



**Northeast  
Utilities System**

107 Selden Street, Berlin CT 06037

Northeast Utilities Service Company  
P.O. Box 270  
Hartford, CT 06141-0270  
(860) 665-5000

February 15, 2006

Ms. Pamela B. Katz  
Chairman  
Connecticut Siting Council  
10 Franklin Square  
New Britain, CT 06051

Re: Docket No. D&M Plans - Segment 4a

Dear Ms. Katz:

This letter provides the response to requests for the information listed below.

Response to CSC-04 Interrogatories dated 02/02/2006

D&M - 001 , 002 , 003 , 004 , 005 , 006 , 007 , 008 , 010 \* , 011 \* , 013 , 014 , 015 , 016 , 017 , 018 \* , 019 ,  
020 , 021 \* , 022 , 023 , 025 , 026 , 027

Very truly yours,

Anne Bartosewicz  
Project Director  
Transmission Business  
NUSCO  
As Agent for CL&P

AB/tms  
cc: Service List

\* Due to the bulk nature of this material, copies are being provided to the CSC only.

**The Connecticut Light and Power Company  
Docket No. D&M Plans**

**Data Request CSC-04  
Dated: 02/02/2006  
Q- D&M-001  
Page 1 of 1**

**Witness: NO WITNESS  
Request from: Connecticut Siting Council**

**Question:**  
Provide minimum, maximum, and average depth of cables.

**Response:**  
Wherever possible, the minimum depth from finished grade to the top of the concrete-encased duct bank will be thirty inches. In those cases where this is not possible the duct bank will be protected by encasing it in reinforced concrete. The reinforced concrete will protect the duct bank from vehicular weight and vibration forces and will also provide additional physical protection from dig-ins. In the typical condition, the centerline of the top cable within the duct bank will be thirty-nine inches below finished grade. The maximum depth of the cable along the entire project corridor occurs at the Housatonic River Crossing where the cable depth will be approximately sixty feet below the bottom of the river channel. The maximum depth of the cable along Segment 4a will be approximately seventeen feet below finished grade. The average depth of the cables excluding the river crossings will be approximately sixty-four inches below finished grade.

**The Connecticut Light and Power Company  
Docket No. D&M Plans**

**Data Request CSC-04  
Dated: 02/02/2006  
Q- D&M-002  
Page 1 of 1**

**Witness: NO WITNESS  
Request from: Connecticut Siting Council**

**Question:**

Has CL&P commence procurement of the XLPE cables? Is CL&P using a single or multiple vendors? What is the estimated time from order to delivery?

**Response:**

CL&P is currently preparing a Request for Proposals ("RFP") to furnish the 345-kV XLPE cable systems. The RFPs are scheduled to be issued in the first quarter of 2006. There are two parallel cable circuits, and CL&P plans to award each parallel circuit's cables to different cable manufacturers. The cable RFPs will be awarded to a minimum of two different cable manufacturers (different manufacturer for each circuit) and possibly as many as four cable manufacturers (different cable manufacturers for each circuit in each of segments 3 and 4). The contracts are scheduled to be awarded in the second quarter 2006, and delivery of the cable is scheduled to commence in the second quarter 2007.

**The Connecticut Light and Power Company  
Docket No. D&M Plans**

**Data Request CSC-04  
Dated: 02/02/2006  
Q- D&M-003  
Page 1 of 1**

**Witness: NO WITNESS  
Request from: Connecticut Siting Council**

**Question:**  
How many vaults could be constructed simultaneously?

**Response:**  
The number of vaults that can be constructed simultaneously will be determined by the number of available construction crews, ConnDOT authorized separation between work zones, and the ability of vault manufacturers to supply the necessary vaults. At this time it is not possible to determine the maximum number of vaults under construction simultaneously; however, work on as many as up to fifteen vaults concurrently may be feasible.

**The Connecticut Light and Power Company  
Docket No. D&M Plans**

**Data Request CSC-04  
Dated: 02/02/2006  
Q- D&M-004  
Page 1 of 1**

**Witness: NO WITNESS  
Request from: Connecticut Siting Council**

**Question:**

Would the median along Fairfield Avenue be disturbed during trenching? If so, describe extent of disturbance and restoration.

**Response:**

Yes, the median along Fairfield Avenue will be disturbed during construction. The extent of the disturbance will include curb removal and replacement and excavation through the median to cross from one side of the road to the other. In other locations, the median's curb may be removed and replaced. The trees along the median will also be disturbed in locations where the duct bank is located in close proximity to the median. When duct bank trench excavation is within a tree's drip line damage to a tree's roots could occur. The civil contractor will be responsible for preserving and protecting to the greatest extent possible a tree's root system. If severe root damage is inevitable, the tree will be removed and replaced as stated in the response to D&M Plans Data Request CSC-04, Q-D&M-007.

**The Connecticut Light and Power Company  
Docket No. D&M Plans**

**Data Request CSC-04  
Dated: 02/02/2006  
Q- D&M-005  
Page 1 of 1**

**Witness: NO WITNESS  
Request from: Connecticut Siting Council**

**Question:**

Has a single vault with a partition been considered? If so, provide specifications and discuss compatibility and applicability of this type of vault.

**Response:**

Northeast Utilities has commissioned the design and testing of a dual circuit vault (i.e., a single vault with a partition). Northeast Utilities is reviewing this vault internally for safety impacts and with qualified cable manufacturers for their willingness to warrant the cable system. If the dual circuit vault is found to be acceptable they may be implemented in certain locations. Where implemented, revised D&M Plan drawings and a revised specification will be required.

**The Connecticut Light and Power Company  
Docket No. D&M Plans**

**Data Request CSC-04  
Dated: 02/02/2006  
Q- D&M-006  
Page 1 of 2**

**Witness: NO WITNESS  
Request from: Connecticut Siting Council**

**Question:**

What is the health of the oak trees in vicinity to station number 552?

**Response:**

The thirty-six inch (36") oak trees in the vicinity of Station 552+00 and 553+00 on Route 1 to be removed are healthy (see the attached pictures). In addition, please see the response to CSC-04, Q-D&M-008.



CSC-04 Q6 Attachment.doc

## Oak Trees



**The Connecticut Light and Power Company  
Docket No. D&M Plans**

**Data Request CSC-04  
Dated: 02/02/2006  
Q- D&M-007  
Page 1 of 1**

**Witness: NO WITNESS  
Request from: Connecticut Siting Council**

**Question:**

Could trees and shrubs be planted in areas where vaults were installed? If not, what type of aesthetic improvements would be proposed?

**Response:**

Areas affected by the installation of the splice vaults will be primarily restored back to their original condition. Replacement trees or shrubs may not be located within fifteen feet of a vault or within ten feet of a duct bank. Replacement trees outside of these distances will be of similar species from general consumer nursery stock typically not exceeding ten feet in height. Replacement shrubs shall be from consumer nursery stock typically in a maximum of a three gallon pot. The disturbed areas will be repaved or reseeded with a seed mix native to the area. Flowers may be acceptable aesthetic alternatives.

**The Connecticut Light and Power Company  
Docket No. D&M Plans**

**Data Request CSC-04  
Dated: 02/02/2006  
Q- D&M-008  
Page 1 of 1**

**Witness: NO WITNESS  
Request from: Connecticut Siting Council**

**Question:**

Could the vaults between station number 551 and 553 be shifted to station numbers 548-550. If no, explain.

**Response:**

The vaults located at 1700 Post Road can not be relocated to the triangular parcel directly to the west which is owned by the Town of Fairfield, due to the cable-length limitations of over-the-road cable reels. The alternative location, which ConnDOT is opposed to, is further described in the response to D&M Plans Data Request CSC-004, Q-D&M-006, is in the middle two lanes of Route 1 between Station 552+00 and 553+00. Locating the vaults in the middle two lanes of Route 1 would not result in the loss of multiple 36 inch oak trees.

**The Connecticut Light and Power Company  
Docket No. D&M Plans**

**Data Request CSC-04  
Dated: 02/02/2006  
Q- D&M-010  
Page 1 of 1**

**Witness: NO WITNESS  
Request from: Connecticut Siting Council**

**Question:**

Explain why the cables could not turn closer to the corner of Broad Street and Railroad Avenue (station numbers 800-801) away from the church.

**Response:**

The alignment can not traverse the Broad Street/Railroad Avenue intersection due to the extensive number and varying depths of existing utility facilities at and immediate to the intersection. The duct bank alignment has been revised to maximize the spacing between the church and the duct bank. Attached as bulk\* is the revised plan and profile drawing number 01224-10001 PG 109.

\* Due to the bulk nature of this material, copies are being provided to the CSC only.

**The Connecticut Light and Power Company  
Docket No. D&M Plans**

**Data Request CSC-04  
Dated: 02/02/2006  
Q- D&M-011  
Page 1 of 1**

**Witness: NO WITNESS  
Request from: Connecticut Siting Council**

**Question:**

Could the vaults in front of the Bridgeport Library-Black Rock Branch be moved from station number 685 to 681 (K.erigan Holdings). If not explain.

**Response:**

The vaults can not be relocated to Station 685+00 due to cable-length limitations of cable reels. An alternative is to move Vault 7541 north of its proposed location and install it in the center of Route 130. To avoid construction and operational conflicts with an existing United Illuminating distribution duct bank, CL&P proposes to move Vault 6441 from Route 130 to an area beneath the sidewalk. Attached as bulk\* are revised drawings 01224-10001 PG 093 through 01224-10001 PG 096 which detail the proposed relocation of Vaults 7541 and 6441.

\* Due to the bulk nature of this material, copies are being provided to the CSC only.

**The Connecticut Light and Power Company  
Docket No. D&M Plans**

**Data Request CSC-04  
Dated: 02/02/2006  
Q- D&M-013  
Page 1 of 1**

**Witness: NO WITNESS  
Request from: Connecticut Siting Council**

**Question:**

Has the State DOT request any vault locations be installed via 24 hour construction? If so, provide vault locations and criteria to use 24 hour construction.

**Response:**

The ConnDOT has not requested CL&P to perform continuous 24-hour construction of any vaults.

**The Connecticut Light and Power Company  
Docket No. D&M Plans**

**Data Request CSC-04  
Dated: 02/02/2006  
Q- D&M-014  
Page 1 of 1**

**Witness: NO WITNESS  
Request from: Connecticut Siting Council**

**Question:**

Has CL&P identify any vault locations that would benefit by 24 hour construction? If so, provide vault locations and criteria to use 24 hour construction.

**Response:**

Construction of the duct bank and individual vaults could each be completed faster and more efficiently when there are no daily work-hour restrictions. Therefore, twenty-four hour construction would benefit all vault locations. There may also be other potential reasons why twenty-four hour construction is beneficial. The civil construction contract CL&P awards will require the contractor to perform constructability studies to determine specific vault locations where the use of nontraditional construction methods could improve productivity, reduce construction cost and have less of an overall impact on vehicular traffic. Without the studies CL&P is unable to identify which vault locations would qualify. Additionally, it should be noted that Bridgeport has indicated it does not want twenty-four hour construction

**The Connecticut Light and Power Company  
Docket No. D&M Plans**

**Data Request CSC-04  
Dated: 02/02/2006  
Q- D&M-015  
Page 1 of 1**

**Witness: NO WITNESS  
Request from: Connecticut Siting Council**

**Question:**  
Is pulling cable a 24 hour operation?

**Response:**  
No, pulling XLPE cable is not a twenty-four hour operation. Individual phases of XLPE cable can be pulled from one vault to another vault in an extended 10 to 12 hour work day, this includes the time to mobilize and demobilize the necessary equipment. In addition, it should be noted that Bridgeport does not want twenty-four hour construction.

**The Connecticut Light and Power Company  
Docket No. D&M Plans**

**Data Request CSC-04  
Dated: 02/02/2006  
Q- D&M-016  
Page 1 of 1**

**Witness: NO WITNESS  
Request from: Connecticut Siting Council**

**Question:**

Would transport of cable reels be included in the Maintenance and Protection for Traffic Plan?

**Response:**

Yes.

**The Connecticut Light and Power Company  
Docket No. D&M Plans**

**Data Request CSC-04  
Dated: 02/02/2006  
Q- D&M-017  
Page 1 of 1**

**Witness: NO WITNESS  
Request from: Connecticut Siting Council**

**Question:**  
How did CL&P confirm that no blasting would be necessary?

**Response:**  
Blasting is not advisable on the underground portion of the project due to the location and age of existing utilities as well as the close proximity and age of the existing buildings and their foundations.

**The Connecticut Light and Power Company  
Docket No. D&M Plans**

**Data Request CSC-04  
Dated: 02/02/2006  
Q- D&M-018  
Page 1 of 1**

**Witness: NO WITNESS  
Request from: Connecticut Siting Council**

**Question:**  
Provide the soil management plan.

**Response:**  
Attached as bulk\* is the CL&P materials handling guideline. The soil management plan is part of this guideline.

\* Due to the bulk nature of this material, copies are being provided to the CSC only.

**The Connecticut Light and Power Company  
Docket No. D&M Plans**

**Data Request CSC-04  
Dated: 02/02/2006  
Q- D&M-019  
Page 1 of 1**

**Witness: NO WITNESS  
Request from: Connecticut Siting Council**

**Question:**

Has an overhead infra-red detector been considered for use at a traffic signal? Did the municipality or the State DOT suggest types of traffic signal detectors? If so, what types were discussed and their economic feasibility?

**Response:**

No. An infrared detector system has not been discussed for use at traffic signals. ConnDOT requires that all traffic-signal detection equipment must be repaired within 24 hours of its interruption due to CL&P's construction. CL&P is coordinating with municipalities and the ConnDOT on all maintenance and protection of traffic issues, including temporary detection equipment.

**The Connecticut Light and Power Company  
Docket No. D&M Plans**

**Data Request CSC-04  
Dated: 02/02/2006  
Q- D&M-020  
Page 1 of 1**

**Witness: NO WITNESS  
Request from: Connecticut Siting Council**

**Question:**

Describe construction and logistic support facilities.

**Response:**

Construction and logistic support facilities include equipment/materials staging areas, soil staging areas and temporary construction trailers. The equipment/materials staging areas will be used to store equipment and materials including excavators, loaders, rollers, conduit, spacers, vaults, cable reels, splices and terminators. The soil staging areas may be used to temporarily store excavated materials prior to shipping these materials to a landfill or disposal facility, or to be used as roadbase or clean fill. The current approach for the handling of excavated materials is described in the materials handling guideline provided in response to D&M Plans Data Request CSC-04, Q-D&M-018. The temporary construction trailers will provide local office facilities for the construction supervisors and contractors.

**The Connecticut Light and Power Company  
Docket No. D&M Plans**

**Data Request CSC-04  
Dated: 02/02/2006  
Q- D&M-021  
Page 1 of 1**

**Witness: NO WITNESS  
Request from: Connecticut Siting Council**

**Question:**  
Provide details for worker safety and environmental plan.

**Response:**  
Attached as bulk\* is CL&P's MN Project Safety and Health Plan.

\* Due to the bulk nature of this material, copies are being provided to the CSC only.

**The Connecticut Light and Power Company  
Docket No. D&M Plans**

**Data Request CSC-04  
Dated: 02/02/2006  
Q- D&M-022  
Page 1 of 1**

**Witness: NO WITNESS  
Request from: Connecticut Siting Council**

**Question:**

Provide a dust control plan. Is this a comprehensive plan for the MiddletownNorwalk project?

**Response:**

A dust-control guideline is included in the CL&P Materials Handling Guideline which is provided in response to D&M Plan Data Request CSC-04, Q-D&M-018. A CL&P dust-control plan will be developed in conjunction with the civil contractor prior to construction.

**The Connecticut Light and Power Company  
Docket No. D&M Plans**

**Data Request CSC-04  
Dated: 02/02/2006  
Q- D&M-023  
Page 1 of 1**

**Witness: NO WITNESS  
Request from: Connecticut Siting Council**

**Question:**

What type of areas would be used for equipment storage and workers parking?

**Response:**

Available parking lots or vacant lots are acceptable areas for parking and staging areas as described in the response to D&M Plan Data Request CSC-04, Q-D&M-019. CL&P is working with the municipalities and local landowners to acquire temporary staging areas.

**The Connecticut Light and Power Company  
Docket No. D&M Plans**

**Data Request CSC-04  
Dated: 02/02/2006  
Q- D&M-025  
Page 1 of 1**

**Witness: NO WITNESS  
Request from: Connecticut Siting Council**

**Question:**  
Provide a list of other permits and/or authorizations.

**Response:**  
For Segment 4a, the following permits and/or authorizations are needed:

- General Encroachment Agreement – ConnDOT
- Encroachment Permit – ConnDOT
- Street Opening Permit and any other local permits deemed necessary after further consultation with the municipalities
- Stormwater and Dewatering General Permit – DEP
- U.S. Army Corps of Engineers Permit
- Office of Long Island Sound Permit (DEP)
- Method and manner of line construction – Connecticut Department of Public Utility Control
- ISO-NE I.3.9 (received 1/20/06)

**The Connecticut Light and Power Company  
Docket No. D&M Plans**

**Data Request CSC-04  
Dated: 02/02/2006  
Q- D&M-026  
Page 1 of 1**

**Witness: NO WITNESS  
Request from: Connecticut Siting Council**

**Question:**

Would CL&P coordinate restoration activities with the municipalities and State DOT as not to be redundant in restoring roads, sidewalks, traffic signals and lighting infrastructure?

**Response:**

Yes, CL&P is coordinating restoration activities with the municipalities and ConnDOT.

**The Connecticut Light and Power Company  
Docket No. D&M Plans**

**Data Request CSC-04  
Dated: 02/02/2006  
Q- D&M-027  
Page 1 of 1**

**Witness: NO WITNESS  
Request from: Connecticut Siting Council**

**Question:**

Discuss the State DOT comment on the impact of the project by lowering State Route 130. (Reference D&M Plan Vol. 1, page 7)

**Response:**

The design modification for the intersection of State Route 130 and a portion of Railroad Avenue has been requested from the ConnDOT. CL&P is working with the ConnDOT to incorporate the modification into the design.