



**Northeast
Utilities System**

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February 1, 2005

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

Re: Docket No. 272 - Middletown-Norwalk 345kV Transmission Line

Dear Ms. Katz:

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

Response to DURHAM-02 Interrogatories dated 06/09/2004
DURHAM - 002 , 003 , 004 , 005 , 006

Very truly yours,

A handwritten signature in black ink that reads "Anne B. Bartosewicz". The signature is written in a cursive style with a large, sweeping flourish at the end.

Anne B. Bartosewicz
Project Director - Transmission Business

ABB/ssn
cc: Service List

SERVICE LIST

Docket: 272

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Mr. Robert Hoff
Reid and Riege P.C.
One Financial Plaza
Hartford, CT 06103

Witness: Anne Bartosewicz
Request from: Town of Durham

Question:

Reference the Applicants' response dated 10/24/2003 to Q-D-W-002. Is the Applicants' proposal to place a 345 kV line from Oxbow Junction to Beseck Switching Station through the Town of Durham based solely upon "Contingency 'c'" discussed in that response, or on additional reliability or other concerns?

Response:

No, the Applicants proposal is not based solely upon "Contingency 'c'". It is also based on right-of-way expansion and cost considerations. As the referenced response to Q-D-W-002 states:

"In addition, the rights-of-way between Chestnut Junction in Middletown and Black Pond Junction in Meriden as well as portions of the rights-of-way between Black Pond Junction and the proposed Beseck Switching Station (the "Northerly Route"), are not wide enough to accommodate an additional 345-kV overhead transmission facility without drastic changes to existing structures. Placing a new 345-kV circuit in the right-of-way would require expanding the rights of way and the acquisition of new easements . The rights-of-way between Oxbow Junction in the Town of Haddam and the proposed Beseck Switching Station in the Town of Wallingford (the "Southerly Route") can accommodate the addition of a new 345-kV facility on a common structure with the existing 115-kV transmission facility without the expansion of the rights-of-way.

The portion of the Northerly Route between Chestnut Junction and Black Pond Junction would require the expansion of the right-of-way by 85 feet, or approximately 70 acres, in order to accommodate a steel H-Frame Structure similar to the construction already in place. To fit four transmission lines in the existing right-of-way for this portion of the route would require that the existing three 345-kV and 115-kV (the 115-kV transmission facility exists on a common right-of-way between Chestnut junction and Hans Brook Junction in the town of Middlefield) transmission facilities be reconstructed in vertical configurations on steel monopoles. Either expansion of the right-of-way or the reconstruction of the existing lines would significantly increase the cost per mile of the transmission facility. For generic cost information on transmission lines, please refer to Appendix E of the "Comprehensive Assessment and Report Part 1" prepared by the Working Group on Southwest Connecticut and the Task Force On Long Island Sound. A copy of this report can be found in Volume 6 of the Municipal Consultation Filing.

In addition to the increased cost per mile compared to the Southerly Route, the Northerly Route is longer than the Southerly Route, (approximately 10 miles for the Northerly Route as compared to approximately 7 miles for the Southerly Route). The Southerly Route would entail no right-of-way expansion.

Furthermore, the portion of the Northerly Route between Black Pond Junction and East Meriden Substation in the City of Meriden would require expansion of the right-of-way irrespective of the configuration. Leaving the existing 345-kV monopole in its place and erecting three new monopoles to support the three additional 345-kV circuits would require the right-of-way to be expanded by 45 feet. This would impact several houses and require construction in closer proximity to wetlands. In the vicinity of the Beseck Switching Station site in Wallingford the construction of three new monopoles (as opposed to only two new monopoles in the proposal) would have to occur in close proximity to wetlands. Please refer to Volumes 9, 10, and 11 of the application in the aerial segment drawings and the Plan & Profile Drawings which show the relative position of the rights-of-way and the locations of preliminary centerlines."

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Data Request DURHAM-02
Dated: 06/09/2004
Q- DURHAM-003
Page 1 of 1

Witness: Roger C. Zaklukiewicz
Request from: Town of Durham

Question:

If the answer to the previous question is that the proposal is based upon additional reliability or other concerns, please identify those concerns and explain in detail the basis for those concerns.

Response:

In addition to the reliability concerns associated with the loss of all transmission circuits on a common right-of-way, there are also significant reliability concerns due to the outages that would be required to rebuild the existing 345-kV circuits to create space for the fourth 345-kV circuit. The Northerly Route is also 3 miles longer, requires the addition of additional transmission right-of-way including the taking of homes, and the increased cost of the project.

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Data Request DURHAM-02
Dated: 06/09/2004
Q- DURHAM-004
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Witness: Allen W. Scarfone
Request from: Town of Durham

Question:

Reference the Applicants' response dated 06/27/2003 to Q-DUR - 010. Please identify the exact passage or passages of the "Southwestern Connecticut Electric Reliability Study," dated December 2002, which provide the information requested: i.e., "the analyses, assessments and evaluations which form the basis for the Applicants' determination that the existing 345 kV lines in Middlefield will not be adequate to carry any increased loads resulting from the proposed 345 kV Middletown to Norwalk Project."

Response:

The relevant portions of the SWCT Electric reliability study are:

Appendix B, pages 4 and 28.

Appendix C.2, page 5 (contingency 318LINE), page 94 (contingency 318-362STKBR), and page 95 (contingencies 318LINE and SGTN3TSTK).

Page 33: "This reliability study proposes a comprehensive system plan that provides a long-term solution to meet the needs of the southwestern Connecticut area. The Southwestern Connecticut Electric Reliability Project provides an infrastructure that is capable of supporting long-term load growth in the area under varying dispatch scenarios."

In addition, see testimony of Roger Zaklukiewicz, Tr. April 21, 2004 pp161-163.

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Data Request DURHAM-02
Dated: 06/09/2004
Q- DURHAM-005
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Witness: Roger C. Zaklukiewicz
Request from: Town of Durham

Question:

State whether the (3) existing 345 kV lines between Chestnut Junction and Black Pond Junction would meet relevant reliability criteria, if the proposed 345 kV Middletown to Norwalk Project is constructed without the proposed 345 kV line between Oxbow Junction and the proposed Beseck Switching Station. This hypothetical assumes that the existing line between Oxbow Junction and Chestnut Junction remains in service.

Response:

No, it would not meet relevant reliability criteria.

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Data Request DURHAM-02
Dated: 06/09/2004
Q- DURHAM-006
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Witness: Roger C. Zaklukiewicz
Request from: Town of Durham

Question:

If the answer to the preceding question is "no," please cite the specific reliability criteria which would not be met by the hypothetical, and provide a detailed explanation as to how or why those cited criteria would not be met.

Response:

This configuration would essentially place the majority of the SWCT load on the 362 Line between Southington and Haddam Neck substations. Both the 362 Line and the 348 Line between Millstone and Southington are already heavily loaded due to the east to west power transfers. By placing the additional SWCT load onto the 362 line, power flows on this line would increase. For the loss of the 348 Line the majority of the power that flowed on the 348 line transfers onto the 362 Line. This causes the 362 Line to exceed its emergency ratings violating NERC, NPCC, NEPOOL design criteria for loss of a single element.