



STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION



2800 BERLIN TURNPIKE, P.O. BOX 317546
NEWINGTON, CONNECTICUT 06131-7546

Phone:

July 13, 2006

Ms. Anne Bartosewicz
Project Director
Northeast Utilities Service Company
107 Selden Street
Berlin, Connecticut 06037

Dear Ms. Bartosewicz:

**Subject: Docket No. 272
Review Comments for NU's Water Crossing
345 kV Double Circuit Underground Transmission Line
All Segments**

The Connecticut Department of Transportation (ConnDOT) has reviewed and commented on your June 13, 2006 submission of the water crossing plans. Our comments are enclosed.

Please have these comments reviewed by your office/consultant as soon as possible. Comments are numbered and referred to by their identifying office letter as shown in the legend. Please be sure to respond to comments by their given designation.

If you have any questions, please contact Mr. Sohrab Afrazi, Transportation Principal Engineer, Utilities, at telephone number (860) 594-3262.

Very truly yours,

A handwritten signature in blue ink, appearing to read "Arthur W. Gruhn", written over a horizontal line.

Arthur W. Gruhn, P.E.
Bureau Chief
Bureau of Engineering and
Highway Operations

Enclosure

cc: Ms. Pamela Katz-Connecticut Siting Council(4)
Mr. John J. Prete, Middletown-Norwalk Transmission Project
Director, United Illuminating Company

DOCKET 272-ALL SEGMENTS NU
WATER CROSSINGS
JULY 13, 2006

Note: For the purposes of the attached current and future comments, please refer to the legend designating the specific office from which the comment originated.

BD = Bridge Design, **BM** = Bridge Maintenance, **CBD** = Consultant Bridge Design, **DC** = Construction, **EC** = Environmental Compliance, **EP** = Environmental Planning, **F** = Financial, **GS** = Graphic Services, **H** = Hydraulics, **HD** = Design, **L** = Lab, **M** = Maintenance, **MS** = Miscellaneous, **R** = Rails, **S** = Soils, **T** = Traffic, **U** = Utilities.

All comments referenced in these comments number 1 through 23 shall carry equal weight, unless it is discovered that there is a conflict between or among any of those requirements. In the case of such a conflict, the comment with the stricter requirements, as determined by the Connecticut Department of Transportation (ConnDOT), will take precedence.

COMMENTS AND RESPONSES ARE RELATED TO SUBMISSION DELIVERED
JUNE 13, 2006

1U All work within the ConnDOT Right-of-Way shall be completed in accordance with the State of Connecticut, Department of Transportation, Standard Specifications for Roads, Bridges, and Incidental Construction, Form 816 and the Supplemental Specifications dated 7/1/05.

2U Encroachment Permit – Pursuant to the Connecticut Highway Encroachment Permit Regulations, an encroachment permit(s) must be secured before any work is performed in the State highway right-of-way. The encroachment permit(s) does not become effective until all necessary local and State licenses and permits are obtained by NU or his agent, and further, NU shall be subject to all federal, State and local regulations.

3U In the event of an issue not approved by ConnDOT by a specific waiver request, the Department requirement shall stand.

4U Have utilities been allowed to review the watercourse and rail crossing submission for consistency with their respective industry standards?

5U Communication and coordination with existing utilities is essential and incumbent upon NU to avoid construction delays and negative impact to the traveling public.

6M Page D-1 Appendix D Docket 272 D&M Plan Change Approval Process

Identification of Significant Changes: “For the underground portion of the Project, once CL&P identifies a potential change, it will consult with a Connecticut Department of Transportation (CDOT) representative to reach an agreement as to whether the change is “significant”. Any changes to existing CDOT facilities or affecting planned projects of CDOT would be considered “significant”.

Comment: This office feels that other construction changes could be “significant”. This includes changes in vault locations or changes in installation depth.

7DC The proposed directional drilling did not indicate on the D&M Plans where the working pits will be located. It is unclear how this operation will impact traffic during installation. In general will this be done from outside the pavement?

8DC How is the horizontal and vertical alignment of the conduits controlled with the directional drilling? Will this operation be accurate to avoid existing underground facilities?

9DC Is there an erection sequence for constructing the proposed SACCO Creek utility bridge?

10DC Please verify that adequate overhead clearance exists for crane picks at all the proposed utility bridge sites.

11DC Verify that the overweight restrictions on the existing bridges will not be exceeded while erecting the utility bridges.

12DC No #7 on plan sheets #01224-16303 pg 010 and 01224-16304 pg 010 indicated to erect Girder G-1 Segment 1. It appears that the Girder G-2 is required to be referenced. Please clarify.

13EP Appropriate water handling and erosion and sediment controls should be utilized and properly maintained during construction of the utility bridges.

14R The Office of Rail will require the owner to apply for a license agreement with Metro-North Railroad to memorialize the installation of any and all facilities occupying rail right of way property. The license agreement must be fully executed prior to start of actual site construction.

15R Horizontal Boring under RR in Milford: Please show the right of way line on Sheet 01223-16402 PG 001. Also, the plan indicates a distance of 25 feet to the centerline of the nearest track for both the jacking and receiving pits. While this is the required minimum clearance from active tracks for contract work, this location is within a rail interlocking which experiences increased railroad activity. In addition, the north side is an active staging area for railroad force account and contractor activities. Please coordinate this crossing closely with Metro-Nroth personnel who may require an additional lateral offset from the tracks.

16R City of Milford, Station 1021+50 to 1030+00 – The drawing notes the required 10 feet depth (min) beneath our tracks. Please add that this shall be measured from the bottom of railroad tie.

17R The drawing indicates that the proposed utility bridge will have sufficient clearance (23'2") over the east leg of the Waterbury Branch wye. For information, this dimension needs to be at least 22' 6" above the top of rail in electrified territory. While this is currently a non-electrified track, the permanence of the utility's crossing dictates that we accommodate the possible electrification of the Waterbury Branch at some point in the near or distant future.

18R NU has promised to include an analysis of EMI impact at this location. We await their report expected sometime this fall. Meanwhile, we will assume that any potential impact can and will be mitigated prior to energization of the Middletown-Norwalk cables.

19R The installation of the duct bank under (and over) rail property shall be coordinated with Metro-North personnel.

20R As noted by our New Haven section, the Office of Rail will require the owner to apply for a license agreement with Metro-North Railroad to memorialize the installation of any and all facilities occupying rail right of way property. The license agreement must be fully executed prior to start of actual site construction.

21R FYI, we are continuing our structural review of the unique utility bridge over the Waterbury Branch. If we have any comments, we will pass them along to you and the designer.

22BM The crossing of the Saugatuck River may fall within the jurisdiction of the Army Corps of Engineers. Has a permit for this encroachment, especially regarding the depth of burial as it affects future river channel dredging operations, been made?

23BM The Housatonic River crossing appears to come close to the Moses Wheeler Bridge, I-95 over the Housatonic River, which is scheduled for future replacement and widening. Coordinate proposed location of the 345 kV line with the Bridge Design personnel involved with the Moses Wheeler widening.
