March 3, 2004

Roger C. Zaklukiewicz
Vice President
Transmission Engineering and Operations
Northeast Utilities System
P.O. Box 270
Hartford, CT 06141-0270

Richard J. Reed
Vice President of Electric System
The United Illuminating Company
801 Bridgeport Avenue
Shelton, CT 06484

RE: **DOCKET NO. 272** - The Connecticut Light and Power Company and The United Illuminating Company Application to the Connecticut Siting Council for a Certificate of Environmental Compatibility and Public Need ("Certificate") for the construction of a new 345-kV electric transmission line facility and associated facilities between Scovill Rock Switching Station in Middletown and 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 Mr. Zaklukiewicz and Mr. Reed:

The Connecticut Siting Council (Council) requests your responses to the enclosed questions no later than March 17, 2004. To help expedite the Council's review, please file individual responses as soon as they are available.

Please forward an original and 20 copies to this office including an electronic filing. In accordance with the State Solid Waste Management Plan, the Council is requesting that all filings be submitted on recyclable paper, primarily regular weight white office paper. Please avoid using heavy stock paper, colored paper, and metal or plastic binders and separators. A list of parties and intervenors dated February 20, 2004, is enclosed. Fewer copies of bulk material may be provided as appropriate.

Yours very truly,

S. Derek Phelps
Executive Director

Enclosure
c: Parties and Intervenors

Docket No. 272
Connecticut Siting Council
Pre-hearing Questions

1. Describe the degree of reduction of magnetic fields by steel pipes in underground electric transmission lines.

2. What degree of slope precludes the use of a HPFF electric transmission line?

3. Is there any method to detect moisture damage to XLPE transmission lines?

4. Describe any differences in magnetic fields emanating from XLPE systems versus HPFF systems.

5. Have any studies been concluded since the publication of the Docket No. 272 application as to the mechanical performances of XLPE in pipes and ducts?

6. In areas of the proposed route where undergrounding is proposed, has the applicant conducted any surveys or studies as to the amount of infrastructure currently buried along the route, such as water pipes, draining, communications cable, distribution lines, etc?

7. Identify a substitute for the use of alkylbenzene fluid?

8. Is there any difference in temperature given off by XLPE versus HPFF cables? What would be the maximum soil temperature one foot from the line? At five feet? At 10 feet? Would the operation of the lines result in any drying out of vegetation along the line in areas underlying plants?

9. Where else has 345-kV XLPE been used in the United States? When were these lines installed? Have there been any problems with these lines? Are the applicants aware of any other 345-kV XLPE lines presently under consideration in the United States?

10. For the chart found in Table A-1 of the Appendix of Volume 6 of the application, discuss why the calculated magnetic field for the Connecticut Baptist Home would be higher under an average load compared to a peak load.

11. Provide tables for the existing and proposed electric and magnetic fields of the figures represented on pages 30 through 80 in Volume Six of the application. Identify the assumed loads in amperes.

12. Why would a spare cable be pulled in on the entire length of the line rather than simply providing an empty space duct with a spare length of cable available to be installed between manholes if needed? Explain.

13. Provide substation equipment specifications for noise emissions identifying incremental decibel ratings versus distance.

14. How long in the future will the proposed 345-kV loop satisfy area requirements before further expansion is necessary? In responding to this question, employ the following assumptions.

    - A 345-kV Norwalk-Devon Junction-Beseck loop is completed.
    - The two 115-kV Devon-Norwalk lines are reconstructed to 1272 kcmil ACSR (or a larger conductor if part of these circuits is already at a size larger than 1272 kcmil)
    - The existing Norwalk Harbor generation is retired and replaced by 600 megawatt (MW) of combined cycle generation.
    - The Cos Cob jets are retired and replaced by a 100MW peaking plant.
    - 100MW of distributed generation s installed which, for these purposed, is shown as a source at Norwalk S/S.
    - The Norwalk-Northport tie is replaced with another tie between these terminals with a 300 MVA capacity.
    - Generation at Pequonnock and the Bridgeport Energy plant as it currently exists.

15. Using the results of questions #14, what is the next probable significant transmission project(s) to argument the proposed 345-kV loop when it requires further expansion?

16. Discuss and describe (including potential costs and benefits) the possibility of extending a high capacity tie (345-kV or DC from Norwalk to either Northport or to the Con Ed system (e.g. Sprain Brook or another location) or to both. Has ISO-New England or ISO-New York suggested such a tie?

17. Identify existing transmission structures between Scovill Rock Substation and Chestnut Junction; between Oxbow Junction and proposed Beseck Substation; between Black Pond Junction and proposed Beseck Substation; between proposed Beseck Substation and proposed East Devon Substation; proposed East Devon Substation to Norwalk Junction; and Norwalk Junction to Norwalk Substation, which now support telecommunications antennas.

18. Identify existing transmission structures between Scovill Rock Substation and Chestnut Junction; between Oxbow Junction and proposed Beseck Substation; between Black Pond Junction and proposed Beseck Substation; between proposed Beseck Substation and proposed East Devon Substation; proposed East Devon Substation to Norwalk Junction; and Norwalk Junction to Norwalk Substation, that are planned to support telecommunications antennas.

19. How would telecommunications service providers be affected by the construction of the overhead transmission line.

20. Identify limit of concurrent operation of the existing electric generation as listed on page F-20, Table F-3 of the application volume 1 for the existing transmission system, with Phase I and with Phase II.

21. Describe the event of a fallen wire within a high voltage electric transmission right-of-way in the Town of Milford in the year 2003.

22. Provide sightlines of existing and proposed transmission structures crossing ridges from trails as identified in the Connecticut Walk Book Eighteenth Edition, Connecticut Forest and Park Association, Inc. 1997.

23. Describe the existing connection between Chestnut Junction and Oxbow Junction and why it is not part of the application.

24. Describe why points east of Scovill Rock Substation and Oxbow Junction do not need upgrading.

25. Define the term junction and transition station.

26. Can more terminal stations be used? Explain

27. Can less terminal stations be used? Explain

28. Provide an all underground proposal and identify parameters that would be required for such a proposal.

29. Is the applicant aware of a Greenways Committee exploring a bike trail parallel to the Merritt /Wilbur Cross Parkway? Could an underground transmission line be constructed and partnered in this proposed greenway plan

30. Provide names and dates of telephone contacts, emails, and correspondence with the Connecticut Department of Transportation.

31. Describe how existing wood and steel structures and foundations would be removed.

32. What is integrated vegetative management? How do the applicants propose to use this technique?

33. Provide a proposed schedule and manner of overhead transmission right-of-way maintenance.

34. Describe how constructing an underground power line differs significantly from construction of a water, sewer or drainage line in paved roads. Compare typical trench dimensions, traffic disruption, duration of construction, construction nuisance (e.g. noise, air pollution, etc.), paving restoration, etc. as they may apply.

35. Do the applicants plan to upgrade or add to the proposed transmission line right-of-way?