



**Northeast  
Utilities System**

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January 19, 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.

Please note that these questions correspond to OCC Set 5, questions 74, 76 and 77.

Response to OCC-03 Interrogatories dated 12/29/2004  
OCC - 015 , 017 RV-01, 018

Very truly yours,

Anne B. Bartosewicz  
Project Director - Transmission Business

ABB/tms  
cc: Service List

**Witness:** Anne Bartosewicz; John J. Prete  
**Request from:** Office of Consumer Counsel

**Question:**

The Bartosewicz/Prete Testimony provides updated cost estimates for initial construction costs only. Please provide updated life cycle cost estimates (including repair and maintenance following initial construction) for the modified Proposed Route, for the modified Alternative A and for the modified Alternative B.

- (a) If possible, please provide these life cycle costs by route segment, as in Appendix A of the Bartosewicz/Prete Testimony.
- (b) If possible, provide life cycle cost estimates for the low magnetic field design options discussed at pp. 5-6 of the Bartosewicz/Prete Testimony and in its Appendix B.

**Response:**

Life Cycle Costs by route segments are indicated in the Table below:

**Summary of Life Cycle Costs by Route Segment  
(Millions of 2004 Dollars)**

Segment	Proposed Route (24 Miles UG 45 Miles OH)	Alternative A (13 Miles UG 60 Miles OH)	Alternative B (4Miles UG 72 Miles OH)	Incremental Cost for Low Magnetic Field Designs
<b>1</b> including Scovill Rock and Beseck Switching Stations	133.2 to 151.5	134.3 to 152.6	137.9 to 155.9	31.8 to 36.2
<b>2</b> including East Devon Substation	333.1 to 382.0	336.0 to 386.0	349.0 to 397.7	74.8 to 85.8
<b>3</b> including Singer Substation and Interconnections	318.3 to 383.7	316.0 to 380.4	\$188.2 to 214.5	Not Estimated
<b>4</b> including Norwalk Substation	395.7 to 488.6	360.4 to 427.6	361.7 to 417.5	Not Estimated
<b>TOTAL *</b>	1,180.4 to 1,405.9	1,146.9 to 1,346.6	1,036.6 to 1,185.6	106.6 to 122.0

**\*Total may not add due to rounding**



**Witness: Allen W. Scarfone**  
**Request from: Office of Consumer Counsel**

**Question:**

In the initial Application of October 2003, the Proposed Route is characterized as the best choice for this project, and Alternatives A and B are characterized as less desirable for specific reasons even though technically feasible.

- (a) Do the Applicants believe that this relative ranking of these three options remains appropriate (that is, as a ranking of these options as now modified)? Please explain any answer in specific detail.
- (b) Please refer to the ROC Report filed 12/20/04, and particularly to its conclusion (Executive Summary, p. 4) that ISO and the Companies "would prefer" a transmission design that contains more overhead transmission, because "Case 5" (a/k/a the modified Proposed Route) would be more difficult to construct and operate and carries more risk than "Case 2" (a/k/a the modified Alternative A). Please explain how, if at all, this ROC Report conclusion has been taken into account in the answer provided to Part (a) of this question, just above.

**Response:**

The modified Proposed Route is the preferred choice, given the need to comply with P.A. 04-246. Alternative A remains preferable to Alternative B because it better balances the need for system reliability with social impacts by minimizing the land and structures (including homes) that would have to be acquired.

From a strict electrical engineering perspective, Alternative A and Alternative B would both be preferable to the modified Proposed Route, because the modifications necessary to maximize undergrounding render the modified Proposed Route less reliable than Alternative A and Alternative B.

**Witness: Anne Bartosewicz; John J. Prete  
Request from: Office of Consumer Counsel**

**Question:**

Refer to the Applicants' Comments on the Phelps Memorandum, and the Applicants' Memorandum on the NEPOOL/ISO-NE Planning Procedure No. 4, both as filed in this docket on October 12, 2004. Assume for purposes of this question that the cost estimates for the modified Proposed Route, the modified Alternative A and the modified Alternative B, as presented in the Bartosewicz/Prete Testimony, remain accurate at the time the Applicants present their "Schedule 12C" application for cost allocation determinations to ISO New England following completion of the present Siting Council proceeding.

- (a) Assume that the Siting Council has certificated the modified Proposed Route, and further assume that NEPOOL/ISO eventually determines that only the costs that would have been associated with modified Alternative B are eligible for regional cost support. Based on these assumptions, specify (i) the dollar amount within the costs for the modified Proposed Route that thereafter would be regionalized, and (ii) the dollar amount within the costs for the modified Proposed Route that thereafter would be localized.
- (b) Assume that the Siting Council has certificated the modified Alternative A, and further assume that NEPOOL/ISO eventually determines that only the costs that would have been associated with modified Alternative B are eligible for regional cost support. Based on these assumptions, specify (i) the dollar amount within the costs for the modified Alternative A that thereafter would be regionalized, and (ii) the dollar amount within the costs for the modified Alternative A that thereafter would be localized.

**Response:**

(a) Based on OCC's hypothetical cost allocation proposal, as little as \$753.7M, or as much as \$863.8M, could be regionalized. (This is the cost range estimate for Alternative B). As much as \$239.4M could be localized. (This is the difference between the low range for Alternative B and the high range for the Proposed Route).

(b) Based on the OCC's hypothetical cost allocation proposal, as little as \$753.7M, or as much as \$863.8M, could be regionalized. (This is the cost range estimate for Alternative B). As much as \$193.5M could be localized. (This is the difference between the low range for Alternative B and the high range for Alternative A).

It should be noted that the costs associated with low magnetic field designs are not included in the above estimates.