



middletown | norwalk

July 30, 2004

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

**Re: Docket No. 272: The Connecticut Light and Power Company and The United Illuminating Company Application for a Certificate of Environmental Compatibility and Public Need for the construction of a new 345-kV electric transmission line and associated facilities between the Scovill Rock Switching Station in Middletown and the Norwalk Substation in Norwalk, including the reconstruction of portions of existing 115-kV and 345-kV electric transmission lines, the construction of Beseck Switching Station in Wallingford, East Devon Substation in Milford, and Singer Substation in Bridgeport, modifications at Scovill Rock Switching Station and Norwalk Substation, and the reconfiguration of certain interconnections**

Dear Chairman Katz:

RE: Updated Homework – Optimized Magnetic Field Reductions Summary

At the Connecticut Siting Council hearing on July 28, 2004 you asked the Applicants to identify along the Proposed Route which cross sections could have the magnetic field at the ROW boundary be at or below the magnetic field from existing lines by using low magnetic field designs for typical cross sections. A table responding to this request was introduced by the Applicants at the hearing on July 29, 2004. You requested that the table be updated to cross reference the map segments numbers in Volume 9 of the Application. This updated table is attached.

Sincerely,

  
Anne Bartosewicz, Project Director  
The Connecticut Light & Power Company

cc: Service List

## Optimized Magnetic Field Reductions by Cross Section Summary

Optimized Magnetic Field Reductions by Cross Section – Proposed Overhead Route @ Edge of ROW									
Cross Section	Application Volume 9 Segment	S/E Edge of ROW				N/W Edge of ROW			
		mG Increase	Calculated mG <sup>4</sup> Edge of ROW "Low Field Option" (Generic Cross Section)	Statutory Facilities <sup>1</sup> (Specific)		mG Increase	Calculated mG Edge of ROW "Low Field Option" (Generic Cross Section)	Statutory Facilities (Specific)	
				Facility ID	Calculated mG "Low Field Option"			Facility ID	Calculated mG "Low Field Option"
1	1-3	-	At or Below	-	-	-	At or Below	-	-
2	4-10	-	At or Below	-	-	-	At or Below	-	-
3	11-12	-	At or Below	-	-	6.7 mG	11.4 mG	N/A <sup>2</sup>	N/A <sup>2</sup>
4	12-13	-	At or Below	-	-	-	At or Below	-	-
5	14-19	-	At or Below	-	-	-	At or Below	-	-
6E	19-20	3.9 mG	4.1 mG	R-14	3.7 mG	-	At or Below	-	-
6W	20-21	4.8 mG	5.1 mG	N/A <sup>2</sup>	N/A <sup>2</sup>	10 mG	12.4 mG	N/A <sup>2</sup>	N/A <sup>2</sup>
7	21-23	3.2 mG	3.6 mG	N/A <sup>2</sup>	N/A <sup>2</sup>	-	At or Below	-	-
7B	23-24	0.7 mG	1.1 mG	R-08	1.1 mG	1.4 mG	5.8 mG	N/A <sup>2</sup>	N/A <sup>2</sup>
8A	24	-	At or Below	-	-	0.8 mG	3.0 mG	R-09 <sup>3</sup>	0.8 mG
8N	24-31	-	At or Below	-	-	0.3 mG	2.9 mG	R-10	1.7 mG
8M	31-33	-	At or Below	-	-	0.1 mG	2.9 mG	P-19	0.6 mG
8S	33-45	-	At or Below	-	-	1.3 mG	2.9 mG	S-11 DC-81 DC-81 R-32 R-34 R-35 R-36 R-37 R-47	0.0 mG 2.9 mG 0.4 mG 2.9 mG 2.9 mG 2.9 mG 2.9 mG 2.9 mG 2.3 mG

<sup>1</sup> Buffer zone statutory facilities “residential areas, private or public schools, licensed child daycare facilities, licensed youth camps or public playgrounds” adjacent to the overhead portion of the Proposed Route.

<sup>2</sup> No statutory facilities adjacent to this side of the ROW in this cross section.

<sup>3</sup> Option 5 provides lower magnetic field levels at the statutory facility while option 4 provides lower magnetic field levels at the edges of the right-of-way.

<sup>4</sup> Based on 15GW new average New England load