January 9, 2004

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.

While it is not possible to provide all the information requested at this time, the Company is attaching the information which has been completed.

<u>Response to AG-01 Interrogatories dated 12/19/2003</u> AG - 001 , 002 , 003 , 004 , 005 , 006 , 007 , 008 , 009 , 010 , 011 , 012

Very truly yours,

Anne B. Bartosewicz Project Director - Transmission Business

ABB/tms cc: Service List

Data Request AG-01 Dated: 12/19/2003 Q- AG-001 Page 1 of 3

Witness:Roger C. ZaklukiewiczRequest from:Office of Attorney General

Question:

Identify all schools that are located within 1200 feet of the right of way or proposed limit of the right of way for the 345 kV transmission line proposed in this proceeding. For the purposes of this question, the term "schools" includes public schools, private schools and pre-schools and the playgrounds, playing fields, parking lots and similar property associated with the schools.

Response:

The attached table provides a listing of facilities as defined in AG-01, Q-AG-001, 003, 005, 007, 009, 011 which exist within 1200 feet of the boundaries of the existing or proposed rights of way. For each of the facilities, the distance to the nearest right-of-way boundary and transmission substation is identified.

Each one of these facilities is identified in the Application, Volume 9, Aerial Photographs - 400 scale. The facilities are also shown, as allowed by the scale of the aerial photographs, in the Application, Volumes 11 and 12, Aerial Photographs of Overhead Portion - 100 Scale and Aerial Photographs of Underground Portion - 100 Scale, respectively. References to segment numbers, where the facilities are shown, are listed in the attached table.

The facilities listed in this table are:

Schools Community Centers Hospitals Public Parks Nursing Homes, Senior Citizens' Homes and Extended Care Facilities Houses of Worship



Location Name	Town	Category	400 Aerial Segment #	100 Aerial Segment #	Nearest Substation	Distance to Nearest Substation (miles to fenceline)	Distance to ROW†
Location Name	Haddam/	Category	#	#	Inearest Substation	Tenceline)	(feet)
Seven Falls State Park	Middletown	Park	2	3	Scovill Rock S/S	0.7	400
Connecticut Baptist Home	Meriden	Nursing Home	12	37-38	East Meriden Substation	0.1	0
Connected daptist Home	Wallingford/	Tursing Home	12	37-30	Last Wenden Substation	0.1	0
Mountainside Special Events Facility	Meriden	Playground	13	_	Beseck Switching Station	0.1	180
YMCA	Meriden	Community Center	13	-	Beseck Switching Station	0.2	650
Town of Wallingford Veterans	Wienden	Community Center	15		Deseek Switching Station	0.2	050
Memorial Field	Wallingford	Park	18	_	WALREC	2.5	800
	, anngrora	House of Worship/	10			2.0	000
Church of the Resurrection	Wallingford	Playground	19	66	WALREC	0.9	200
Ballfields on South Cherry Street	Wallingford	Playground	20	69	WALREC	0.1	*
Quinnipiac River State Park	Wallingford	Park	21	-	Wallingford	0.4	*
	Hamden/				Ŭ		
	Wallingford/						
Sleeping Giannt State Park	Cheshire	Park	22-24	77, 83-84	WALREC	1.1	*
Brooksvale Recreation Park	Hamden	Park	25	-	Wallingford	4.8	650
Baseball Field Jewish Community					Ŭ		
Center	Woodbridge	Playground	33	115	June St	1.2	100
	C	House of					
		Worship/Community					
Jewish Community Center	Woodbridge	Center	33	114-115	June St	1.2	*
Beecher Road School	Woodbridge	School	34	119	June St	1.2	700
B'Nai Jacob Congregation	Woodbridge	Playground	34	118-119	June St	1.0	*
Racebrook Elementary School	Orange	School	38	-	Allings Crossing	2.3	850
Holy Infant Church	Orange	House of Worship	39	-	Allings Crossing	1.9	400
Fred P. Wolf Park	Orange	Park	40	143	Elmwest	2.4	0
High Plains Community Center	Orange	Playground	39-40	140-141	Elmwest	2.5	*
Peck Place School	Orange	School	40/41	-	Elmwest	2.5	250
Eisenhower Park	Milford	Playground	42	147-150	Elmwest	2.4	0
Eisenhower Park Softball Field	Milford	Playground	42	148	Elmwest	2.4	100
		House of Worship/					
Christ the Redeemer Church	Milford	Playground	44	155	East Devon Substation	1.1	100
Raybestos Memorial Field	Stratford	Playground	48	-	Barnum	0.3	1100
Ball Fields	Stratford	Park	49	172	Barnum	0.4	150
Franklin School	Stratford	School	49	174	Baird	0.6	20
Holy Name of Jesus Church	Stratford	House of Worship	49	174	Baird	0.6	20
High Park	Stratford	Park	50	-	Baird	0.3	1200
Bridgeport Hospital	Bridgeport	Hospital	51	-	Congress	1.2	800
East Side School	Bridgeport	School	51	177	Baird	1.0	20
Little Lamb Day Care	Bridgeport	Day Care	51	180	Congress	0.6	0-20
Washing D. 1	Duid	D- 1	51/50	181-182,	Car	0.2	0.20
Washington Park Waterview Park	Bridgeport	Park Park	51/52	182A	Congress	0.3	0-20 800
waterview Park	Bridgeport	Рагк	51	-	Congress	0.3	800
Holy Rosary School	Bridgeport	School	50	182, 182A	Con	0.2	0.20
McLevy Park	Bridgeport	Playground	52 52	182A	Congress	0.3 0.4	0-20 500
Riverfront Park	Bridgeport Bridgeport	Playground Park	52 52	- 184	Pequonnock Congress	0.4	900
KIVCHIOIII PAIK	Brugeport	r di K	32	184 182B,	Congress	0.2	900
Waterfront Park	Bridgeport	Park	52	182B, 185	Congress	0.3	100
Church of God	Bridgeport	House of Worship	52	185	Ash Creek	0.3	0
Park City Hospital	Bridgeport	House of worship Hospital	53	- 195	Singer	0.9	400
Sacred Heart School	Bridgeport	School	53	190	Singer	0.5	250
Seaside Park	Bridgeport	Park	53	- 190	Singer	0.3	700
St Joseph School	Bridgeport	School	53	189	Singer	0.3	100
University of Bridgeport	Bridgeport	School	53	-	Singer	0.4	1000
Went Field	Bridgeport	Playground	53	191-192	Singer	0.2	0
Longfellow Playground	Bridgeport	Playground	54	-	Ash Creek	0.8	700
Longionow i luygiounu	L'INCEUDUIL	1 IUY STUUIU	J-1		A ADDI CICCA	0.7	,00

Location Name	Town	Category	400 Aerial Segment #	100 Aerial Segment #	Nearest Substation	Distance to Nearest Substation (miles to fenceline)	Distance to ROW† (feet)
West End Park	Bridgeport	Park	54	-	Ash Creek	1.3	600
Burroughs Community Center	Bridgeport	Playground	55	196	Ash Creek	0.6	0-20
United Church for All People	Bridgeport	House of Worship	55	196	Ash Creek	0.6	0-20
Venings Park	Fairfield	Park	56	202	Ash Creek	1.0	0
Sherman School	Fairfield	School	57	205	Ash Creek	1.9	0
St Anthony School	Fairfield	School	57	-	Ash Creek	2.2	200
Thomlinson Junior High School	Fairfield	School	57	203	Ash Creek	1.5	400
Palmer's Neck Park	Fairfield	Park	58	208	Sasco Creek	1.5	40
Saquanung Park	Fairfield	Park	58	209	Sasco Creek	1.5	0
		Community					
Wakeman Memorial Boys Club	Fairfield	Center/Playground	58	-	Sasco Creek	1.2	800
Landsdowne Common Park	Westport	Park	59	214	Sasco Creek	0.7	0
Ball field on Morningside Drive	Westport	Playground	60	217	Sasco Creek	1.4	100
Winslow Park	Westport	Playground	61	222-223	Compo	1.5	20
Doubleday Complex	Westport	Playground	61	223C	Compo	1.1	100
King's Highway Elementary School	Westport	School	62	223C	Compo	1.1	0
Norwalk High School	Norwalk	School	63	-	Norwalk	1.8	800
Andrews Field	Norwalk	Playground	64	-	Norwalk	1.5	400
Naramake Elementary School	Norwalk	School	64	-	Norwalk	1.8	1100
North Avenue Park	Norwalk	Playground	64	237	Norwalk	1.0	0-20
Norwalk Green	Norwalk	Playground	64	-	Norwalk	1.2	400
St Paul Church	Norwalk	House of Worship	64	236-237	Norwalk	1.2	0
Tracey Elementary	Norwalk	School	64	-	Norwalk	0.7	700
Center School	Norwalk	School	65	238	Norwalk	0.6	300
Broad River School	Norwalk	School	66	-	Norwalk	0.2	600

* Indicates a facility that falls within either the existing or proposed edge of right-of-way \dagger ROW = Right(s)-Of-Way

Data Request AG-01 Dated: 12/19/2003 Q- AG-002 Page 1 of 2

Witness:Roger C. ZaklukiewiczRequest from:Office of Attorney General

Question:

For every school identified in response to question AG-1:

- a. specify the distance from the right of way and the extent to which it is in the right of way;
- b. describe all efforts made by the Applicants to mitigate the impact of the proposed 345 kV transmission line upon the school in any manner, including: the impact of electric and magnetic fields; and the impacts upon aesthetics and property values. Also provide all documents concerning those efforts; and
- c. identify its proximity to the nearest substation.

Response:

a. Please see table in response to data request AG-01, Q-AG-001.

b. The Companies follow the February 1993 Connecticut Siting Council <u>Electric And Magnetic Field Best</u> <u>Management Practices</u>. The Companies employ optimized phasing arrangements wherever possible to manage magnetic fields. This has particular application where two circuits (e.g. 345-kV and 115-kV) are constructed on a common single-column structure as demonstrated in the Application Volume 10; Typical Cross Section Diagrams; Drawing XS-001 Figures 2, 4, 6, 7, 7B, and 8. The Companies have submitted a report with the Application regarding the latest research on electric and magnetic fields that includes a project specific assessment of electric and magnetic fields, Application, Volume 6, "Electric and Magnetic Field Assessment: Middletown-Norwalk Transmission Reinforcement" prepared by Exponent (particularly the appendix to the report entitled "Supplementary EMF Data").

Please refer to the Application, Volume 1, Sections H.1 through H.3 for a description of routing criteria and analysis. The criteria include the use of existing, long-established electric transmission rights of way and expanding the width of portions of the rights of way only where no other overhead alternatives are available. Where widening of the right of way would involve acquisition of homes, businesses, or land that provides a buffer in these areas, the Companies have proposed underground construction.

As a result of this routing criteria and analysis process, of the total 69 mile line (45 miles overhead, 24 miles underground), the Companies have determined that just 9.5 acres of additional overhead right of way along a 2.5 mile section in Middletown and Haddam would have to be acquired from private landowners all in a very sparsely developed rural area. The effect of the widening of the right of way would include selective removal of tall trees that could jeopardize the line, changing the habitat type from forest to old field brush habitat, a type which has very high value for wildlife, and which has become one of the rarest habitat types in Connecticut. These practices would minimize effects of the line on land owners, land use and wildlife habitat.

There have been concerns raised by the municipalities and other groups regarding the aesthetic effects of transmission line structures. The Companies have utilized existing rights of way and selected horizontal configurations to minimize the overall structure height where possible. Additionally, where possible, the Companies have also proposed a more compact shield wire design and reduced span lengths utilizing higher conductor and overhead shield wire tensions (producing less sag) in order to reduce structure height and visibility. (Refer to the Application; Volume 10, Typical Cross Sections, Drawing XS-001, Figures 2, 6, and 8). These structure designs were not proposed on other right of way sections (Drawing XS-001, Figures 1, 3, 4, 5, and 7) where spans must match those of the existing parallel lines.

Data Request AG-01 Dated: 12/19/2003 Q- AG-003 Page 1 of 1

Witness:Roger C. ZaklukiewiczRequest from:Office of Attorney General

Question:

Identify all community centers that are located within 1200 feet of the right of way or proposed limit of the right of way for the 345 kV transmission line proposed in this proceeding. For the purposes of this question, the term "community centers" includes public and private centers as well as the playing fields, parking lots and similar property associated with the facilities.

Response:

Data Request AG-01 Dated: 12/19/2003 Q- AG-004 Page 1 of 1

Witness:Roger C. ZaklukiewiczRequest from:Office of Attorney General

Question:

For every community center identified in response to question AG-3:

- a. specify the distance from the right of way and the extent to which it is in the right of way;
- b. describe all efforts made by the Applicants to mitigate the impact of the proposed 345 kV transmission line upon the community center in any manner, including: the impact of electric and magnetic fields; and the impacts upon aesthetics and property values. Also provide all documents concerning those efforts; and
- c. identify its proximity to the nearest substation.

- a. Please see table in response to data request AG-01, Q-AG-001.
- b. Please see response to data request AG-01, Q-AG-002 (b).
- c. Please see table in response to data request AG-01, Q-AG-001.

Data Request AG-01 Dated: 12/19/2003 Q- AG-005 Page 1 of 1

Witness:Roger C. ZaklukiewiczRequest from:Office of Attorney General

Question:

Identify all hospitals that are located within 1200 feet of the right of way or proposed limit of the right of way for the 345 kV transmission line proposed in this proceeding. For the purposes of this question, the term "hospitals" includes the parking lots and similar property associated with the facilities.

Response:

Data Request AG-01 Dated: 12/19/2003 Q- AG-006 Page 1 of 1

Witness:Roger C. ZaklukiewiczRequest from:Office of Attorney General

Question:

For every hospital center identified in response to question AG-5:

- a. specify the distance from the right of way and the extent to which it is in the right of way;
- b. describe all efforts made by the Applicants to mitigate the impact of the proposed 345 kV transmission line upon the hospital in any manner, including: the impact of electric and magnetic fields; and the impacts upon aesthetics and property values. Also provide all documents concerning those efforts; and
- c. identify its proximity to the nearest substation.

- a. Please see table in response to data request AG-01, Q-AG-001.
- b. Please see response to data request AG-01, Q-AG-002 (b).
- c. Please see table in response to data request AG-01, Q-AG-001.

Data Request AG-01 Dated: 12/19/2003 Q- AG-007 Page 1 of 1

Witness:Roger C. ZaklukiewiczRequest from:Office of Attorney General

Question:

Identify all public parks that are located within 1200 feet of the right of way or proposed limit of the right of way for the 345 kV transmission line proposed in this proceeding.

Response:

Data Request AG-01 Dated: 12/19/2003 Q- AG-008 Page 1 of 1

Witness:Roger C. ZaklukiewiczRequest from:Office of Attorney General

Question:

For every public park identified in response to question AG-7:

- a. specify the distance from the right of way and the extent to which it is in the right of way;
- b. describe all efforts made by the Applicants to mitigate the impact of the proposed 345 kV transmission line upon the public park in any manner, including: the impact of electric and magnetic fields; and the impacts upon aesthetics and property value. Also provide all documents concerning those efforts; and
- c. identify its proximity to the nearest substation.

- a. Please see table in response to data request AG-01, Q-AG-001.
- b. Please see response to data request AG-01, Q-AG-002 (b).
- c. Please see table in response to data request AG-01, Q-AG-001.

Data Request AG-01 Dated: 12/19/2003 Q- AG-009 Page 1 of 1

Witness:Roger C. ZaklukiewiczRequest from:Office of Attorney General

Question:

Identify all nursing homes, senior citizens' homes and extended care facilities that are located within 1200 feet of the right of way or proposed limit of the right of way for the 345 kV transmission line proposed in this proceeding. For the purposes of this question, the terms "nursing homes," "senior citizens' homes" and "extended care facilities" include the parking lots and similar property associated with the facilities.

Response:

Data Request AG-01 Dated: 12/19/2003 Q- AG-010 Page 1 of 1

Witness:Roger C. ZaklukiewiczRequest from:Office of Attorney General

Question:

For every nursing home, senior citizens' home and extended care facility identified in response to question AG-9:

- a. specify the distance from the right of way and the extent to which it is in the right of way;
- b. describe all efforts made by the Applicants to mitigate the impact of the proposed 345 kV transmission line upon the nursing home, senior citizens' home or extended care facility in any manner, including: the impact of electric and magnetic fields; and the impacts upon aesthetics and property values. Also provide all documents concerning those efforts; and
- c. identify its proximity to the nearest substation.

- a. Please see table in response to data request AG-01, Q-AG-001.
- b. Please see response to data request AG-01, Q-AG-002(b).
- c. Please see table in response to data request AG-01, Q-AG-001.

Data Request AG-01 Dated: 12/19/2003 Q- AG-011 Page 1 of 1

Witness:Roger C. ZaklukiewiczRequest from:Office of Attorney General

Question:

Identify all houses of worship that are located within 1200 feet of the right of way or proposed limit of the right of way for the 345 kV transmission line proposed in this proceeding.

Response:

Data Request AG-01 Dated: 12/19/2003 Q- AG-012 Page 1 of 1

Witness:Roger C. ZaklukiewiczRequest from:Office of Attorney General

Question:

For every house of worship identified in response to question AG-11:

- a. specify the distance from the right of way and the extent to which it is in the right of way;
- b. describe all efforts made by the Applicants to mitigate the impact of the proposed 345 kV transmission line upon the house of worship in any manner, including: the impact of electric and magnetic fields; and the impacts upon aesthetics and property value. Also provide all documents concerning those efforts; and
- c. identify its proximity to the nearest substation.

- a. Please see table in response to data request AG-01, Q-AG-001.
- b. Please see response to data request AG-01 Q-AG-002(b).
- c. Please see table in response to data request AG-01, Q-AG-001.