and use of separate dedicated distribution lines. Such proposals would be difficult to construct, increase the risks to system reliability and stability, sustain higher line losses, impose temporary loss of service on existing customers, and require CL&P to acquire new right-of-way, particularly at substations. All would substantially increase construction and long-term operating costs and are unreasonable in comparison with the HPOF underground line.

The Council believes that measures to minimize the environmental impacts of a HPOF underground line with a detailed development and management (D&M) plan would be acceptable if properly implemented. By imposing a strict D&M plan, the Council believes that the HPOF underground interconnection can be constructed without a significant, detrimental, long-term effect on the natural or cultural environment.

Based on the foregoing, the Council feels that the proposed partially overhead and partially underground system would not be appropriate for interconnecting the SCRRRA facility to CL&P's transmission system at Hallville Junction. The Council believes that the proposed alternative HPOF totally underground system would best serve the needs of CL&P ratepayers, the SCRRRA, Town of Preston, and the public. The increased cost to

construct this system would be justified by outweighing the environmental damage created by the overhead section of the proposed line; therefore, a Certificate of Environmental Compatibility and Public Need is warranted for the alternative HPOF underground transmission line. The Council directs that such a Certificate be issued subject to the terms, limitations, and conditions of the Decision and Order that accompanies this Opinion.

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