

March 17, 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.

This filing completes all the requested information for the AG-02 set of interrogatories.

Response to AG-02 Interrogatories dated 01/22/2004  
AG - 014

Very truly yours,

Anne B. Bartosewicz  
Project Director - Transmission Business

ABB/tms  
cc: Service List

**CL&P/UI**  
**Docket No. 272**

**Data Request AG-02**  
**Dated: 01/22/2004**  
**Q- AG-014**  
**Page 1 of 8**

**Witness: Dr. Bailey**  
**Request from: Office of Attorney General**

**Question:**

For every facility listed in the Applicants' response to AG-01, please provide the measured and calculated electric and magnetic fields at the boundaries or location of the facilities closest to the proposed 345 kV transmission line. Please provide this information in the same format as provided in Table A-1 of the Appendix to the "Electric and Magnetic Field Assessment: Middletown – Norwalk Transmission Reinforcement," provided in Volume 6 of the Application.

**Response:**

Please see the attached Table, AG-02; Q-AG-014, Attachment 1, and appended Figures 1, 2, and 3, which are reproductions of Figures 11, 12 and 13, respectively, in the Exponent Report contained in Volume 6 of the Application. Please note that there are 87 "Facilities" (schools, community centers, hospitals, public parks, nursing homes, senior citizens' homes and extended care facilities, and houses of worship) listed in the attached Table, whereas there were 69 listed in the table attached to AG-01; Q-AG-01. The earlier table was prepared using desktop information. That desktop information was then used as a starting point for the field inspections and measurements on which the attached table is based. These field inspections showed that several Facilities that were listed in the AG-01 table no longer exist, or were misidentified; and that there are other existing Facilities that were not identified in the AG-01 table. The attached table includes all of the existing Facilities. In addition, in order to provide a clear basis for cross referencing to the AG-01 table, Facilities listed in the AG-01 table, but found to be nonexistent or misclassified in the course of the field inspection, are also listed, but identified as such.



AG-014 tablesfigures.pdf

Attachment to AG-02;Q-AG-014 Measured and Calculated Electric and Magnetic Fields at Boundaries of Facility Locations Categorized by the CSC														
Location Name	Cross Section #	400 Scale Aerial Segment #	100 Scale Aerial Segment #	Facility Category	Measurements of Fields from Existing Transmission Lines and Other Sources			Calculated Fields from Existing & Proposed Transmission (Transmission Line Sources Only)						
					Measurement Distance from the ROW*	Electric Field (kV/m)	Magnetic Field (mG)	Existing			Proposed			
								Electric Field (kV/m)	Magnetic Field Average+ Load	Peak† Load	Electric Field (kV/m)	Magnetic Field Average+ Load	Peak† Load	
<b>Overhead Lines</b>														
1	Seven Falls State Park Middletown	1	2	3	Park/ Playground	400	0.000	4.9	0.012	1.4	3.6	0.024	1.9	3.8
2	Connecticut Baptist Home Meriden	3	12	38	Assisted Living Facility	115	0.050	4.1	0.09	1.8	4.4	0.19	2.6	0.7
3	Mountainside Special Events Facility Meriden/Wallingford	4	13	-	Park/ Playground	180	0.005	1.7	0.046	1.7	3.7	0.048	1.1	1.4
4	YMCA Campground of Wallingford Meriden	4	13	-	Park/ Playground	300	0.010	1.5	0.026	1.0	2.1	0.031	0.6	0.7
5	Wallingford Veteran's Memorial Field Wallingford	5	18	-	Park/ Playground	600	0.000	0.6	0.002	0.3	0.7	0.004	0.5	1.5
6	Church of the Ressurrection Wallingford	6	19	66	House of Worship	240	0.000	0.3	0.005	0.0	0.2	0.073	1.1	3.9
7	Ballfields on South Cherry Street Wallingford	6	20	69	Park/ Playground	In ROW	0.150	5.3	0.531	1.2	6.6	1.946	31.1	109.0
8	Quinnipiac River State Park Wallingford	7	21	-	Park/ Playground	In ROW	0.407	12.8	0.093	4.4	34.3	0.097	10.2	35.5
9	Sleeping Giant State Park Hamden	8	24	83-84	Park/ Playground	0	0.128	8.7	0.696	6.2	44.0	0.157	5.0	15.6
10	Brooksvale Recreational Park Hamden	8	25	-	Park/ Playground	815	0.000	0.1	0.003	0.0	0.1	0.004	0.1	0.4
11	Baseball Fields at the JCC Woodbridge	8	33	115	Park/ Playground	100	Figure 2 Attached	Figure 1 Attached	0.080	0.5	3.4	0.200	3.3	11.3
12	Jewish Community Center Building Woodbridge	8	33	114-115	Community Center	55	Figure 2 Attached	Figure 1 Attached	0.090	1.6	9.3	0.060	3.5	11.1
13	Beecher Road School Woodbridge	8	34	119	School	655	0.005	0.1	0.004	0.0	0.2	0.007	0.2	0.6
14	B'Nai Jacob Congregation (Basketball Court Woodbridge	8	34	118	Multiple	In ROW	0.810	7.5	1.48	4.8	35.5	2.72	30.6	106.9
15	Racebrook Elementary School Orange	8	38	-	School	885	0.000	0.1	0.002	0.0	0.1	0.004	0.1	0.4
16	Holy Infant Church Orange	8	39	-	House of Worship	Unable to gain access for measurement								
17	Fred P Wolf Park Orange	8	40	-	Park/ Playground	10	0.000	0.9	0.282	2.3	20.0	1.164	12.8	44.5

† Based on 27.7 GW New England Peak Load  
 + Based on 15 GW load for average conditions

‡ Locations not identified in response to AG-001 but identified during field visit  
 \* Based on GPS measurement, aerial photos, and laser ranging  
 -na- Not Applicable

<b>Attachment to AG-02;Q-AG-014 Measured and Calculated Electric and Magnetic Fields at Boundaries of Facility Locations Categorized by the CSC</b>														
Location Name	Cross Section #	400 Scale Aerial Segment #	100 Scale Aerial Segment #	Facility Category	Measurements of Fields from Existing Transmission Lines and Other Sources			Calculated Fields from Existing & Proposed Transmission (Transmission Line Sources Only)						
					Measurement Distance from the ROW*	Electric Field (kV/m)	Magnetic Field (mG)	Existing			Proposed			
								Electric Field (kV/m)	Magnetic Average+ Load	Peak† Load	Electric Field (kV/m)	Magnetic Average+ Load	Peak† Load	
18 High Plains Community Center (Playground) Orange	8	39/40	140-141	Community Center	In ROW	0.900	Figure 3 Attached	1.050	3.4	30.5	1.880	19.6	68.2	
19 Peck Place School Orange	8	40/41	144	Playground / School	500	0.010	0.2	0	0.1	0.3	0.01	0.3	0.9	
20 Eisenhower Park Milford	8	42	147-149	Bleachers / Playing Field	24	0.120	4.6	0.05	1.7	14.0	0.84	9.8	34	
21 Eisenhower Park Softball Fields Milford	8	42	148	Park/ Playground	Measurement recorded at Eisenhower park at a closer location. See Location # 20									
22 Christ the Redeemer Church Milford	8	44	155	House of Worship	170	0.000	0.3	0.017	0.4	1.9	0.019	1.3	4.1	
<b>Underground Lines</b>														
23 Raybestos Memorial Fields Stratford	9	48	-	Park/ Playground	1200	0.005	0.5	-na-	-na-	-na-	-na-	0.0	0.0	
24 Ball Fields Stratfield	9	49	172	Park/ Playground	350	0.010	1.3	-na-	-na-	-na-	-na-	0.0	0.0	
25 Franklin School Stratford	9	49	174	School	25	0.000	3.7	-na-	-na-	-na-	-na-	0.1	0.2	
26 Holy Name of Jesus Church Stratford	9	49	174	House of Worship	40	0.005	4.8	-na-	-na-	-na-	-na-	0.1	0.1	
27 Presentation of Christ Church‡ Stratford	9	49	-	House of Worship	360	0.005	1.3	-na-	-na-	-na-	-na-	0.0	0.0	
28 High Park Stratford	9	50	-	Park/ Playground	1175	0.000	0.2	-na-	-na-	-na-	-na-	0.0	0.0	
29 Bridgeport Hospital Bridgeport	9	51	-	Hospital	825	0.000	1.0	-na-	-na-	-na-	-na-	0.0	0.0	
30 East Side School Bridgeport	9	51	-	School	Field review revealed that there is no school at the identified location.									
31 Little Lamb Day Care Bridgeport	9	51	180	Day Care Facility	3	-na-	1.5	-na-	-na-	-na-	-na-	0.2	0.2	
32 Saint Cyril Saint Methodus Church‡ Bridgeport	9	51	-	House of Worship	400	0.016	13.6	-na-	-na-	-na-	-na-	0.0	0.0	
33 Washington Park Bridgeport	9	51/52	181	Park / Playground	0	-na-	0.8	-na-	-na-	-na-	-na-	0.2	0.2	
34 Waterview Park Bridgeport	9	51	-	Park/ Playground	400	0.010	10.0	-na-	-na-	-na-	-na-	0.0	0.0	

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								Electric Field (kV/m)	Magnetic Field Average+	Peak†	Electric Field (kV/m)	Magnetic Field Average+	Peak†	
35 Calvary Temple Christian Center‡ Bridgeport	9	52	-	Community Center	25	0.000	4.6	-na-	-na-	-na-	-na-	0.1	0.2	
36 Holy Rosary School Bridgeport	9	52	182, 182A	School	25	0.016	1.2	-na-	-na-	-na-	-na-	0.1	0.2	
37 McLevy Park Bridgeport	9	52	-	Park/ Playground	580	0.000	0.2	-na-	-na-	-na-	-na-	0.0	0.0	
38 Mother of God Ukranian Catholic Church‡ Bridgeport	9	52	-	House of Worship	50	0.002	2.0	-na-	-na-	-na-	-na-	0.0	0.0	
39 Riverfront Park Bridgeport	9	52	184	Park/ Playground	45	0.000	3.1	-na-	-na-	-na-	-na-	0.0	0.1	
40 Waterfront Park Bridgeport	9	52	182B, 185	Park/ Playground	180	0.069	23.8	-na-	-na-	-na-	-na-	0.0	0.0	
41 Church of God Bridgeport	9	54	195	House of Worship	25	0.005	1.8	-na-	-na-	-na-	-na-	0.2	0.2	
42 Lafayette Day Care‡ Bridgeport	9	53	-	Day Care	100	0.010	4.3	-na-	-na-	-na-	-na-	0.0	0.0	
43 Mercy Learning Center‡ Bridgeport	9	53	-	School	470	0.016	8.4	-na-	-na-	-na-	-na-	0.0	0.0	
44 Park City Hospital Bridgeport	9	53	-	Hospital	690	0.010	3.9	-na-	-na-	-na-	-na-	0.0	0.0	
45 Roosevelt School‡ Bridgeport	9	53	-	School	710	0.005	5.1	-na-	-na-	-na-	-na-	0.0	0.0	
46 Sacred Heart School Bridgeport	9	53	-	School	Field review revealed that there is no school at the identified location.									
47 Seaside Park Bridgeport	9	53	-	Park/ Playground	760	0.000	0.5	-na-	-na-	-na-	-na-	0.0	0.0	
48 Shiloh Baptist Church‡ Bridgeport	9	53	-	House of Worship	20	0.016	8.9	-na-	-na-	-na-	-na-	0.2	0.2	
49 South End Community Center‡ Bridgeport	9	53	-	Community Center	520	0.010	4.9	-na-	-na-	-na-	-na-	0.0	0.0	
50 St Joseph School Bridgeport	9	53	-	School	Field review identified that there is no school at the identified location									
51 Turner's Fath Temple‡ Bridgeport	9	53	-	House of Worship	370	0.026	0.7	-na-	-na-	-na-	-na-	0.0	0.0	
52 University of Bridgeport Bridgeport	9	53	-	School	350	0.026	1.9	-na-	-na-	-na-	-na-	0.0	0.0	

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53 Walter's Memorial AME Zion Church‡ Bridgeport	9	53	-	House of Worship	20	0.016	4.3	-na-	-na-	-na-	-na-	0.2	0.2	
54 Went Field Bridgeport	9	53	191-192	Park/ Playground	120	0.048	9.7	-na-	-na-	-na-	-na-	0.0	0.0	
55 Longfellow Playground Bridgeport	9	54	-	Park/ Playground	475	0.005	0.2	-na-	-na-	-na-	-na-	0.0	0.0	
56 St Anthony' School Bridgeport	9	54	-	School	Field review identified that there is no school at the identified location									
57 West End Park Bridgeport	9	54	-	Park/ Playground	440	0.026	8.8	-na-	-na-	-na-	-na-	0.0	0.0	
58 Black Rock School‡ Bridgeport	9	55	196	School	290	0.010	1.6	-na-	-na-	-na-	-na-	0.0	0.0	
59 Burroughs Community Center Bridgeport	9	55	196	Community Center	25	0.005	2.3	-na-	-na-	-na-	-na-	0.2	0.2	
60 United Church For All People Bridgeport	9	55	196	House of Worship	40	0.005	1.6	-na-	-na-	-na-	-na-	0.1	0.1	
61 Vening's Park Fairfield	9	56	202	Park/ Playground	35	0.005	14.4	-na-	-na-	-na-	-na-	0.1	0.1	
62 Sherman School Fairfield	9	57	205	School	20	0.005	1.4	-na-	-na-	-na-	-na-	0.2	0.2	
63 St Anthony School Fairfield	9	57	-	School	660	0.010	2.3	-na-	-na-	-na-	-na-	0.0	0.0	
64 Thomlinson Junior High School Fairfield	9	57	203	School	325	0.016	7.8	-na-	-na-	-na-	-na-	0.0	0.0	
65 Palmer's Neck Park Fairfield	9	58	208	Park/ Playground	35	0.000	2.7	-na-	-na-	-na-	-na-	0.1	0.1	
66 Sequanung Park Fairfield	9	58	209	Park/ Playground	60	0.026	2.0	-na-	-na-	-na-	-na-	0.0	0.0	
67 Wakeman Memorial Boy's Club Fairfield	9	58	-	Community Center	800	0.016	0.4	-na-	-na-	-na-	-na-	0.0	0.0	
68 Landsdowne Common Park Westport	9	59	214	Park/ Playground	50	0.000	0.3	-na-	-na-	-na-	-na-	0.0	0.0	
69 Ballfields on Morningside Drive Westport	9	60	217	Park/ Playground	40	0.000	3.9	-na-	-na-	-na-	-na-	0.1	0.1	
70 Winslow Park Westport	9	61	222/223	Park	5	-na-	2.2	-na-	-na-	-na-	-na-	0.2	0.2	

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71 Christ & Holy Trinity Church‡ Westport	9	61	224	House of Worship	450	0.005	1.1	-na-	-na-	-na-	-na-	0.0	0.0	
72 Saugatuck Congregational Church‡ Westport	9	61	223	House of Worship	20	0.021	3.5	-na-	-na-	-na-	-na-	0.2	0.2	
73 Pumpkin Preschool & Assumption Church‡ Westport	9	61	223B-C	School	20	0.000	0.1	-na-	-na-	-na-	-na-	0.2	0.2	
74 Double Day Complex Westport Westport	9	61	223C	Park/ Playground	Measurement taken at King's Highway Elementary School. See Location # 75									
75 King's Highway School Westport	9	62	223C	School	60	0.005	1.3	-na-	-na-	-na-	-na-	0.0	0.0	
76 Norwalk High School Norwalk	9	63	-	School	850	0.037	0.6	-na-	-na-	-na-	-na-	0.0	0.0	
77 Andrew's Field Norwalk	9	64	-	Park/ Playground	650	0.042	0.1	-na-	-na-	-na-	-na-	0.0	0.0	
78 Naramake Elementary School Norwalk	9	64	-	School	1200	0.000	0.2	-na-	-na-	-na-	-na-	0.0	0.0	
79 North Avenue Park Norwalk	9	64	237	Park/ Playground	35	0.010	3.9	-na-	-na-	-na-	-na-	0.1	0.1	
80 Norwalk Green Norwalk	9	64	-	Park/ Playground	430	0.010	6.8	-na-	-na-	-na-	-na-	0.0	0.0	
81 St. Paul's Church on the Green Norwalk	9	64	236-237	House of Worship	50	0.005	5.3	-na-	-na-	-na-	-na-	0.0	0.0	
82 First Congregational Church of Norwalk‡ Norwalk	9	64	-	House of Worship	800	0.010	1.2	-na-	-na-	-na-	-na-	0.0	0.0	
83 St. Philip RC Church & School‡ Norwalk	9	64	237	School	60	0.000	3.5	-na-	-na-	-na-	-na-	0.0	0.0	
84 Tracey Elementary School Norwalk	9	64	-	School	715	0.000	0.1	-na-	-na-	-na-	-na-	0.0	0.0	
85 Center School Norwalk Norwalk	9	65	-	School	Field review identified that there is no school at the identified location									
86 Jefferson School‡ Norwalk	9	65	240	School	400	0.005	0.7	-na-	-na-	-na-	-na-	0.0	0.0	
87 Broad River School Fields Norwalk	9	66	-	Park/ Playground	800	0.000	1.0	-na-	-na-	-na-	-na-	0.0	0.0	

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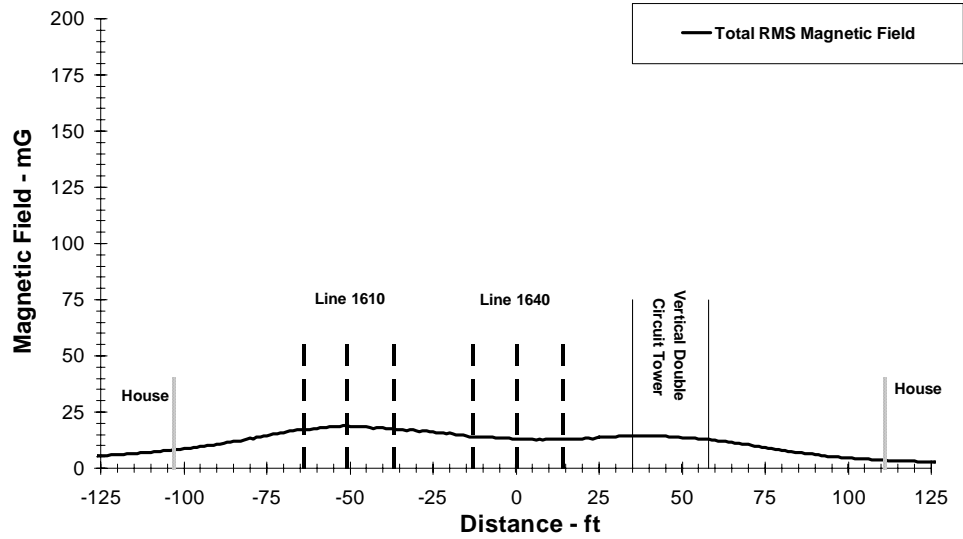


Figure 1. Magnetic field profile from south to north for the transmission lines passing over Route 114 (Center Road) in Woodbridge

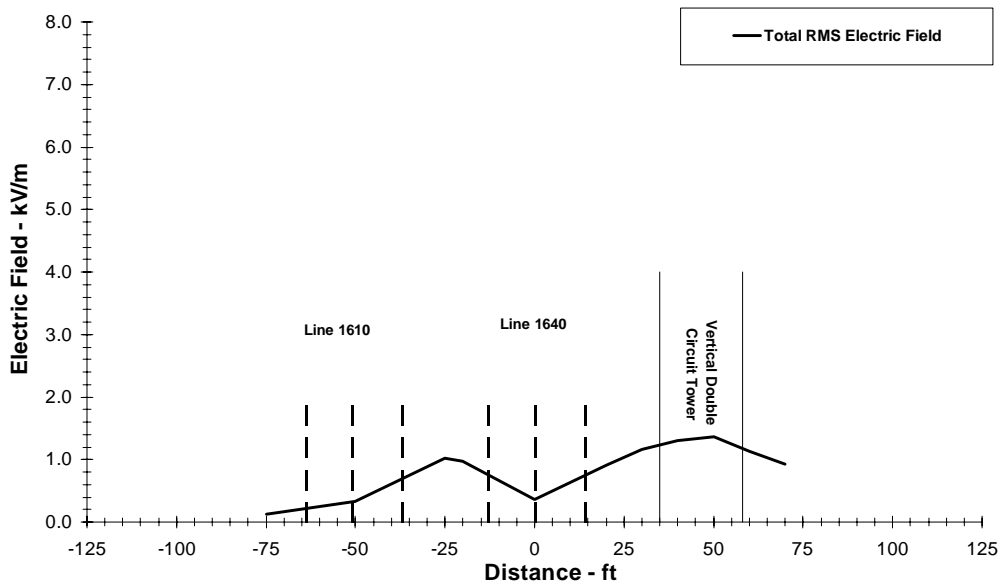


Figure 2. Electric field profile from south to north for the transmission lines passing over Route 114 (Center Road) in Woodbridge

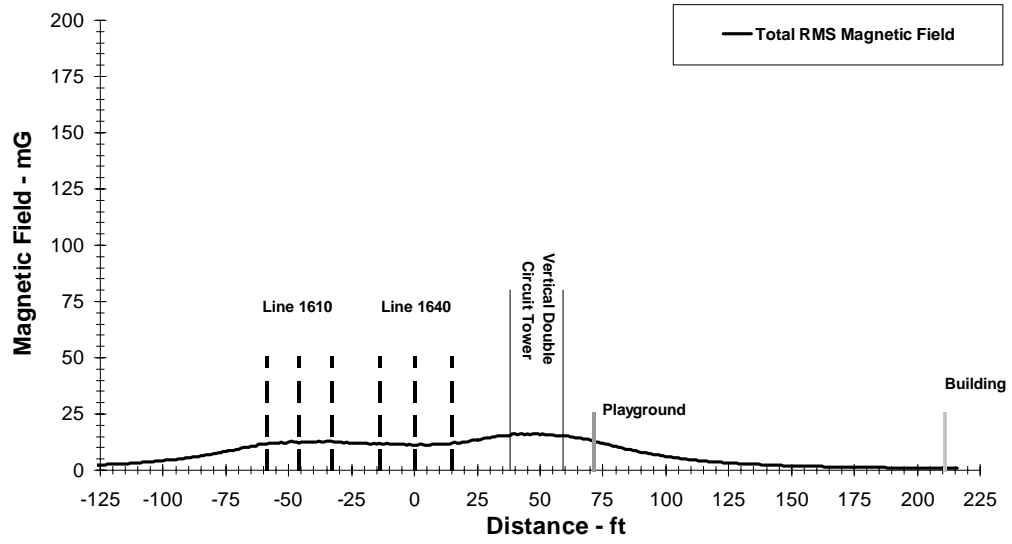


Figure 3. Magnetic field profile from south to north for the transmission lines adjacent to the High Plains Community Center in Orange