



# STATE OF CONNECTICUT

## CONNECTICUT SITING COUNCIL

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PETITION NO. 200  
Transmission Line  
West Side Substation - Berlin Substation - Newington Substation  
January 28, 1988

Connecticut Light and Power Company (CL&P) is requesting a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for modifications to its transmission lines between the West Side Substation, Middletown, through the Berlin Substation, Berlin, to the Newington Substation, Newington, in Connecticut.

Fred J. Doocy and Colin C. Tait, members of the Siting Council and Thomas E. Fanning, Jr., staff of the Siting Council met with Northeast Utilities representatives Mike Carlson and Bernie Silkowsky on January 20, 1988, and inspected the proposed modifications along the 1765 and 1785 lines.

Both the 1765 and 1785 lines are single circuit, 115-kV wood pole H-frame structures except for a short section of lattice towers near the West Side Substation. Part of the 1765 line shares a common right-of-way (ROW) with another single circuit wood pole H-frame line. The 1785 line also shares a ROW with a single circuit wood pole H-frame line and a short section of a double circuit lattice tower line.

The proposed modifications include:

- a. Converting ten structures from suspension to strain insulator configuration. This involves raising the conductors from a hanging position to a fixed position on the crossarm of the structure. This would reduce the sag in the conductors without raising the structure height;

- b. Raising the crossarm on one structure (#7041) one foot, thereby allowing a higher conductor clearance over a railroad crossing;
- c. Replacing one three-pole structure (#6188) 43 feet high, with a three-pole, H-frame structure, 48 feet high. This would reduce considerable sag in the conductor at a point where the line crosses a steep ridge;
- d. Replacing one structure (#6309) 61 feet high with a taller, 71 feet high, identically configured wood pole H-frame. A higher conductor clearance is necessary where recent housing developments in the area created an improved and raised public roadway crossed by the line;
- e. Resagging the span between structure #6148-6149;
- f. Replacing structure #6323 with an identical unit of the same size. This would be necessary due to deterioration of the structure;
- g. ROW rehabilitation and brush clearing as needed, to permit access to the structures; and
- h. Access road improvement and temporary corduroy road construction, if necessary to access structures. Some of the structures are located in depressed or wetland areas which may be difficult to access following the spring thaw.

The proposed work is necessary to reduce readily observable sag in the conductors along the line. By raising the elevations of the conductors, higher temperature operation of the lines would be allowed. Loads along these lines are expected to exceed the present temperature-limited ratings by the summer of 1988. In addition, changes in adjacent land uses and increased use of off-road vehicles, in areas previously designated as inaccessible to vehicles, requires additional clearances for safety reasons. Without the proposed work, the capacities of both lines would be limited.

If the proposed project is not completed as planned, both the 1765 and 1785 lines could overload under certain conditions during the summer of 1988. Construction is scheduled to begin in March 1988, with completion by the end of June 1988.

The proposed modifications would be located within CL&P's ROW. Due to localized conditions, access to a portion of the line may be needed from adjoining properties. In this event, CL&P would obtain the neighbor's permission to access the necessary ROW. Wherever appropriate, property owners adjacent to a construction site would be notified when work is scheduled in that area.

No specific locations requiring definite rehabilitation, erosion or sedimentation controls have been identified. Established access exists to most locations. The need for rehabilitation would depend on actual site conditions at the time of construction.

The Review Team suggests that CL&P consider staggering the work schedule in order that work on structures located in obvious wetlands, could be completed before the ground thaws. In this way, construction of access roads would be minimal or avoided.

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