



**Connecticut
Light & Power**

The Northeast Utilities System

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June 2, 2006

Mr. S. Derek Phelps
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Dear Mr. Phelps:

CL&P offers the following comments on the draft staff report for Segment 2a D&M Plan.

With regard to increasing the height of structure numbers 24203 and 24204, attached are plan and profile sheets showing structure numbers 24203 and 24204 at heights of 120 feet as shown in the D&M Plan (Drawing No. Proposed 120' HT) and at heights of 135 feet as suggested in the draft staff report (Drawing No. Alternative 135' HT).

The suggested relocation of the Old Farms Road transition structure to 300 feet east of Tuttle Avenue will have significant implications to the Project. A comparison of construction issues, environmental impacts and structure heights associated with the relocation is provided below.

1. D&M Plan Filed with the CSC
 - Structure locations (structure numbers 24209, 4663 and 4663A) were selected to avoid impact to wetlands.
 - New structures (structure numbers 24209, 4663 and 4663A) were located in proximity to existing lattice structure (#4663) to be removed
 - Conventional underground construction techniques would be used.
 - Environmental impacts are consistent with the ACOE permit application that was filed in July 2004.
 - Structure locations (structure numbers 24209, 4663 and 4663A) were agreed to by CL&P, the Town and the property owner (parcel 95 13).

2. The draft staff report suggested relocating structure numbers 4663 and 4663A three hundred feet east of Tuttle Avenue by extending the 115-kV underground within the existing overhead ROW through wetland 88 on parcel 95 13, across Tuttle Avenue and through wetland 87.
 - Construction of the duct bank would result in approximately 5,400 square feet of impact (temporary and permanent) to wetland 88



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- The impact to wetland 88 is in conflict with the EPA's requirement for the least environmentally damaging practical alternative
- The ACOE permit application would have to be modified due to the new impacts to wetland 88 (a federal jurisdictional wetland) resulting from construction of the duct bank
- The ACOE and EPA have already expressed concerns about the impacts that the Project is having on federal jurisdiction wetlands and introducing additional impacts at this time will delay the issuance of the ACOE permit and the schedule for the Project
- Construction of the duct bank would result in approximately 13,300 square feet of impact (temporary and permanent) to wetland 87
- Wetland 87 has been identified as a habitat for Box Turtles. This habitat will be disturbed by trenching for the duct bank
- The Town of Wallingford does not support relocating the transition structure into their town
- Underground easements within existing overhead ROW would be needed from property owners (parcel numbers 95 13 and 111 1 1)
- Installation of an additional vault is necessary
- The length of 115-kV underground route would be increased by 700 feet and cost approximately \$1.4M due to the longer duct bank run and the additional vault
- Open trenching across Tuttle Avenue, a major travel route, would be required
- Structure number 24209 must remain in proximity to its proposed location and be configured as a double circuit monopole with a height of approximately 165 feet
- The relocated 115-kV transition structure would be approximately 100 feet high. The companion 115-kV structure would be approximately 125 feet high
- Existing lattice structure number 4664 would need to remain
- Structure 24210 may have to be relocated to the west closer to the new transition structure and its height increased to maintain appropriate clearances
- Relocating these structures increases visual impact to new housing development adjacent to northeast side of the ROW (Ortense Road), where no structures currently exist

Staff suggested the use of jack and boring (J&B) or horizontal directional drilling (HDD) techniques for crossing wetlands. The issues associated with these alternatives are provided below.

- J&B beneath wetlands 87 and 88 is not a practical solution due to the topography and geology of the area. Significantly large and deep jacking and receiving shafts, constructed in rock, would be required to accommodate the change in elevation between the west side of wetland 88 and the east side of wetland 87.



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- HDD beneath wetlands 87 and 88 is technically feasible but will require the following:
 - The ACOE permit application would have to be modified for notification of HDD construction and the potential environmental impact to wetland 88 associated with the possible release of bentonite during drilling operations
 - HDD construction would add more than \$1 million in cost versus conventional methods
 - HDD requires minimum footprint of areas of approximately 150' x 250' and 75' x 75' on each side of the HDD for drilling and receiving, respectively. Additionally, an area of 12' x 300' will be necessary for preassembly of the ducts.
3. The heights of structure numbers 24209, 4663 and 4663A could be reduced by 15 feet if these structures were relocated to the area of the existing lattice tower to be removed (structure number 4663).

If you need any further information, please call me.

Sincerely,



Albert W. Cretella, III
Middletown-Norwalk Project Manager

cc: Fred O. Cunliffe



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